Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Erwin Marckx, EUROBAT, eurobat@kelleneurope.com
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Association of EU Battery Storage manufacturers
3. Please indicate your country	European organisation
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	To maintain EU's increasingly challenged industrial leadership in renewable energy technologies
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Better financing possibilities Other (please specify)
Please specify which other policy elements?	- Improved access to the grid and further grid investments - Battery energy storage is mayor part of the policy elements selected above. - Subsidies for technologies at R&D stage

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)

Please specify how to make support schemes more market-oriented	It makes sense to subsidise renewable technologies which have not yet reached competitiveness but the storage component should be part of that as it is the key enabler to successfully integrate RES . Making support schemes more market-oriented to take into account the benefits of local decentralized storage
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	N/A
B.4. Should the structure of financial support be gradually aligned EU-wide?	N/A
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	RES have to be supported by flexibilisation means such as adequate energy storage.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	N/A

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	N/A

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules Curtailment regime

D.1.1. Please specify which obstacles and the nature and degree of them for each	None of the existing rules take into account the technical and economical potential of energy storage. All of them should be revised taking into account the capabilities of energy storage: o Grid connection rules: energy storage is either considered as a load or a generator. These prohibit an effective use of energy storage by grid operators. Furthermore, priority grid access for RES is no more feasible when RES generation exceeds the load. Then different RES would enter direct competition. This could be alleviated or even avoided by energy storage if considered by a new grid access regulation. o Cost-sharing rules: should take into account specific capabilities of energy storage, and namely its ability to provide added value simultaneously to different stakeholders along the value chain. No rules exist today on operation of a storage device by one of the stakeholders (for example DSO), enabling grid services to be valued by another stakeholder (for example TSO) o Balancing rules: need to take into account increasing importance and ability of balancing at local level (decentralized storage) o Curtailment regime: rules of curtailment can be totally changed when taking into account energy storage. Typically grid overload or other contingency situations can be limited if generators are coupled with ancillary services capable storage systems.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Other (please specify)
Please specify which other rules	Technical solutions, in particular energy storage, open new ways to effectively integrate increased amounts of (intermittent) renewable energies. They require new modes of regulation between the different stakeholders (production, transportation, distribution, sales, consumption…) going beyond the current scheme of either “grid extension” or “priority access”.
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage Other (please specify)

Please specify which other measures	- Increase flexible back-up capacity (capacity payments …) - Increase availability of demand response (smart grids …) - Accelerate infrastructure development and interconnection - Increased availability of storage. A broad range of different electrochemical battery technologies exist. However there are four which are considered as those technologies that can effectively contribute to the efficient and sustainable use of electrical energy storage: Lead-based battery, Nickel-based battery technology, Lithium-based battery technology, Sodium-based battery technology The selection of the battery technology depends on the requirements regarding performance, life, safety and cost for a given application, all having a high recyclability. Given the diversity of possible operating modes, there is no single battery system or technology covering the entire range of needs adequately. On the contrary, different Battery Energy Storage Technologies exist and each of them has a role to play in future solution to the needs of a system depending on their specific attributes. Increased availability of storage is "the most important measure to increase the flexibility reserve of the system".

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)

Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	The more intermittent RES will get into the system and replace fossil power stations, the more balancing need will occur and flexibilisation potentials will have to be activated at system, demand and conventional generation sites.The most flexible one of these options is energy storage. The development of advanced Battery Energy Storage will offer more than primary and secondary spinning reserves and has the advantage that fossil-based power plants (i.e. coal, oil, gas) can continuously operate at optimal production levels to considerably reduce CO2 impact and increase the energy efficiency of the plant. The new transmission system operators' business model for grid expansion will take into account the advantages of BES, which are: ▫▫High value of stored energy / high cost of conventional energy during peak periods ▫▫Avoids investment in distribution grid upgrades ▫▫Avoids investments into additional flexible peak powe
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	Most important is certainly storage as a single system component. However, storage adds value to a smart grid or if directly assigned to a generator, too, since it will increase the flexibility of this specific component. Consequently also this has to be rewarded.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)
Please specify which instruments incentivising investment	Storage as a single system component is of utmost importance. However, storage adds value to a smart grid or if directly assigned to a generator, too, since it will increase the flexibility of this specific component. Consequently also this has to be rewarded. Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING

F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	

F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Other (please specify)
Please specify which other pathways	Adding storage to electrical heating and cooling would provide the opportunity of balancing the heating and cooling demand and generation.
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Other (please specify)
Please specify which other barriers	Storage will be important for the future transport system. Producing advanced battery energy storage can help in overcoming that problem. Battery storage is vital for electrical vehicles.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Water Air
G.2.1. Please explain your answer	All transport modes can be optimized through further electrification

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	N/A
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)

Please explain why	A well suited option to limit the need of grid extension is generation site located storage, which will help to firm the intermittent renewables for the sake of a better grid usage. One has to take into account that this is nevertheless only one application of storage. Thus there is still the need to optimize the location of storage in the overall system.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	N/A
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Specific cooperation should be further promoted. A testing site for energy storage should be added in combination with large scale wind farms from the North Sea to e.g. the Southern countries.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Industrial manufacturing and supply chain Other (please specify)
Please specify which other key challenges	Energy storage is necessary for system integration. However, it needs to be further enhanced. For this happen, additional basis battery research is necessary.

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Improve grid integration features of fluctuating renewables by adding storage.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Energy storage should be given priority in the post-2020 perspective. The battery industry is committed regarding the further development of energy storage technologies.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Technology development should be associated to deliverables but energy storage technologies lead to high risk investments that cannot be simply coupled with precise deadlines. This response was elaborated by EUROBAT and reflects a consolidated response based on the IBC White Paper on Battery Energy Storage for Renewable Energy Sources (edition November 2011) and individual members may add specific points according to their corporate strategy.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Maria Bareli, mgbareli@freemail.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Greece
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, an indicative and non-legally binding target at EU level is appropriate

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	The mountain range of Ikaria, Mount Pramnos (or Atheras),-the greatest natural common of the island-, has been designated for the establishment of an industrial wind-farm of 330 MW in a total area of 28.000 sq. klm. The extreme budget cuts have brought a serious state of economic poverty to the Municipality of Ikaria, which as a result of that seems to be in favor of this developmental project in the hopes of economic returns, with total disregard of the environmental impacts and despite the fact that Ikaria has been acknowledged at the Rio Conference in 1992 as one of the most sensitive eco-systems, especially threatened by soil erosion and desertification, and despite the fact that aaccording to the UN Action Plan Against Desertification, the mountain is protected against any change of land use. There is also total disregard of the cultural monuments and island history, -as on the mountain range there are the old settlements of Ikaria, where for centuries, the islanders found refuge throughout turbulent historical periods. These have been referred to as the "ark of Ikaria's survival" by historians and linguists. Furthermore, there is total disregard of the footpaths that have been uniting the two sides of the island (North and South) for centuries. There is total disregard of the ages-old regime of the commons acknowledged by Law until the'80s and for the impacts on the local economy, the subsequent social and cultural impacts, on human health and quality of life.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)
Please specify which other policy elements?	Protect our cultural, natural and civic commons. The Aarchus Convention is towards the right direction. More aggreements will be needed to ensure the sustainance of cultural diversity, and thus maintain the rich traditions we have inhereted by our ancestors and the only possible way is the empowerment of local people. All these are necessary for the assurance of democracy, our civic freedoms and our basic human rights.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	

B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?

G. RENEWABLES IN TRANSPORT
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?
G.2.1. Please explain your answer

H. SUSTAINABILITY
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?
H.1.1. Please explain

I. REGIONAL AND INTERNATIONAL DIMENSIONS
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
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2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Greece
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Στα χωριά μας, Κάντανος, Φλώρια, Ρούματα, που κατακρεούργησαν οι Ναζί το 1941-1945 ήρθε και η αιολική βιομηχανία και άρπαξε τις περιουσίες των κατοίκων. Έναντι των διαμαρτυριών των κατοίκων οι αρχές προχώρησαν σε συλλήψεις και παραπομπή σε δίκες, δείτε την σχετική ταινία εδώ http://www.youtube.com/watch?v=OwKv2RnWarw&feature=email&email=comment_received Η Ε.Ε. μεταμορφώνεται σε μία γραφειοκρατία των πολυεθνικών, η δημοκρατία καταρρέει. Είμαστε αντιτιθέμενοι στην αιολική βιομηχανικής κλίμακας ενεργειακή πλατφόρμα. Η στρατηγική για τις ΑΠΕ της Επιτροπής οδηγεί τους πολίτες στην ενεργειακή φτώχεια. Δεν επιβεβαιώνονται άξιες λόγου αποσοβήσεις εκπομπών καύσης άνθρακα λόγω ΑΠΕ, μόνο από την ύφεση έχουμε αυτό το αποτέλεσμα και την μετατόπιση της βιομηχανικής παραγωγής σε Κίνα, Ινδία. Το σύστημα εμπορίας άνθρακα αποσκοπεί σε ένα μαύρο κύκλο εργασιών και μόνο
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)

Please specify which other policy elements?	Οποιαδήποτε περαιτέρω στήριξη στην αιολική ενεργειακή πλατφόρμα πρέπει να εκλείψει. Προσφάτως, η Ελληνική κυβέρνηση ενέταξε στον αναπτυξιακό νόμο ν. 3299/2004 αιολικά και φωτοβολταϊκά της EEN HELLAS-EDF EN GREECE AE για την επιχορήγηση τους με 26.920.200 ¤. Θέσεις εργασίας ; Πέντε για τέσσερα έργα. Τα ντοκουμέντα εδώ : http://www.kandanos.eu/node/1725. Κάθε θέση εργασίας στην Ελλάδα μας κόστισε 5.384.040 ¤. Αποσόβηση εκπομπών ; Να μας πει η Κομισιόν, το βράδυ αλλά και άλλες ώρες, που πηγαίνει το ρεύμα από τα αιολικά. Πουθενά. Τα λιγνιτικά της ΔΕΗ δουλεύουν παράλληλα. Να που πηγαίνουν τα χρήματα με τον αναπτυξιακό νόμο ενώ οι Έλληνες είναι άνεργοι και πεινάνε : επιδοτούν θυγατρικές της EDF και θέσεις εργασίας στην Γερμανία και Δανία. Πρέπει να απεμπλακούν τα κράτη-μέλη της Ε.Ε. που έχουν κατ΄ουσίαν χρεωκοπήσει από τους δεσμευτικούς στόχους για τις ΑΠΕ της οδηγίας 2009/08/ΕΚ και περαιτέρω χρονικά. Πρέπει να υποστηριχθούν ενδεχομένως μόνο ενεργειακοί τομείς με πολλαπλασιαστικά αναπτυξιακά αποτελέσματα, σε άλλες τεχνολογίες όπως το φυσικό αέριο σε συνδυασμένο κύκλο . Τα κοιτάσματα της Μεσογείου μας αρκούν, προς τι να επιδοτούμε τα αιολικά ; Κύριοι τέλος δεν προκύπτει από κάποιο νομικό κείμενο ότι οι κρίσιμες διαβουλεύσεις βάσει της σύμβασης Arhus θα διεξάγονται στην Αγγλική γλώσσα κατά το μέρος του κειμένου διαβούλευσης. Η αρμόδια Υπηρεσία περιορίζει στον μέγιστο βαθμό την συμμετοχή των πολιτών και τα συμπεράσματα της δεν είναι αντιπροσωπευτικά.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	Οποιαδήποτε περαιτέρω στήριξη στην αιολική ενεργειακή πλατφόρμα πρέπει να εκλείψει. Προσφάτως, η Ελληνική κυβέρνηση ενέταξε στον αναπτυξιακό νόμο ν. 3299/2004 αιολικά και φωτοβολταϊκά της EEN HELLAS-EDF EN GREECE AE για την επιχορήγηση τους με 26.920.200 ¤. Θέσεις εργασίας ; Πέντε για τέσσερα έργα. Τα ντοκουμέντα εδώ : http://www.kandanos.eu/node/1725. Κάθε θέση εργασίας στην Ελλάδα μας κόστισε 5.384.040 ¤. Αποσόβηση εκπομπών ; Να μας πει η Κομισιόν, το βράδυ αλλά και άλλες ώρες, που πηγαίνει το ρεύμα από τα αιολικά. Πουθενά. Τα λιγνιτικά της ΔΕΗ δουλεύουν παράλληλα. Να που πηγαίνουν τα χρήματα με τον αναπτυξιακό νόμο ενώ οι Έλληνες είναι άνεργοι και πεινάνε : επιδοτούν θυγατρικές της EDF και θέσεις εργασίας στην Γερμανία και Δανία. Πρέπει να απεμπλακούν τα κράτη-μέλη της Ε.Ε. που έχουν κατ΄ουσίαν χρεωκοπήσει από τους δεσμευτικούς στόχους για τις ΑΠΕ της οδηγίας 2009/08/ΕΚ και περαιτέρω χρονικά. Πρέπει να υποστηριχθούν ενδεχομένως μόνο ενεργειακοί τομείς με πολλαπλασιαστικά αναπτυξιακά αποτελέσματα, σε άλλες τεχνολογίες όπως το φυσικό αέριο σε συνδυασμένο κύκλο . Τα κοιτάσματα της Μεσογείου μας αρκούν, προς τι να επιδοτούμε τα αιολικά ; Κύριοι τέλος δεν προκύπτει από κάποιο νομικό κείμενο ότι οι κρίσιμες διαβουλεύσεις βάσει της σύμβασης Arhus θα διεξάγονται στην Αγγλική γλώσσα κατά το μέρος του κειμένου διαβούλευσης. Η αρμόδια Υπηρεσία περιορίζει στον μέγιστο βαθμό την συμμετοχή των πολιτών και τα συμπεράσματα της δεν είναι αντιπροσωπευτικά.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
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B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?
G.2.1. Please explain your answer

H. SUSTAINABILITY
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?
H.1.1. Please explain

I. REGIONAL AND INTERNATIONAL DIMENSIONS
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Tricia Wiley, Renewable Trade Association, UK
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Trade Association
3. Please indicate your country	United Kingdom
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	• A mandatory target is essential to ensure Member States continue to support renewables. • It needs to be legally binding in order to provide a strong signal to investors. • There is still a great deal of contribution to be exploited. • Renewables also contribute towards GHG reduction targets, ensuring security of supply, and have other environmental benefits. • Renewables offer a long term solution, with no issues with waste storage or finite fuel supply issues. • If it is considered that no sector targets are required, a mechanism must be found to ensure that all energy sectors play their part
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Continue to ensure sustainability and scalability Other (please specify)

Please specify which other policy elements?	Experience in other countries has shown that an overall mandate for the use of renewables in transport over a prolonged period of time is the most effective way to ensure the uptake of renewables in this sector Provide a hierarchy of the different EU regulations – e.g. which takes priority, renewable energy or conservation? Recognise the positive environmental impacts of marine renewable developments (on a global scale) to offset minor local environmental impacts due to the presence of the generating device and cabling.R&D is essential for some emerging technologies such as marine. Grid facilitation policies would also be welcomed by some sectors, particularly by the marine sector. Implementation of the EU Birds and Habitats regulation, and marine conservation zones regs into the marine licensing process has severely impeded the permitting process. The climate and energy targets are interlinked and it is important that these are mutually reinforcing. Europe needs to focus on ensuring there is a robust, certain and long-term carbon price. This will provide a clear market signal to low carbon generators, and one of the reasons why support mechanisms should be more market orientated in the future. In the long term some believe that a strong carbon price could drive the renewables market. Most REA members believe a renewables target is still necessary for due to the concerns regarding whether strong carbon priceswill be established, and also the wider benefits.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	• By 2020 there might be some technologies that become increasingly competitive with fossil fuels and in these cases the level of support should be reviewed. • There are however, a number of more emerging technologies that will need further support post 2020. In some cases only a few projects will be operating. • As already noted, a mandate in the transport sector will be the most effective policy instrument, with the market deciding on the most appropriate technologies
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)

Please specify how to make support schemes more market-oriented	• The market and deployment of renewables in each Member State is very different. It is likely how support schemes can become more market oriented will vary and this analysis will need to be undertaken once the deployment of renewables has increased. • Where appropriate policy support could be connected to carbon saved, particularly for biomass/biofuel technologies
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	•Yes there is a difference in the sectors. Renewable transport fuels trade on an international market. Experience in the power sector has is showing there is a degree of natural convergence. It might not be appropriate for the EU to prematurely interfere in the market. • A difference approach should be taken to the Transport sector. This sector needs benchmark values to avoid market any distortions
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	• The purpose of support schemes is to affect the market to address specific issues. An example would be transport biofuels from waste.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of information on support schemes or other Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	• These are all serious issues - the degree varies depending on the technology, and in some cases these will vary due by scale. • Examples include biofuels specifications, and consistency of voluntary schemes
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one- stop-shop), maximum time-frame or other • There need to be some guidelines for Member States, but they should retain a degree of discretion. • Transport in particular needs standardisation and harmonisation, including mandatory sustainability criteria.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	It is impossible to say with any certainty now whether any of the frameworks associated with the issues below will create obstacles to renewable electricity production after 2020. The philosophy of some aspects of the grid connection rules as currently applied imposes unnecessary costs on many generators, including renewables and probably increases costs for electricity consumers without providing any additional benefit. Generators in Great Britain bear a significantly higher share of network (that includes both connection and use of system charges) and system loss costs than most of our continental neighbours. In an increasingly pan EU market this systematically discriminates unfairly against British renewable generation compared to that of our continental neighbours. Currently in Great Britain our gate closure time of a rolling one hour ahead of the settlement period concerned provides less balancing risk, particularly for intermittent generation, than the longer periods prevalent in many other countries. We would be concerned if any move to harmonise balancing arrangements lengthened this period.we would like to see an improvement to the arrangements for those connected to distribution network
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment

D.2.1. Please explain why	Obligation for network operator to develop network This is necessary and currently exists in Great Britain but it is not a specifically renewable related requirement. Priority or guaranteed access We currently have guaranteed access in the sense that it is financially firm and consider that the maintenance of this position would be satisfactory. Priority dispatch and obligation on TSO to counteract curtailment All generation currently self despatches and sets its own prices at which it is prepared to be curtailed. We are content with the maintenance of this position.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Other (please specify)
Please specify which other measures	Increase flexible back-up capacity-It will be necessary to have a fleet of generation and other resources with flexible capacity (which could be for example fossil fired generation or biomass or hydroelectric generation with reservoir storage) and these may require a capacity mechanism to supplement a market based largely on marginal generation costs (plus any support mechanisms for low carbon generation). The other resources which should also have access to any capacity mechanism will include flexible demand and storage. - Accelerate infrastructure development and interconnection - Increased interconnection will always make it more economic to accommodate additional uncertainty in both generation and demand. The cost of the increased interconnection must of course be balanced against the saving in system running costs. - Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Interconnectors should be used to their full potential to reduce costs. It is however not clear what is meant by an interconnector in the context of a fully implemented single market. - Increased availability of storage- Storage whether purpose built or naturally arising within the systems of end consumers (heat or cold storage capacity with flexibility in electricity consumption) will be a valuable facility for integrating iintermittent generation into the electricity system. - Enable renewable generators to offer balancing services to TSOs

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	There needs to be consideration to different scales of generation. Smaller scale generation need a simple mechanism, it might not be appropriate for them to sell into a market.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)
Please specify which instruments incentivising investment	Subsidies are used to ensure renewables are competitive in the market. The actual market should not be adapted to one type of generation, governments should focus on making their energy markets efficient, cost reflective and ensuring there is competition.

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness Lack of suitable information Other (please specify)
Please specify which other barriers	• We hope that the UK's RHI will ensure that renewable sources of energy are considered for heating. This will be dependent on suitable information. In some renewables the market can adjust quickly. A number of renewable generators do not capture the renewable heat because it is uneconomic to do so, having the right level of incentive is essential.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal Electrification together with higher share of renewables in electricity production Other (please specify)

Please specify which other pathways	It is important to support a mixture of technologies and that by picking winning technologies those that could make a valuation contribution are no longer options or more expensive need to reduce risks.
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	It is vital that there is a link between renewable heating and cooling and energy efficiency.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of suitable information
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Water Air
G.2.1. Please explain your answer	The decarbonisation of all sectors is an urgent issue if Member States want to reduce emissions in transports.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	It is vital that sustainability criteria are consistent and fair. Industry is confident in its ability to meet sustainability criteria, however these must be clearly set out and any changes need to respect commercial contracts and agreements. Over time, sustainability criteria should be extended to other end uses for biomass, in particular agriculture and forestry to maintain consistent markets.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)

Please specify how and with whom, i.e. only neighbouring countries or more widely	In the future as deployment of renewables increases and Member States have developed their own potential, in order to decarbonise further they could use renewable energy from third countries. However, there needs to be a physical link with the electricity actually being consumed in the Member State.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	The choice to use renewable energy from another country needs to be cost reflective. This should include the cost of networks.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Other (please specify)
Please specify which other key challenges	Advanced biofuels for transport need greater R & D and commercialisation support.

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Certain technologies, such as marine energy, should be given priority, because there will be large-scale availability, particularly for wave energy, when the technology matures. Tidal energy has the advantage of being completely predictable and wave energy is predictable over a longer timescale than wind. In the UK, the marine energy industry is used to collaborative partnerships, because that is model on which the Technology Strategy Board runs its funding programmes.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	The assistance should not be subject to a cut-off deadline, but linked to realistic reviews on progress.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Oana Catalina TAPURICA,Researcher - The Academy of Economic Studies,Romania, oana.tapurica@yahoo.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Romania
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	A combination of EU and sectoral level targets is more appropriate than a mandatory target at EU level, as energy efficiency policies should focus especially on intensive energy consuming industries. Setting-up overall mandatory targets for all countries might be a burden for the countries which don't have the climatic background for developing renewable energy capacities. Moreover, setting up an indicative and non-legally binding target, will lead to the situation in which some member states will be more involved in achieving the target while other countries will be less interested in achieving the targets.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc)

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes
Please specify how to make support schemes more market-oriented	-
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	The financial support should be provided for each member state, according to a forecast on a coefficient which reflects the average expected ratio between the amount of energy generated from renewable sources and the overall energy consumption. Therefore, it is very important to take into account during the forecast, some benchmarks, which should reflect the performance of a certain state in producing and promoting the renewable energy sources. The forecast could provide a country rating for each member state, and the financial support should be provided for those countries who have proved a higher commitment in achieving the targets.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	-
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Lack of commonly agreed technical specifications Lack of information on support schemes or other Lack of credible and certified training and qualification

C.1.1. Please provide explanations and specific examples where available	In some member states, such as Romania, the renewable energy field is still an emergent sector, as there is not enough information about the support schemes, the regulatory framework and the commonly agreed technical specification. Although the green certificates market is operational, there are not certifies trainings for the economic agents.
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	-
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	-
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Accelerate infrastructure development and interconnection Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid
E.2. How can it be ensured that market arrangements reward flexibility?	Current market arrangements are sufficient to reward flexibility
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of suitable information Lack of capacity (installers, other)

F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	-

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Lack of infrastructure
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for goods
G.2.1. Please explain your answer	-

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	-

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	-
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	-
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	-

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	-
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	-
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	-

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	-

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Luís de Sousa luis.a.de.sousa@gmail.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Portugal
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	The ratio of world fossil fuel extraction per capita will not only continue to decline after 2020, its decline rate shall accelerate. The gap left by the decline in world oil production cannot be covered by other fossil fuels to provide for much longer the same fossil energy per capita the world has enjoyed in recent years. Having exhausted the larger part of its fossil reserves, Europe remains one of the most vulnerable regions in the world to this decline. Having the proper energy policies, promoting alternative indigenous sources, can spare us the economic disruptions that force a disordered and painful demand destruction like the one we live today in several states of the Union.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Better financing possibilities Other (please specify)
Please specify which other policy elements?	Legal bindings that guarantee stable fixed-in tariffs long term, in horizons of at least 20 years.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Open up national support schemes to cross-border projects
Please specify how to make support schemes more market-oriented	Feed-in tariffs must be totally transparent, ideally a simple function of EROEI and project lifetime. Considering the uncertainty around EROEI calculations (especially for new technologies), the feed-in tariff should at least be a clear contract that anticipates revenues in time during the first years of operation and on a second phase bounds the producer to low price production up to the end of the expected system life-time.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	A single feed-in tariff should exist for each technology EU-wide. A convergence period of some years could be employed for a smooth transition. EU-wide tariffs are vital to guarantee high EROEI, i.e. avoiding investors applying for solar power projects in Scotland instead of Spain because of different financial support.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	No, the harmonization should be total.

B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	This should be achieved by the harmonization of support schemes.
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Balancing rules Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	Regular curtailments have an obvious impact on the project pay-back time horizon; the same effect comes out of balancing rules. It can be an unbearable source of uncertainty for an energy project and avoid investment altogether. They can also impose an unjustifiable EROEI reduction.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access
D.2.1. Please explain why	Priority or guaranteed access - it is essential that a renewable energy project can deliver every single kWh of energy it can produce, otherwise both the financial and energy returns on investment get negatively impacted.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increased availability of storage Enable renewable generators to offer balancing services to TSOs

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	Energy consumers must be made aware that prices vary with the time and that they can make a profit by either changing consumption to off peak hours or by storing energy. Like renewable energy producers, energy consumers must start thinking in advance.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	This is a very important point. A good part of the traditional systems with which renewable systems compete run on electricity. Renewable electricity generation systems tend to have near zero marginal generation costs, thus an increase in the amount of renewable electricity reduces prices and increases the competitiveness of traditional acclimatization systems. Left to the market in these conditions, renewable acclimatization may never come to take a relevant place. At some point, policies to phase out traditional systems must be put in place, such as special taxes on new AC units.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of infrastructure Limits of availability of sustainably produced biofuels Other (please specify)
Please specify which other barriers	The higher volumetric density of fossil fuel based energy vectors.

G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail Water
G.2.1. Please explain your answer	Rail - being grid connected it avoids the many issues of on board energy storage. Water - highly efficient and capable of taking advantage of renewable energies on board.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)
Please specify which criteria	Any agricultural crop dedicated to energy production should be phased out.
H.1.1. Please explain	In first place for the additional demand of fossil based inputs they demand; secondly for at our latitudes agro-fuels have very low EROEI; and finally because expensive fossil fuels impose enough strain an Agriculture on their own. Only waste or agricultural/forestry by-products should ever by used as energy sources. These issues do not concern other technologies not based in agriculture, like bio-diesels produced by algae.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	As stated in sections A and B the most important factor will be a stable legal framework where feend-in tarifs are effectively guaranteed and bound investors long term. No large scale deployment shall happen without this.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Without knowing industry willingness to engage in PPP I'd point out three that have high scalability : - Hot-dry rock: a multi-decade investment capable of scale up to the same size of the Nuclear park today. - Wave-power: also highly-scalable, although it overlaps Wind power in power over time. Nevertheless a way to produce energy near-shore with minimal visual impact.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Certainly. We cannot wait 50 years for a technology to mature, has it has been hapening with Hydrogen as an energy vector.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	FEDIOL - The EU Vegetable Oil and Proteinmeal Industry / Contact: fediol@fediol.eu
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	European Industry Association
3. Please indicate your country	European organisation
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	Despite the deadline for implementation, EU Member States still have difficulties in transposing the provisions of RED into their national legislations. This situation causes market disturbances and poses a risk to reach renewable energy targets. Delays in approving and recognising sustainability voluntary schemes and lack of definitions relating to biomass have created major uncertainties for economic operators. For the economic operators in the biofuels supply chain, the availability of sustainable raw materials is the main priority. However, the lack or delay in implementation of EC Decisions is creating problems along the supply chain and in markets. For instance: - EU Member States not recognising each other's national sustainability systems and requiring mutual recognition agreements - EU Member States not recognising EC-approved voluntary schemes and creating barriers to intra-EU trade - EC benchmarked and thus equivalent sustainability voluntary schemes not recognising each other and creating difficulties with regard to interoperability along the supply chain. Therefore, FEDIOL calls for greater harmonisation at the EU-level and stricter implementation plans to be put in place.
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of awareness Lack of suitable information
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Air

G.2.1. Please explain your answer	Biofuels are the only liquid fuel alternative to fossil fuels, that could help decarbonise the transportation sector in Europe. Therefore the EU should continue giving a strong support for biofuels beyond 2020. In particular, the biodiesel technology has a potential of higher penetration and uptake in Europe. For a stronger uptake of biofuels in Europe, the Commission must ensure that the provisions of the RED are fully implemented in all EU countries. To provide favourable conditions for producing sustainable biofuels, the Commission should also ensure that sustainability schemes are approved, fully recognised and applicable across the EU. However, FEDIOL is worried about the direction of the public debate on indirect effects of biofuels. In the decision-making process, we urge the European Institutions to carefully examine all the implications for the food, feed and energy supply chains, and take a holistic approach which would not jeopardise food, feed and energy security, which would not limit access to sustainable raw materials and which would not endanger competitiveness of EU industries.

H. SUSTAINABILITY

H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing binding sustainability criteria are sufficient

H.1.1. Please explain	FEDIOL has a long standing commitment to sustainability and promotes the production of biofuels from sustainably produced raw materials responding to the stringent sustainability and land-use criteria set out by the Directive. These criteria reflect the ambitions of the EU in reducing GHG emissions globally and bear significant costs for biomass producers, processors and biofuels producers. Therefore, the EU should rather strive for ensuring the harmonious implementation of these criteria in all EU Member States. However, the EU sustainability criteria are considered as a trade barrier by some key trading partners of the EU, thence putting the availability of sustainable raw materials are risk. As far as the iLUC is concerned, we strongly believe that iLUC is a phenomenon which cannot be quantified with the available scientific knowledge. Since the multi-feedstock sourcing is absolutely critical for food, feed and biofuel markets, the Commission should abstain from taking any quantifying/discriminating measures. This would penalise feedstocks and the sustainability compliant operators along the biofuels chain. In such a scenario, more pressure would be put on a reduced number of crops to meet the demand and this would come at a cost of higher price volatility. Most importantly, the benefits of biofuels production, such as co-production of proteinmeals, shall be fully taken into account when the sustainability of biofuels is discussed.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Lisa Hardie, Argyll and Bute Council, Lisa.hardie@argyll-bute.gov.uk
2. Are you responding to this questionnaire on behalf of /as:	Public Authority
3. Please indicate your country	United Kingdom
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	A target has been set for 2020 and with member states anticipating achieving and possibly exceeding the target for 2010. With this in mind, it would be sensible to continue with a consistent approach with identified targets. By having a combination of targets, then some of the less emerging sectors are not under the same burden as those that have been tried and tested. An EU wide target would emphasise that the commitment to reach the target stretched across all of the member states and that collectively we all have a responsibility to continue towards this. Within Argyll and Bute there is significant potential with renewable opportunities in the area to play a major role in the reduction of greenhouse gases and promoting and developing renewable technologies. This potential is recognised within the Argyll and Bute Council Corporate Plan, Economic Development Action Plan and the Argyll and Bute Renewable Energy Action Plan.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Public procurement obligations in support of renewables Better financing possibilities

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	The Highlands and Islands face some of the highest transmission charges in Europe and since the introduction of the new charging arrangements for interconnectors, perversely it has become cheaper to transmit power from anywhere in France to anywhere in the UK than it is to transmit power from anywhere in Scotland to anywhere in the UK (including Scotland). As such, when considering the importance of emerging technology such as marine in contributing to EU targets (see J3 for context), this technology by its very nature is at the periphery of Europe, and the connection issues being faced by generators in the H&Is today, will be faced by marine generation (and other forms of low carbon which are similarly unable to respond to locational signals) everywhere tomorrow. As such, tenable connection of low carbon generation in peripheral regions is required and would be welcomed.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Accelerate infrastructure development and interconnection Other (please specify)

Please specify which other measures	Accelerate infrastructure development and interconnection - It is likely that investment in grid infrastructure to connect peripheral regions will need to be strategic and there will be a role for Europe to drive down the cost of capital to allow these strategic investments to proceed at an acceptable cost to the consumer. • Other: See 'Irish-Scottish Links on Energy Study' (ISLES) funded via the INTERREG IVA Cross Border Programme for Northern Ireland, Border Region of Ireland and Western Scotland, which examples a strategic collaboration between governments of Scotland, Ireland and Northern Ireland, to accelerate development, utilization and export of offshore renewables across the three jurisdictions. This project has been recognised as having important learning of transferable value across the EU (e.g. highlighting issues of cross-border compatibility of e.g. energy markets, financial support for renewables, planning regimes etc). Highlights the potential to assist management of variability and uncertainty of renewables.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Other (please specify)
Please specify which other barriers	The main barrier is cost/lack of financial support. Business cases and viability vary dramatically between sites and technologies. Incentives to guarantee a £ payback below 10 years (the lower the better), set against project risk/deliverability, would offer a decent case to implement. This should be applied to all technologies should a generation mix be deemed desirable, so it may be necessary to financially support (or incentivise otherwise) less attractive technologies to a higher level. Evaluation of the UK FIT/RHI schemes, is steering Argyll and Bute Council largely towards oil to biomass fuel conversion as a strong £ payback and £ invested / CO2 reduction.

F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Other (please specify)
Please specify which other barriers	In remote and peripheral areas there can be conflict between policies aimed at growing the economy and preserving the environment, such as Argyll and Bute, with a geographically diverse and dispersed nature, which is so dependent on the road network for access to local and national centres. Despite this there is a commitment to investing in transport infrastructure which promotes sustainable economic growth whilst reducing the areas carbon footprint and protecting/enhancing the areas rich natural environment. The Council have been working with partners including Transport Scotland and Sustrans to deliver a network of traffic-free walking and cycling routes which will encourage modal shift away from the private car helping to reduce CO2 emissions. Argyll and Bute Council are part of the delivery forum for the Scottish Government's Cycling Action Plan for Scotland (CAPS) which aims by 2020 to have 10% of all journeys taken in Scotland by bike. There has been increased levels of communication with local industries to promote more sustainable freight transport, in particular the Timberlink Project where timber is shipped from local ports saving up to 1,245 tonnes of CO2 per year (Forestry Commission Scotland Figures) compared to standard road haulage operations. Moving forward it is likely that there will be increasing volumes of timber in Argyll shipped from local ports and temporary pontoons in order to preserve fragile road networks and reduce CO2 emissions.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	

G.2.1. Please explain your answer	In addition to the information supplied in G1: Hybrid vehicles are currently used in Argyll and Bute Council's vehicle fleet however, the scope for introducing fully electric vehicles is limited by high purchase and maintenance costs, (cars circa £30k and replacement batteries £7k) limited battery range and lack of local charging points. Bio-gasoline requires more onerous storage, distribution and product handling facilities as this product will readily denature on contact with water. Many rural fuel sites have low volume fuel sales and are generally privately owned and characterised by ageing infrastructure. Such sites are unlikely to be able to meet the considerable costs associated with modernisation to store bio-gasoline. In addition bio-gasoline does not responsd well to prolonged periods of storage which is likely to be an issue in rural filling stations with low sales volumes.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	If there are concerns over the environmental impacts associated with both biomass and fossil fuels then there should be additional sustainability criteria for the use of these resources. Sustainability should be part of the consideration process when looking at alternative sources.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Yes – e.g. see the ISLES study - as noted in D3. This is recognised by the EU North Seas Countries Offshore Grid Initiative as providing invaluable learning and transferable value across the EU – highlights the potential to open up marine renewable development opportunities, where the capacity to generate electricity is not matched by the ability to collect and transport that energy to the market. Further to I.1 - This in turn highlights potential lessons learned for EU Cross-Border projects, such as compatibility of energy markets, financial support and planning regimes. See http://www.islesproject.eu/.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Other (please specify)
Please specify which other key challenges	Please see F1.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Marine (wave and tidal). Marine is strategically important to Europe in terms of its potential to contribute to carbon reduction targets beyond 2020, its predictability and the creation of a new exportable industry. Argyll and Bute, located in the west coast Highlands and Islands of Scotland has a significant natural wave and tidal resource along its coast (a quarter of Europe's potential tidal energy resource and a tenth of the wave capacity is found in Scotland and Argyll offers some of the best tidal resource following the Pentland Firth). The existence of this significant resource is reflected in the fact that Scottish Power Renewables are proposing to build the world's largest tidal stream energy Array in the Sound of Islay. The Scottish Power Renewables £40 million tidal array development will harness the power of the sound of Islay and generate enough electricity for over 5,000 homes. The 10 megawatt facility (consisting of 10 x 1 mw tidal devices) will further develop emerging tidal technology and provide economic and community benefit to the island of Islay and Jura. Projects like these not only assist in delivering economic benefit to our communities but also assist the Scottish, UK and EU to deliver on their targets. A futher three sites were announced off Argyll and Bute by The Crown Estate October 2011, to be taken forward for consideration by tidal energy developers. Testing and deployment of these technologies is progressing.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Antonio Lucio-Villegas, Director of Brussels Office, Red Electrica de España (alucio@ree.es)
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Transmission System Operator
3. Please indicate your country	Spain
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	REE supports ENTSO-E response on this issue. As a matter of fact, REE is a good example of how TSO can overcome the significant challenges created by the Grid Integration of Renewable Energy. Nevertheless REE would like to emphasize the following issues: • Grid connection rules for new RES should be clear and understandable, and should oblige these units to meet technical capabilities that ensure power systems evolve in a secure manner. REE believes that this should apply to any RES regardless of the generation capacity and the voltage level of connection. This could be especially important when huge amounts of micro generation be connected to the power system (i.e. photovoltaic). • The curtailment regime should be seen as a tool of the TSO to respond flexibly to different operational situations, as long as it is clear, fair and accepted by the generators. In order to make it operational, a proper observability and controllability of RES production should be guaranteed.

D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Other (please specify)
Please specify which other rules	REE supports ENTSO-E response on this issue with regard to the obligation of TSOs to deliver the network. However REE believes that special emphasis should be done on a regulation that fosters the development of interconnections, electric highways and storage facilities as key tools to guarantee a proper integration of RES in the system.
D.2.1. Please explain why	REE believes that, in a post-2020 scenario, with increasing penetration of RES at the European level, the development of additional interconnections will be required in order to provide a proper framework to maximize the integration of RES. As a consequence, the regulation should foster, and even oblige, member states to reach the appropriate levels of interconnection. New interconnections will improve the integration of RES, easing the management of the variability of solar and wind power. In this post-2020 scenario, European electric highways should start to be a reality, allowing the long distance transmission of bulk renewable energy. These highways should improve even more the balancing capacity of the overall European system, allowing the integration of more RES. Furthermore, the development of massive storage would help this integration even more. Hence, regulatory measures should be taken which incentivize the development of storage facilities, even if they are not marketable by then.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Enable renewable generators to offer balancing services to TSOs Other (please specify)

Please specify which other measures	REE supports ENTSO-E approach to the proposed measures to increase the flexibility of the system. However, REE believes, based on our experience with CECRE, the first national control centre in the world dedicated to integrate renewable in the system in a secure way, that the optimal usage of flexibility reserve can only be achieved if RES production is fully observable and controllable. Therefore regulatory measures obliging RES producers to become observable and controllable would optimize (reduce) the requirements of additional flexible reserve.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS

I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	REE believes that collaboration with third countries should be promoted, as long as it is done in a gradual way. As a consequence, cooperation with neighboring countries seems to be easier in the midterm (post 2020). In order to guarantee a proper collaboration, any regulation in this regard should take into consideration the role of border countries, like Spain, in whatever cooperation is fostered.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	REE supports the cooperation with third countries such as Morocco, Algeria or Tunisia. However, this requires that the reinforcement of electricity networks in the EU (i.e. Spain), and the development of new infrastructures, should be fostered and support by the EU. Among other possibilities, these projects should be considered of common interest, and should be eligible for grants.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Other measures (please specify)
Please specify which other measures	Multilateral agreements are the best solutions for these projects. All countries involved in any way with the projects should be in the agreement, including the border and transit countries. These agreements should be done on the basis that the cost of the infrastructure should be borne by the users of the Member State(s) to which the project provides benefits.
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Zsuzsanna Vitai, Hungarian Geothermal Association, info@mgte.hu
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Public Service Association
3. Please indicate your country	Hungary
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	It will be necessary to support geothermal energy utilisation post-2020 since financial support for geothermal is now very low and there is a significant need for further R&D on new technologies such as Enhanced Geothermal Systems (EGS) which would make possible to harness geothermal energy in almost all European countries.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	
Please specify for which technologies (if applicable) to phase out support schemes over time	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Heating (and cooling) is a local issue, and therefore it has to be handled in another way than the electricity sector.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Supporting fossil fuel based energy generations instead of creating special feed-in tariff systems for renewables, considering not only electricity but heat generation.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of information on support schemes or other Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	

C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Increased availability of storage Other (please specify)
Please specify which other measures	Renewable base load has to be provided for making the system flexible, for which the best way is geothermal energy utilisation.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	Specific rules for variable generation would be appropriate. Because of the high capacity factor of geothermal it has to be appreciated.
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING

F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness Lack of suitable information Other (please specify)
Please specify which other barriers	Internalization of externalities of fossil fuels is still proceeding very slowly.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Geothermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	By replacing old, fossil fuel based district heating systems or building new geothermal district heating networks, it highly contributes to energy efficiency increase, especially when cascade use is preferred.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	In the case of geothermal they are not. There is still further cooperation needed in the fields of R&D, information exchange and training.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	N/A
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Geothermal electricity generation because of its outstanding capacity factor among RES and geothermal heating/cooling. Both sectors are capital intensive which makes them attractive as PPP projects.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Σολανακης Γιωργος ninodem@yahoo.gr
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Greece
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Στα χωριά μας, Κάντανος, Φλώρια, Ρούματα, που κατακρεούργησαν οι Ναζί το 1941-1945 ήρθε και η αιολική βιομηχανία και άρπαξε τις περιουσίες των κατοίκων. Έναντι των διαμαρτυριών των κατοίκων οι αρχές προχώρησαν σε συλλήψεις και παραπομπή σε δίκες, δείτε την σχετική ταινία εδώ http://www.youtube.com/watch?v=OwKv2RnWarw&feature=email&email=comment_received Η Ε.Ε. μεταμορφώνεται σε μία γραφειοκρατία των πολυεθνικών, η δημοκρατία καταρρέει. Είμαστε αντιτιθέμενοι στην αιολική βιομηχανικής κλίμακας ενεργειακή πλατφόρμα. Η στρατηγική για τις ΑΠΕ της Επιτροπής οδηγεί τους πολίτες στην ενεργειακή φτώχεια. Δεν επιβεβαιώνονται άξιες λόγου αποσοβήσεις εκπομπών καύσης άνθρακα λόγω ΑΠΕ, μόνο από την ύφεση έχουμε αυτό το αποτέλεσμα και την μετατόπιση της βιομηχανικής παραγωγής σε Κίνα, Ινδία. Το σύστημα εμπορίας άνθρακα αποσκοπεί σε ένα μαύρο κύκλο εργασιών και μόνο
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)

Please specify which other policy elements?	Οποιαδήποτε περαιτέρω στήριξη στην αιολική ενεργειακή πλατφόρμα πρέπει να εκλείψει. Προσφάτως, η Ελληνική κυβέρνηση ενέταξε στον αναπτυξιακό νόμο ν. 3299/2004 αιολικά και φωτοβολταϊκά της EEN HELLAS-EDF EN GREECE AE για την επιχορήγηση τους με 26.920.200 ¤. Θέσεις εργασίας ; Πέντε για τέσσερα έργα. Τα ντοκουμέντα εδώ : http://www.kandanos.eu/node/1725. Κάθε θέση εργασίας στην Ελλάδα μας κόστισε 5.384.040 ¤. Αποσόβηση εκπομπών ; Να μας πει η Κομισιόν, το βράδυ αλλά και άλλες ώρες, που πηγαίνει το ρεύμα από τα αιολικά. Πουθενά. Τα λιγνιτικά της ΔΕΗ δουλεύουν παράλληλα. Να που πηγαίνουν τα χρήματα με τον αναπτυξιακό νόμο ενώ οι Έλληνες είναι άνεργοι και πεινάνε : επιδοτούν θυγατρικές της EDF και θέσεις εργασίας στην Γερμανία και Δανία. Πρέπει να απεμπλακούν τα κράτη-μέλη της Ε.Ε. που έχουν κατ΄ουσίαν χρεωκοπήσει από τους δεσμευτικούς στόχους για τις ΑΠΕ της οδηγίας 2009/08/ΕΚ και περαιτέρω χρονικά. Πρέπει να υποστηριχθούν ενδεχομένως μόνο ενεργειακοί τομείς με πολλαπλασιαστικά αναπτυξιακά αποτελέσματα, σε άλλες τεχνολογίες όπως το φυσικό αέριο σε συνδυασμένο κύκλο . Τα κοιτάσματα της Μεσογείου μας αρκούν, προς τι να επιδοτούμε τα αιολικά ; Κύριοι τέλος δεν προκύπτει από κάποιο νομικό κείμενο ότι οι κρίσιμες διαβουλεύσεις βάσει της σύμβασης Arhus θα διεξάγονται στην Αγγλική γλώσσα κατά το μέρος του κειμένου διαβούλευσης. Η αρμόδια Υπηρεσία περιορίζει στον μέγιστο βαθμό την συμμετοχή των πολιτών και τα συμπεράσματα της δεν είναι αντιπροσωπευτικά.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	

B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?

G. RENEWABLES IN TRANSPORT
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?
G.2.1. Please explain your answer

H. SUSTAINABILITY
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?
H.1.1. Please explain

I. REGIONAL AND INTERNATIONAL DIMENSIONS
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	COGEN EUROPE
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	European Association
3. Please indicate your country	Belgium
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Better financing possibilities Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	

B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	RES power plants as well as distributed generators suffer from lengthy procedure when they want to build their units and connect them to transmission and distribution lines. It is a good move that the European Commission is now investigating possibilities to set European rules for units to be connected to transmission lines. The same approach should be taken for units to be connected to distribution lines.
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules Curtailment regime

D.1.1. Please specify which obstacles and the nature and degree of them for each	There are currently many network codes under preparation by ACER/ENTSO-E and therefore those above mentioned issues should be addressed before 2020. However, the proper drafting and implementation of those legislations will be key in encouraging new technologies, particularly decentralised energy producers, to do their job in the forthcoming electricity system. It is therefore crucial that the voice of those decentralized generators, being fuelled by renewable energy sources or not, is taken into account into those arenas. The very much welcome impact of flexible energy efficient electricity generators has to be looked at by regulatory authorities when promoting renewable electricity generation, intermittent or not. On cost-sharing rules, it is important to assess the different TSO/DSO charges and to understand the way costs of the system are factored in ands scrutinize the fair treatment of stakeholders. In addition, there is a need to investigate more on the possibilities of local balancing through DSO level.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Increased availability of storage Other (please specify)

Please specify which other measures	In the forthcoming European electricity system, where intermittent renewable energy sources are going to play a bigger role, flexible cogeneration units can facilitate in a cost effective way that integration. Existing CHP plants (small and medium size industrial CHPs and those connected to district heating networks) and new CHPs (from micro-CHPs up to large industrial CHPs), can be flexible and controllable players in order to help balancing supply and demand. The excess electricity production from those CHPs can be dispatched remotely and modulated to meet the needs of the network and the consumer. CHP coupled with heat storage can play several "smart" roles on the new grid. In times of rapidly falling electrical output from renewables it can start to supply the local electricity network and using heat storage temporarily store the heat to supply later. This also keeps the electricity supply local hence minimising grid losses. In times of falling demand CHP can switch off supplying heat from storage. This functionality can be controlled by suitable balancing and demand response markets signalling the appropriate action. Such deployment maximises the value of the appliance for both end-user and distribution utility. For instance, the output of micro and small CHP units can be aggregated and used as a source of electricity output to supplement shortfalls in demand from centralised generation (this aggregated output of micro-CHP appliances forms a Virtual Power Plant (VPP).

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should bear greater responsibility for system costs
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)

Please specify which instruments incentivising investment	Markets should be designed to have an element of certainty for the forward capacity market. due attention should be put on encouraging the building of flexible energy efficient capacity that can support the integration of intermittent RES.

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of public support Other (please specify)
Please specify which other barriers	To date, the European energy policy has not yet adressed the heat market even if it represents as much as half of the total final energy demand. The European Commission is focusing too much on promoting the electrification of the energy system while heat demand is not well understood and characterized (different grades of heat with their associated technological answers exist). It is time to look at how to capture the potential energy and CO2 savings in households, commercial and industrial premises.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal Other (please specify)
Please specify which other pathways	While cogeneration units can run on a variety of fuels, all of which offer unique environmental benefits compared to the conventional technology alternatives, only 11% of electricity produced by CHPs comes from Renewable fuels in Europe today. as far as biomass is concerned, production and demand are set to increase in the future, therefore the combustion of biomass in CHP should be promoted as the preferred route for biomass utilization. It is important to note that other promising technological routes should take a more proeminent role post 2020, such as geothermal and concentrated solar power energies. Both could produce heat and power from a high temperature source.
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	COGEN Europe would like to highlight that the use of any fuel source should be energy efficient. Energy efficiency legislation in combination with renewable energy legislation will ideally reinforce the role of RES and ease the sustainability dimension of energy usage. COGEN Europe would like to highlight that a large untapped potential for the use of RES heating or cooling could be found in district heating/cooling networks.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	COGEN Europe supports the introduction of sustainability criteria for bio-energies, nevertheless the administrative burden to be supported by the suppliers have to be commensurated with the potential negative impact. for this reason, COGEN Europe considers that small & local bioenergy producers should benefits from more lenient provisions. COGEN Europe recalls that as a matter of principle the use of any fuel source should be as energy efficient as possible. We are of the views that the energy efficiency legislation should apply at the top, or in alignment, with renewable energy legislation.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	The same regional cooperation approach should apply to RES heating and cooling markets, as in some parts of Europe district heating/cooling networks could be developed in order to supply households and industries across the borders.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	It would far more relevant for the EU to look at those technologies from the broader energy system approach. Individual technologies are bringing substantial changes to the energy system, and from time to time for the worse (in terms of energy savings or CO2 emissions). Their impacts/interactions on the remainder technologies should not be overlooked and upgrading of the whole energy systems should be seeked.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Stuart Allison, Economic Development Manager, Orkney Islands Council- stuart.allison@orkney.gov.uk
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	United Kingdom
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, an indicative and non-legally binding target at EU level is appropriate Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	The principle drivers for the directive 2009/28/EC still stand and targets would be recommended to continue past 2020 to achieve the EU aims. The Directive is part of a package of energy and climate change legislation which provides a legislative framework for Community targets for greenhouse gas emission savings. It encourages energy efficiency, energy consumption from renewable sources, the improvement of energy supply but also economic stimulation of a dynamic sector in which Scotland and Orkney is setting an example. The sensitivity of peripheral regions that have demonstrable Renewable Energy sources should be recognised which could fall foul of unsupportive transmission charging. Care should be taken to consider implications of any specific development in terms of targets to support the full range of directive ambitions. There is ongoing controversy concerning biofuels (displacement of productive food land-use and the creation of a new cash crop economy that has wide-ranging ecological, conservation and sustainability issues), so this needs carful definition. Synthetic fuels derived from constrained renewable energy however could become a significant opportunity as chemical engineering technologies and smart grids become better developed. The complexities of negotiating the policy changes to support development of synthetic fuels (R&D and eg fuel tax regimes)- will likely go beyond the current 2020 timeline and targets woudl help.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Accelerate convergence of national support schemes Open up national support schemes to cross-border projects Phase out support schemes over time (please specify for which technologies if applicable)
Please specify for which technologies (if applicable) to phase out support schemes over time	As renewables technologies such a Wind turbines reach a technical maturity its likely that the market will drive further development and ultimate deployment and therefore focus should rest on newer technology and relevant support for example Marine, Storage, Smart Grid Synthetic fuels which will still be developing post 2020
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	N/A
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	In particular Marine Renewables (Tidal and Wave), Smart Grid technology, Energy storage, Smart Transport solutions and synthetic fuels are still early stage and emergent in relative terms eg compared to Wind energy. Whilst significant developments and deployments are expected to be demonstrated in the period up to 2020 – with many examples being led and tested in Orkney - such technologies will still need to develop well beyond 2020 and support mechanisms and financial incentives will be required. There are significant differences between the different sectors. Sustainable Transport for example has major barriers to overcome and despite manufacturing advances in terms of electric vehicles there are many technological and social issues to address- but also potential solutions such as vehicle to grid storage. Heating and cooling are perhaps closer aligned in terms of the technology but again they stand as a discrete sectors from Electricity generation and the associated technology. Energy storage remains a significant challenge to address Renewable Energy intermittency and should be considered as a priority in tandem with smart grid technology over the next 2 decades. Synthetic fuel as noted whilst R&D solutions are showing real possibilities (in association with constrained renewable energy generagy) the phase of commercialisation is very early and confounded by inappropriate fuel tax regimes.

B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	The difficulties being experienced just now may well continue post 2020 - its hard to speculate on this as all are live issues under the government Electricity Market Reform with numerous uncertainties
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network
D.2.1. Please explain why	All are live issues under the government Electricity Market Reform with numerous uncertainties and so its necessary to bring clarity in the nearer term.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage Other (please specify)

Please specify which other measures	Alternatively other balancing services such as hydrogen, energy carriers and synthetic fuel production offer solutions of system integration (no necessarily electrical system). Smart grid technology, as established to good early effect in Orkney, still has significant potential to develop further as smart meters, storage solutions, 'vehicle to grid 'and demand flows are better developed, understood and potentially managed. This in itself requires much better system integration and government support.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	N/A

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness Lack of suitable information Lack of public support
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Electrification together with higher share of renewables in electricity production Other (please specify)
Please specify which other pathways	Without a doubt it will be electrification – with an aspiration to transition from traditional fossil fuel heating to renewable sources. Air to air and some ground source will also heavily feature. Biomass is a possibility but price and demand as well as provenance and supply (local and further afield remain challenges to balance- but it will have its place. PV and solar thermal are still expected to have an impact – however subsidy and new technologies will be very different by 2020 and so it will likely be a market driven demand response. Smart grid technology, as established to good early effect in Orkney, still has significant potential to develop further as smart meters, storage solutions, vehicle to grid and demand flows are better developed, understood and potentially managed. This in itself requires much better system integration and government support.

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Heating and cooling solutions may well still be constrained by price beyond 2020. Whilst all new builds and new housing districts are likely to have a higher level of renewables, solutions retrofitting of old properties will remain a challenge.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of infrastructure Lack of awareness Lack of suitable information Limits of availability of sustainably produced biofuels Other (please specify)
Please specify which other barriers	All the above, but 'lack of awareness' also extends to challenging existing vehicle use patterns and ownership. On demand sustainable transport solutions whilst attractive for what they offer in support of the directive remain some time off. As stated if synthetic fuels are to feature then serious consideration needs to be given to the fuel tax regime to encourage appropriate R&D and commercialisation – developing, utilising, commercialising and integrating existing rich sources of renewable energy should consider addressing the barriers to synthetic transport fuel being part of the offering. Some types of Synthetic Fuel development eg from renewable sources (as opposed to sustainably produced biofuels) remains uneconomical to commercialise due to existing transport fuel tax regimes
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Water Air

G.2.1. Please explain your answer	Water transport remains heavily dependent on oil fuel. Some developments in terms of hybrid and hydrogen fuel-cell or even battery driven vessels offer possibilities that would be more within the post 2020 time frame. Support and trials should however be considered in the near term as any transition in this sector would have a long lead time. Agricultural transport is not often included but is a high user of fossil fuels. The high energy demands placed on these vehicles/equipment means alternative low carbon versions are challenging but should not be ignored particularly in the rural and agricultural regions taht are also dependent on passenger transport. The Scottish government ambitions are high in terms of low carbon transport and Orkney can offer a unique testbed for a range of low carbon transport developments (Public and private low carbon transport and ferry provision)- excluding rail. More integrative work between manufacturers, the buying/leasing public and government is required as take up of electric vehicles remains a near term challenge. Orkney has considerable potential to contribute to developments that address challenges in a rural and island region in terms of agricultural . This is all the more promising due to the proximity of the richest Marine Renewables energy source in Europe.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	To encourage proper sustainability criteria and deter unsustainable option for biofuel and Fossil fuels (which are ultimately unsustainable)

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	

I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Not familiar enough tyo comment

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Industrial manufacturing and supply chain Other (please specify)
Please specify which other key challenges	Energy storage is still a significant challenge in dealing with intermittency.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Synthetic hydrocarbon fuels and energy carriers should be given priority post 2020. Efforts and support have focussed on the technologies listed but with the possibilities to use renewable energy at source to manufacture fuel, fix CO2 and generate hydrogen should be given increased support. Industry will only engage if the tax levels are amended to recognise synthetic fuel as being from sustainable sources rather than as fossil fuels and with such incentive changes the necessary scale up and commercialisation from early stage R&D currently being explored has the opportunity to considerably reduce carbon emissions.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	A hard questoin as we know in broad terms the aspirations and targets, but to offer accountability to development projects certain results are indeed expected. Therefore good sound principles of project management should identify milestones and phased project development based on metrics that woudl determine progress.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Gestore dei Servizi Energetici - GSE
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	public company promoting renewables
3. Please indicate your country	Italy
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Come si è avuto modo di registrare a tutt'oggi – con un consuntivo 2010 per l'Italia superiore alle attese dichiarate nel NREAP - l'avere fissato obiettivi obbligatori, benché in assenza di un sistema sanzionatorio esplicito, ha prodotto un effetto positivo in termini di incremento di utilizzo delle fonti rinnovabili nel nostro paese, grazie all'avvenuta adozione o rafforzamento di efficaci misure di sostegno, anche stimolando una risposta puntuale del governo, a fronte dell'aumentata consapevolezza dell'opinione pubblica sulle tematiche della sostenibilità della crescita. Un altro aspetto altamente positivo dell'impostazione seguita con la Direttiva 28 è l'aver costretto gli Stati Membri a un monitoraggio continuo e confrontabile delle politiche in atto (costi, efficacia, efficienza) e dei risultati raggiunti. Pertanto si ritiene auspicabile un'analoga impostazione a livello comunitario, anche post 2020. La fissazione di obiettivi vincolati, costituisce inoltre un'ulteriore spinta per potenziare la ricerca in ambito tecnologico (modelli di nuova generazione). Naturalmente sarà da verificare le modalità di attribuzione dei target nonché l'oggetto dei medesimi. Sarebbe auspicabile, ad esempio, pensare ad una compenetrazione degli obiettivi oggi fissati in direttive differenti (vd.FER, ETS, E.E.). In particolare, appare non auspicabile, una politica di obiettivi fissati sulla produzione o sul consumo di energia da FER che non tenga conto dello sviluppo tecnologico.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Better financing possibilities Other (please specify)

Please specify which other policy elements?	Tutte le politiche sopra indicate sono importanti al fine di conseguire i risultati attesi. Si ritiene però che il focus debba essere orientato in particolare al rafforzamento del settore ricerca e sviluppo (nonché rafforzare l'attività di disseminazione di progetti pilota) a sostegno anche di produzioni ad alto valore aggiunto che possano premiare l'industria europea. E' inoltre importante eliminare tutti quegli ostacoli che ancora oggi si frappongono ad un efficace e meno oneroso impiego delle fonti rinnovabili, in particolare i sussidi erogati a vantaggio delle fonti convenzionali e la difficoltà di accesso alle reti. Occorre peraltro puntare ad affrancarsi finalmente dalle politiche finanziarie di sostegno pubblico alla realizzazione degli impianti, mirando a sviluppare filiere pienamente competitive in assenza di incentivi. Una delle strategie da porre in atto dovrebbe essere l'internalizzazione dei costi esterni nella produzione e nel consumo di energia. Si segnala inoltre che un maggior coinvolgimento della pubblica amministrazione - sia in considerazione dell'impatto che la stessa ha sul consumo finale che in relazione agli effetti che si possono positivamente produrre sull'opinione pubblica - sia auspicabile.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	Si ritiene ragionevole che al 2020 anche quelle tecnologie che oggi si presentano bisognose di uno specifico sostegno possano non doverne più beneficiare (cfr. CSP). Ciò sia in considerazione delle curve di apprendimento (emblematico il caso del fotovoltaico negli ultimi anni), sia come conseguenza di una strategia di supporto che non si limiti a rincorrere i costi ma che diventi essa stessa motore della riduzione dei costi, stimolando la concorrenza a favore delle tecnologie competitive in tutti i campi Peraltro, nei prossimi anni occorrerà anche effettuare interventi sul fronte regolatorio, autorizzativo, di modellizzazione dei mercati, di accesso al credito, che correggano le distorsioni esistenti: una rimozione delle barriere non economiche è anch'essa una delle strategie da adottare per ridurre gli incentivi.

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	E' necessario, arrivare a modelli di mercato che consentano un'effettiva competizione tra le fonti (anche prevedendo l'eliminazione graduale dei sistemi incentivanti in essere). I sistemi incentivanti, finchè necessari, dovrebbero poter rispondere rapidamente alla diminuzione dei costi di generazione; la riduzione degli incentivi nel tempo, quand'anche non fosse esattamente nota la curva di decrescita dei costi di produzione, è comunque auspicabile in modo da continuare la spinta verso tecnologie sempre più competitive. Una naturale convergenza delle modalità di incentivazione presenti a livello europeo, già oggi spontaneamente in atto (e si ritiene che non debba essere imposta a livello europeo), pare anch'esso uno strumento utile in quanto, ad esempio, consente un confronto di costi, incentivi, scambio di buone pratiche e di esperienze negative da cui imparare. Inoltre l'introduzione di sistemi di internalizzazione dei costi esterni legati al consumo di energia favorirebbe la competitività delle energie rinnovabili sul mercato libero.
Please specify for which technologies (if applicable) to phase out support schemes over time	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Le risposte sono prevalentemente riferite al settore elettrico
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	Commento relativo alla risposta C.2 Si riconosce la necessità di un miglioramento delle procedure autorizzative. I meccanismi e gli strumenti attraverso i quali intervenire possono essere vari. Le misure che si ritiene possano maggiormente contribuire a risolvere i principali problemi che si riscontrano sono la durata della procedura autorizzativa e il numero elevato delle amministrazioni coinvolte per il rilascio dei permessi necessari.
C.2. Which policy response to the problems identified above do you consider appropriate?	The approach of the current Directive to lay down a general framework for Member State action is fine

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	Ad oggi le regole di connessioni sono carenti di trasparenza rispetto alla gestione della rete successivamente alla connessione dell'impianto.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Other (please specify)
Please specify which other rules	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Enable renewable generators to offer balancing services to TSOs

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness Lack of suitable information
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of infrastructure Limits of availability of sustainably produced biofuels

G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers
G.2.1. Please explain your answer	Nel settore del traffico passeggeri si può prevedere una maggiore diffusione di veicoli elettrici e inoltre può essere estesa l'offerta di veicoli innovativi a basso consumo o alimentati a biocarburanti. Inoltre il traffico dei beni dovrebbe essere almeno in parte spostato dal trasporto su gomma a quello su rotaia.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)
Please specify which criteria	I criteri di sostenibilità esistenti sono da considerare attualmente sufficienti ma si ritiene che debbano essere applicati anche al settore della biomassa solida e gassosa. Inoltre, tenendo conto dell'esperienza attuale si ritiene opportuno disciplinare tutti quegli aspetti con i quali gli stati membri si stanno confrontando (esempio impiego degli oli da cucina usati) per identificare e superare in modo più preciso il perimetro di applicazione dei criteri medesimi e le azioni volte al loro aggiramento. Particolare attenzione andrebbe posta per rafforzare le azioni di controllo nei confronti delle biomassa importata.
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)

Please specify how and with whom, i.e. only neighbouring countries or more widely	Considerando che la scelta di dare attuazione a tali meccanismi di cooperazione ha in sé un valore strategico e non tanto legato all'effettivo conseguimento dei target nazionali, in una logica di rafforzamento ed allargamento delle relazioni esterne e dei partenariati internazionali della Comunità, la Commissione potrebbe identificare degli assi prioritari (analogamente ai TEN-E) su cui rendere disponibili dei finanziamenti. In particolare un'area da investigare è la sponda sud del Mediterraneo, in cui lo sviluppo delle infrastrutture di rete e delle connessioni con l'Europa è funzionale ad intensificare la cooperazione in ambito energetico e per lo sviluppo delle fonti rinnovabili.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	Lo sviluppo delle infrastrutture di rete e delle connessioni in quei paesi europei che si configurano come hub naturali (i.e. Spain, Greece, Italy) verso i paesi confinanti e non appartenenti all'UE, risultano funzionali al fine di intensificare la cooperazione in ambito energetico.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	La priorità dovrebbe essere l'individuazione di partner con cui definire progetti di interconnessione, nella logica sia di un'integrazione del mercati europeo e nord africano rispondendo così a due delle prioirtà della Comunicazione stessa "Strengthening partnerships for secure, safe, sustainable and competitive energy" e "Improving access to sustainable energy for developing"countries. La previsione esplicita ad accordi con paesi terzi sottoscritti da più paesi membri UE potrebbe essere utile. L'UE dovrebbe cercare di favorire la nascita di partenariati o specifici accordi tra gli Stati Membri, al fine di poter esplorare nuove possibilità di cooperazione in ambito energetico, e in particolare per lo sviluppo delle fonti energetiche rinnovabili, anzitutto verso i Paesi del Bacino del Mediterraneo. L'UE dovrebbe farsi portavoce di un partenariato che faccia da framework ai vari accordi che potrebbero scaturire in questa area. Di fatto, se si considerassero i meccanismi di cooperazione uno strumento non solo funzionale al raggiungimento del target, ma come a uno strumento che rafforzi la cooperazione interna tra gli Stati membri nel settore energetico, e che favorisca un approccio di tipo regionale allo sviluppo delle FER - piuttosto che un approccio dato da ogni singolo Stato membro - si potrebbero stimolare degli accordi funzionali allo sviluppo regionale delle FER in una determinata area, piuttosto che in un singolo paese.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Questo tipo di progetto risponde alla logica espressa al punto 4. Pertanto potrebbe essere replicabile.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness Industrial manufacturing and supply chain

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Si.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Ministry of Enterprise, Energy and Communications, Government of Sweden
2. Are you responding to this questionnaire on behalf of /as:	Public Authority
3. Please indicate your country	Sweden
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	It is premature to asses if targets post 2020 are necessary or desirable. Sweden looks forward to a thorough discussion of the issue within the framework of the Energy Roadmap 2050 and a impact assessment from the commission.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	The need for financial support depends on how mature different technologies are. Financial support can be interpretated in a wider way than direct production or investment aid. There are another ways of financially supporting certain technologies that may even in the future be justified even if a technology is mature in order to fill market failure, needs in the physical planning, etc. It is not possible in the current situation to predict which possible support might be needed after 2020. It is up to each Member State to decide on aid.

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)
Please specify how to make support schemes more market-oriented	Sweden has mainly made use of general instruments to promote renewable energy such as. carbon and energy taxes. These have had a major impact on eg the type of fuel used for heat. Sweden's experience of the electricity certificate system is very positive. It is a market-based support scheeme to promote renewable electricity generation that delivers as planned and at reasonable prices.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Different national circumstances in different countries may justify differences in the needs that exist and thus the necessary support.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	For example, different exception rules in different countries might mean unfair competition of some sectors in different Member States.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing

C.1.1. Please provide explanations and specific examples where available	The relatively biggest obstacle from a Swedish perspective, is considered to be permitting process. There have been improvements in recent years but the outcome of permit applications are still uncertain and appeals can come late in the process, which can lead to large delays in the investment process. On the other hand, Sweden is a country with large land areas and therefore with alternative locations for investment, which has probably contributed to the rapid development of renewable electricity production.
C.2. Which policy response to the problems identified above do you consider appropriate?	The approach of the current Directive to lay down a general framework for Member State action is fine

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	Considering the potential positive socio-economic effects, Sweden may consider to introduce a system of ex ante sharing of grid reinforcement costs for large scale renewable power production. Such a system would mean that an electricity producer only would pay a share of the total cost of reinforcement, a share that would corresponds to the producer's share of the total capacity of the grid reinforcement. This question is currently investigated by the Swedish Government Offices.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	None of the above
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Other (please specify)
Please specify which other measures	There is an important potential for consumers to participate in the balancing power market (smart grids). With an increasing share of renewable electricity production in the system, trading closer to real time will become more interesting to evaluate.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	In the long run, renewable energy producers should carry their own costs. In the shorter run, there might be need for financial support. Support for electricity from renewable energy resources should be made possible through market based support schemes such as the electricity certificate system in Sweden. In that case the total income for the producer will be the income from the sale of electricity on the electricity market plus the income from sale of electricity certificates.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing is appropriate

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Other (please specify)
Please specify which other barriers	Different segments of the market are suitable for different forms of RES and the determining combinations of barriers are specific for each sector. There is not one barrier for the whole heating and cooling sector. In SE heating is provided by RES, via biofuels and district heating, small scale use of solid bio fuels and electric heat pumps with >50 RES in electricity generation.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Other (please specify)

Please specify which other pathways	The energy efficiency directive rightly pointed out the advantages and options following district heating/cooling infrastructure. This opens for very efficient and flexible use of available waste and other types of biomass in high efficient CHP.as well as distribution of geothermal heat. For small scale heating efficient heat pumps and increased renewable electricity generation is an important option. These supply systems offers heating services without transportation or pollution to the air in the built environment.
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	We do not see energy efficiency and RES as alternatives or competing. With a system perspective a balance between these essential components of sustainable development can be reached.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers
G.2.1. Please explain your answer	Passenger transport (mainly cars) is for Sweden the ”most simple” sector in which to increase the share of biofuels. It is a sector where Sweden is already at the forefront.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	

H.1.1. Please explain	None of the above. The sustainability criteria in RED are primarily related to sustainability of biofuels from agriculture and are hence not suited properly to address sustainability in forestry. This would be true even with significant adaptations of criteria similar to those presented by COM in its 2010 report (COM(2010)11). Rather than addressing important environmental sustainability concerns by such adaptations we would urge the Commission to instead focus its efforts on the implementation of forest-related legislation such as the Timber Regulation and global processes such as EU partnerships on forest law enforcement, governance and trade (EU FLEGT VPA) with timber-exporting countries. It should also be noted that the agreements in Nagoya and Durban entail significant progress in third countries with respect to the protection of carbon stocks, biodiversity and ecosystem services in forests. If additional measures are necessary this should be handled through relevant forest processes and environmental legislation and thus cover forestry as a whole and the use of forest products not only the small fraction used for energy purposes.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)

Please specify how and with whom, i.e. only neighbouring countries or more widely	It is the interest of the EU and its member states (MS) to make ambitious efforts to develop and transfer renewable energy and technologies. It will be needed to fulfil the 20% target on renewable energy and the 10 % target of renewables in the transport sector by 2020. It will also be needed to create the preconditions for growing industrial sector and to contribute to the competetiveness. Therefore, it is important that the EU continues its policy to promote renewable energy, not the least through the SET-plan. It is important that EU member states fully implement internal energy market legislation. If done, it will facilitate the transfer of energy between MS and increase the export opportunites within the EU. EU and its MS should also cooperate to remove obstacles for the transfer of renewable energy, for example the integration into the grid. If EU is succesful in these areas, the region will be a global model for the transfer of clean energy technology. The development of the european energy markets, including the renewable energy sector, does not end at the external borders of the EU. An increased cooperation, especially with neighbour countries will contribute to further developing this sector and strengthen the security of suppy of the union. Therefore a very close cooperation on renewable energy with neigbour countries is encouraged, for example within the Energy Community, and the Union for the Mediterrenean. The North Sea is also an important area
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	criteria as the basis for the projects to be prioritized more clearly needs to steer towards the goal of achieving the agreed energy and climate goals for 2020 and 2050
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Other measures (please specify)

Please specify which other measures	Sweden welcomes a more strategic effort for the external relations in line with the conclusions of the EU-commission's communication on the external policy. A continued discussion with the member states is welcomed. The format of co-operation with third countries should in principle be adjusted to fit strategic interests in different countries and regions. There is a great value in the strenghened co-operation between EU member states when working to strengthen the co-operation with third countries. EU should be transparent in the bilateral relations with third countries to enable the contribution of EU member states. The EU-delegations in each third country has an important role to consult with the embassies of member states in order to realise possible synergies. It is difficult to predict a model when it is appropriate with a bilateral cooperation at EU level. This should be based on a case by case basis and based primarily on the provisions of the treaty and EU practices.
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Sweden is positive towards the fact that the EU specifically supports the development of renewable energy in the Mediterranean and the projects that are running. Sweden also considers that there are other regions that are interesting and important for developing regional cooperation on renewable energy, such as the North Sea area. Sweden is open to a discussion on developing cooperation between the EU and the Mediterranean countries, like what is done within the framework of the Energy Community of Southeast Europe.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Off shore wind power projects are according to current projections not expected to experience a great development in the short run in Sweden. However, Sweden believes that it is worthwhile to be a party to the discussions taking place within the NSCOGI initiative and that can be used in the future. Examples of benefits that can come from this initiative is the harmonization of market rules, allocation of costs for grids at sea, the rules for allocation of capacity and standardisation of technology.

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Industrial manufacturing and supply chain Other (please specify)
Please specify which other key challenges	None of the three technologies will be totally technically and commercially mature by 2020, and further efforts are needed to improve efficiency and competitiveness. For the intermittent sources, grid integration and storage will also be important. For bioenergy, there will be further research needed on the resource efficient use of biomass, land, water, etc, and further attention will be needed on sustainability.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Additional measures, in general, will be needed for effective and efficient policies and measures, and for the removal of barriers. There is also a need for more long-term R&D to support the further development, address problems that arise, and to find new renewable energy technologies.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	New technologies in the field of ocean energy may become important in some regions. More fundamental research in, i.e., materials science may give rise to new opportunities that could be explored.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	The SET-Plan measures have taken time to start, and it is in our opinion too early to evaluate the pros and cons.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	If ”assistance” means public funding, then, yes, it is vital to have project plan with milestones. One must, however, understand that industrial development and deployment often involves complicated industrial investments, subject to environmental permissions, etc. The time schedule must be open to revision on account of what happens in the real world.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Energy research Centre of the Netherlands (contact: Ton van Dril)
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	National Research organisation
3. Please indicate your country	Netherlands
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	To support an ambitious climate target the role of renewables has to be made clear. Legally binding targets reduce investor uncertainty. However, targets should be evaluated and adjusted if necessary if conditions change. Adjustment procedures and parameters have to be predetermined. The ETS does not cover all GHG emissions. Furthermore, the ETS has a poor track record on dynamic efficiency, or on the ability to support long term technology development. Targets alone are not sufficient to promote RES deployment due to the numerous barriers they face, e.g. high costs, lack of financing opportunities, lengthy permitting and licensing procedures, etc. These barriers need to be addressed and removed using additional targeted measures. Care should be taken to ensure that complementary measures are well designed and introduced appropriately in time. Analysis should bear out that RES still have room to be integrated in markets and transport systems (electricity, gas) cost-effectively beyond 2020.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Better financing possibilities Continue to ensure sustainability and scalability Other (please specify)
Please specify which other policy elements?	EU wide regulation on allocation of costs incurred by the obligation is necessary. Enhanced public support focus on R&D is only applicable to promising RES technologies with a high cost gap. MS R&D and additional market stimulation support to be left to MS subsidiarity. All forms of energy supplied to the market and fed into public grid should be subjected to uniform, non-discriminatory market rules and grid codes

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	Making support schemes more market-oriented and accelerate convergence of national support schemes: It should be considered to bring all commercially immature RES technology under an EU-wide market-oriented support scheme. Support to non-commercial RES should have a basic technology-neutral approach for static market efficiency. Supplementary technology-specific market support could provide dynamic market efficiency. All forms of energy supplied to the market and fed into public grid should be subjected to uniform, non-discriminatory market rules and grid codes Market design rules should lower the barriers to RES to market entrance as much as possible. This applies to both energy markets and markets for system services. Phase out of support schemes depends on levels of market incentives like taxes and carbon prices.

Please specify for which technologies (if applicable) to phase out support schemes over time	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	Support should become more market oriented, which in itself causes alignment to a certain extent, (notably with feed-in premium schemes). By combining them in a hybrid way to obligation-like schemes (e.g. ETS), a gradual and controlled transition to a more EU-wide aligned support structure can be achieved. Designing support schemes so that they do not distort the functioning of the market becomes increasingly important as the share of RES increases. Gradual alignment across EU should be ensured so as not to jeopardize the functioning of the internal energy markets, in particular the electricity market.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Choices related to question 3 and 4 rely on the cost structure of low carbon options in the different sectors. When the market is open and international, like the transport fuel market, EU-wide obligations have a higher added value than when the market is local or subnational by nature, like the heating market. In the latter market, localization of the support structure remains a valid approach to enhance effectiveness while limiting wind fall profits.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	This issue should be dealt with in a prudential way. On the one hand EU-wide market-based support is imperative. On the other hand, within the EU framework there should be room for additional MS-specific support
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)

Please specify which support schemes you consider most distorting	Feed-in support schemes have direct impact on price formation, as the income structure for new projects is very transparent for all parties in the supply chain. Priority access and dispatch for renewables is distorting the market between 'gray' and 'green' electricity. When the share of intermittent electricity production increases, premium schemes are less distorting than tariff schemes as the producers are faced themselves with profile and balancing costs in a premium scheme. Following the Principle of Subsidiarity and the need for governments to achieve their national binding targets, control of national support schemes should in principle remain in the hands of national governments. However, there is a need to open up national support schemes to allow for greater deployment of RES in a cost-efficient manner. For example, in light of expected development of large scale OWE and an offshore grid, in particular in the Northern European Sea basins, it may be anticipated that a common price or support level would be needed as well as removing national requirements that offshore wind farms must feed itstheir electricity to the grid of the country through which they are subsidized. Support that is excessive given the technology-specific cost gap towards commercial maturity should be avoided. Discriminatory rules among energy technologies on markets for energy and system services and grid codes should be avoided.

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of information on support schemes or other Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	Information on support schemes, adequate skills and agreement technical specifications are specifically lacking for smaller scale RES, like e.g. renewable heating and cooling. Even language barriers exist.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	Strengthening rules and pushing for more standardisation are both appropriate For small scale RES: improve communication on technologies, procedures, certification

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	This applies for the Netherlands.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network
D.2.1. Please explain why	The networks have to be accommodated to far greater penetration of intermittent sources. It requires strengthening on local level, mostly due to solar PV and other distributed generation. Also on the international level, mostly due to offshore wind ambitions. Priority dispatch and very rigid curtailment limitations are not desirable, as this impedes good market functioning and may imply social costs. These tend to be socialized through the energy bills of small energy consumers. Moreover, variable renewables will be already in advanced positions in the merit order.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Enable renewable generators to offer balancing services to TSOs Other (please specify)
Please specify which other measures	Back-up capacity mainly in response to wind, demand response mainly for solar PV Market design should be reformed increasing flexibility services including the demand side, energy storage facilities, and distributed generators with proper recognition of the flexibility value. Introduction of capacity payment mechanisms may have serious disadvantages for market functioning and the completion of the Internal Energy Market. Their pros and cons need to be prudently considered.

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Producers of renewable energy should bear greater responsibility for system costs Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	Complete implementation of unbundling is needed.
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	Still a lot of amendments in regulatory frameworks need to be made lowering barriers to participation in various markets for flexibility. All market participants should be exposed to variability in energy prices on wholesale markets. In the development of cross-border participation through harmonization of grid codes and market designs still major strides need to be taken.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)

Please specify which instruments incentivising investment	Attention: the remarks below refer more to the first answering option than to the second one. ECN does not prefer separate instruments for separate generation capacities. The current whosesale market might not be adequate for future investments in fossil peak generation capacity. Markets for flexibility services should be further developed for a range of time scales with low entry barriers to the various categories of potential suppliers. Further development of voluntary markets for renewable energy certificates can provide additional income for this category as well. In this respect, the provision in the Renewables Directive that RES-GO can only serve disclosure purposes is hampering transparency and reliability. An integrative approach to the use of unique energy certification systems can be a way forward in this respect. RES certification (RES-GO) can be expanded to cover the whole energy mix, at least with regard to electricity. The social costs are low and it will serve consumer transparency and enhance market functioning.

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness Lack of suitable information Other (please specify)
Please specify which other barriers	Lacking customised practical solutions for specific situations Split incentives, intransparant markets, limited price information
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Geothermal Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Too aggressive approaches in pushing renewable energy in heating and cooling might diminish the attractiveness of energy efficiency measures, resulting in an non-optimal solution.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Lack of standards Limits of availability of sustainably produced biofuels
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Rail

G.2.1. Please explain your answer	Passenger road and rail transport are promising for further electrification in combination with increasing renewable electricity generation. Biofuels can also be promising for passenger road transport with more dedicated biofuels or higher blends. However, in view of limits to biomass availability, biofuels should be allocated to road freight, air and water transport where electrification and hydrogen are no realistic alternative

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	It is doubtful whether the current criteria will be implemented in full by 2020. Implementation, enforcement and expansion to all kinds of biomass is important now. When the share of biomass increases, additional attention may be required on sustainability. Sustainability criteria should also be developed for fossil fuels.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	There is no clear yes/no answer here. Provisions in RES Directive are a first step, based on anticipated cooperation opportunities, rules in this directive may need to be refined based on demonstration projects and experiences.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Again, there is no clear yes/no answer here. Answer is conditionally yes, depending on mutual benefits and if these can be exploited. Only with neighbouring countries and only if it i's benefial to both the EU and those countries, and if it suits the needs for further technology development.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)

Please explain why	NW Europe also faces challenges to integrate intermittent sources, so a priori prioritizing for third countries' production seems arbitrary.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	see responses to questions 2 and 3.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Yes. It is a necessary prerequisite to develop tens of GW of North Sea wind. NSCOGI is an important bottom-up approach, allowing for information exchange for parties to agree on a coordinated masterplan for grid interconnection to accommodate offshore wind deployment in the medium term. However, there is a need to integrate cooperative efforts on offshore grid into a broader maritime spatial planning (MSP) framework, taking into account the potential locations for development of offshore wind energy and the development of human activities in the seas like shipping, fisheries, coastal tourism, etc. Bottom-up approaches will only work if countries implement a proper MSP. This is currently not the case and therefore initiatives such as NSCOGI have limitations. Therefore, although such a bottom-up approach is beneficial, it should be complemented by a top-down approach. This could involve a MSP directive which would require MSP planning at national level and a framework for a long term, and more binding cooperation, with key visions and objectives. The approach could be applied for other seas.

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Industrial manufacturing and supply chain Other (please specify)

Please specify which other key challenges	Development of customized practical applications in buildings, industry and agriculture
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Instruments aimed at communication, improving balanced public perception, public participation in developing solutions, and involvement in projects
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Energy efficiency in industry, recycled or renewable carbon feedstocks for industry, applications of electrification, hydrogen and CCS in industry Combination processes of biomass and CCS Deep emission reduction in the existing building stock including user and social acceptance
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	To answer this, a complete overview of the EU innovation system is needed, and a structured concept of policy evaluation. This could be based on the sufficient occurrence of innovation system conditions. See e.g. http://www.ecn.nl/docs/library/report/2010/e10090_TotalfootballInInnovationPolicy_Summary.pdf
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Technology development policies should require researchers to use systems of monitored targets. These should be based on international peer evaluation with low burocracy.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Deutscher Industrie- und Handelskammertag e.V. (DIHK), Corinna Grajetzky, grajetzky.corinna@dihk.de
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Association of Chambers of Commerce and Industry
3. Please indicate your country	Germany
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, an indicative and non-legally binding target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	The binding targets for 2020 have played a strong role in increasing awareness and support for renewable energies. They were necessary to pave the way for a new energy source into the market. As the renewables' market share is constantly increasing, there is far less need for binding targets in the future, but a great need for a systematic approach in order to reduce costly national support measures and to fully integrate renewable energies in the market. Furthermore, the binding targets for renewables have introduced conflicts with other EU policies and instruments, especially the internal market and the ETS, which has also led to increased costs and burden for the concerned companies. However, indicative targets could help to maintain support for renewable energies and at the same time encourage Member States to establish cost-effective support schemes. Renewable energy sources don't play a crucial role only for decarbonisation but also for security of supply and industrial development.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Continue to ensure sustainability and scalability Other (please specify)
Please specify which other policy elements?	Policies to promote renewable energies should ensure a level playing field for all technologies, project sizes and locations. They should be based on the principle of cost-effectiveness.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	N/A
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes Open up national support schemes to cross-border projects Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	All of the above mentioned measures should be taken into account: As a first step, and even before 2020, national support schemes should be open up to cross-border-projects and cooperation mechanisms must be used and intensified by Member States. However, this must not lead to excessive and unbalanced use of specific national support schemes. Instead of that, the convergence of national support schemes with the aim of establishing an EU-wide harmonized scheme must be accelerated as soon as possible, meaning before 2020. It is also absolutely necessary to make the existing support schemes more market-oriented. A possible solution can be feed-in-premiums; the Commission should therefore deliver an analysis of possible models. In the post-2020-period, the aim of RES policy must be the phasing out of all support schemes over time, as soon as the concerned technologies are competitive to market prices.

Please specify for which technologies (if applicable) to phase out support schemes over time	All of the above mentioned measures should be taken into account: As a first step, and even before 2020, national support schemes should be open up to cross-border-projects and cooperation mechanisms must be used and intensified by Member States. However, this must not lead to excessive and unbalanced use of specific national support schemes. Instead of that, the convergence of national support schemes with the aim of establishing an EU-wide harmonized scheme must be accelerated as soon as possible, meaning before 2020. It is also absolutely necessary to make the existing support schemes more market-oriented. A possible solution can be feed-in-premiums; the Commission should therefore deliver an analysis of possible models. In the post-2020-period, the aim of RES policy must be the phasing out of all support schemes over time, as soon as the concerned technologies are competitive to market prices.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	Financial support schemes in the EU should be aligned on the basis of cooperation mechanisms foreseen in the RES Directive. They also must be aligned with international standards. A fully harmonized European support scheme for renewable energies should be gradually approached, in order to ensure a maximum degree of cost efficiency and allocative efficiency. This should entail a non-discriminatory choice of the optimal location, technology and project size. However there should be no retroactive changes, as investments have already been made, and the expected levels and methods of support should be maintained.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	The convergence of support schemes is especially needed in the electricity sector in order to fully achieve the internal market.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States

Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	The opening of national support schemes is the first necessary step: Application of flexible cooperation mechanisms is a stage on an evolutionary way to a European harmonized and market based support scheme for renewable energies. However, the second step to full convergence of support schemes needs to be made as soon as possible. If not, an overdemand of certain national support schemes will be the consequence, which conflicts with the establishment of a level playing field in the EU.
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Some support schemes, such as feed-in-premiums, have less distorting impacts than others, e.g. feed-in-tariffs, because of their higher market exposure.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications
C.1.1. Please provide explanations and specific examples where available	The most important condition for further growth of the RES share is a reliable and business-friendly regulatory framework: Administrative procedures must be simplified and support schemes must be stable enough to make long-term investment decisions possible.
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	Non-harmonized grid connection rules may distort management of the synchronous European transmission network. A reliable network is an important prerequisite for the efficient expansion of electricity from renewable energies in Europe. It is essential that a level playing field for all producers is ensured also via the balancing rules.

D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network
D.2.1. Please explain why	Already now, existing priority dispatch and guaranteed network access for RES generation should not exempt these generators from their scheduling and balancing obligations, otherwise full integration of wind and solar generation in the market might not be achieved.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Enable renewable generators to offer balancing services to TSOs Other (please specify)
Please specify which other measures	Most of these measures are needed to deal with the growing share of highly volatile RES. That's why a complete system approach in RES policy is necessary which takes into account innovation / R&D as well as investment related challenges.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Price risk – producers of renewable energy should operate without any aid Producers of renewable energy should bear greater responsibility for system costs Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)

Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	As a first step producers might continue to be supported via premiums or investment aid, but as soon as possible they should operate without any aid. With regard to balancing responsibility, a level playing field for all producers must be established in order to limit system costs. For a transition period there might be specific rules for variable generation, but balancing responsibility for these generators must be increased step-by-step.
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	Any rewarding and flexibility product should be market-based.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness Lack of suitable information
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	The regulatory instruments established for increasing the energy efficiency of buildings (EPBD) and heating / cooling products (Eco-design) are complementary to the RES policy. Both policy instruments should be implemented in a way that ensures the highest degree of complementarity and that avoids any double regulation.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of infrastructure Limits of availability of sustainably produced biofuels

G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Rail
G.2.1. Please explain your answer	Road for passengers and rail seem to be the most promising options regarding their spread, the ongoing technology development (e-mobility) and cost-efficiency.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	Member States don't use the existing rules sufficiently. Cooperation should be further encouraged and facilitated, e.g. through guidelines for Member States and companies.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	N/A
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	In the long-term, a new EU-Mediterranean energy partnership based on a non subsidized cooperation seems to be an interesting perspective. In the short and medium term, the existing instruments for cooperation with third countries (art. 9 RES Directive) should be further exploited; Member States should quickly transpose these rules into national law. However, priority should be given to cooperation mechanisms between Member States within the EU in order to enhance RES production and to improve as quickly as possible the security of supply.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Yes, such cooperation is beneficial for cost-efficient offshore wind development and should be encouraged, also elsewhere in the EU.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Priority should be given to research and development of technologies.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Kirsty Hamilton, on behalf of the Low Carbon Finance Group
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Group of senior finance practitioners
3. Please indicate your country	United Kingdom
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	There is an pressing need to address the time period out to 2030, if not 2040. Renewable energy will have a minimum investment horizon of 15-20 years and, as such, the overarching 2020 framework across the EU is too short. Targets continue to play an important role, as well as other planks of policy that impact a project to construction and operation. Although varying across countries and technology, today's market is not yet mature enough (or on a level-playing field) to attract investment without a policy regime in place. Investment decisions being made in 2012 will need to see a firm framework to at least 2030; targets create scale in the market and the level of opportunity. These factors will make RE more attractive to financiers.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Other (please specify)

Please specify which other policy elements?	All of the above are useful, however we would place priority on the second item; it is not clear what 'better financing possibilities' refers to. LCFG is submitting separately a short overview of the current market situation.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	Our response is yes, with transparent regression/review to the point of cost competitiveness; some RE sub-sectors will require longer timeframe of support than others, if the policy objective is a diverse set of investment opportunities and technology uptake (rather than only 'least cost', which would vary by country/resource).
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Phase out support schemes over time (please specify for which technologies if applicable)
Please specify for which technologies (if applicable) to phase out support schemes over time	LCFG support steady cost reduction in delivering projects as this contributes to durable policy, see comment above re regression. We see starting points for the post-2020 policy regime, as relevant to investment decisions today under difficult market conditions, as: * maintaining current momentum, build further track record and inform policy from successful operating models * maintain simplicity. * examine system management linked to greater interconnection, and determine elements of national systems that may need further EU-led cooperation * retain focus on building long-term domestic markets where possible, this will enable the highest penetration of renewables longer-term, attract capital to those countries, and enable other benefits such as supply chain opportunities * a level-playing field for each market is required (with respect to the question below on distorting competition) Last the EU policy framework should remain simple, clear and reliable, removing obstacles, to attract new pools of capital. The LCFG have a set of principles for attracting capital that may be useful.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	B.3. In principle, this could draw on successful aspects of member state policies, in terms of attracting capital. - The first option could potentially be useful for relevant technologies, but within a member state, ie at national level, and linked to attention to other factors affecting investment would be important - The second option may be complex, taking a uniform approach may mean missing key risk areas in the different markets (i.e. just providing benchmark support level may not help in a market where planning delays are the greatest risk). There may be complexities associated with electricity market structures that make comparability difficult. B.4. A broader issue is how to minimise regulatory and policy risk at the point of investment, which is currently at national level. Theoretically alignment of structures may help reduce complexity between member states, however in practice there are many factors that investors will look at before deciding which countries to invest in, not only the support scheme. As per response to question 2. above, insight into the actual consequences of greater physical interconnection at points of greater penetration of RE, including the consequences for support schemes, will be useful in assessing in what areas alignment are useful or necessary, or efficient in maintaining a stable framework for steady market growth (rather than the financial support per se). B.5. This response is primarily focused on the electricity sector.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing

C.1.1. Please provide explanations and specific examples where available	For financiers, the first bullet gives rise to the most serious impediment. The track record of a country, or region, in terms of 'planning' delays (encompassing the areas mentioned) can be an impediment where this adds to risk investors face prior to construction and revenue generation. Where planning is devolved down to local community level, this may add to the complexity of understanding how planning processes (including opposition and review) are likely to be determined. The timeframe is a key factor, particularly where this is open-ended.
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	Financiers look for clear understanding of the rules, and the ability to quantify costs; lack of clarity on regulation can hamper investment. The issues above vary by member state and would be analyzed individually by financiers. We note markets like Spain and Germany have already managed high penetrations of RE in the power system, that track record should be used to inform other member state consideration.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment
D.2.1. Please explain why	At higher penetration of RE, financiers will want to ensure there is guaranteed access, priority of dispatch and a clear route to market; as well as measures taken to counteract curtailment.

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Enable renewable generators to offer balancing services to TSOs Other (please specify)
Please specify which other measures	All of the above may help increase flexibility, if introduced in an appropriate way in the context of national conditions. The current policy debate over the introduction of capacity payments, in the UK, signals that the interaction of support schemes (capacity payments, renewables support) and impact on overall electricity market operation, need to be carefully understood.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand) Current market arrangements are sufficient to reward flexibility

Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	It is complex to respond to E.1. and E.2. in a multiple choice format. For E.1. the options presented, it is not price risk per se that should be the focus of attention - financiers can and do manage electricity market price risk - the issue is whether RE project economics work in the context of the operation of the electricity market in any jurisdiction; who takes the risks and who pays. Experience across Europe, illustrates a variety of different costs associated with getting RE power to markets (paid by RE generators) depending, for example, on the presence of a pool, or other arrangements. E.2. In practice market design needs to be assessed against the ability to manage and reward much greater interaction between supply, including variable supply, and demand side, reducing kWh use. The current Electricity Market Reform debate in the UK is illustrative of the fact it is the detail that matters. It is important to understand the precise objectives, and design the framework to deliver those.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)
Please specify which instruments incentivising investment	Prefer to submit information separately; that said, clearly a shift to electricity markets evolving into energy service markets, earning revenues from more than just electricity will be important.

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	LCFG has been primarily electricity focused to date, however we are happy to pick up on issues on biomass, and some matters linked to energy efficiency. One observation is the importance of streamlining on-site (household, business) incentives for RE power and RE heat to avoid over-complexity.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	

G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	Financiers would prefer that the Commission sort this out, and define the parameters for this sector. Simplicity will be important. Sustainability criteria that are common to all Member States greatly reduces regulatory burden. There are already EU sustainability criteria for liquid biofuels so it makes sense to do the same for solid biomass in the upcoming Commission review. Competing and overlapping sustainability systems in each country make things complicated and hence less financeable. To ensure a level playing field similar analysis should be applied to conventional energy sources.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	In general, the objective should be to secure investment in EU to build momentum and scale in the RE sector, as well as conditions for increasing the depth of RE industry for high penetration (if third country cooperation is linked with compliance with EU targets). More detailed response can be considered in that context.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Other measures (please specify)
Please specify which other measures	National policies and structures in third countries will have to have the right risk-reward profile in order to attract investors, if co-operation is intended to increase investment in those countries.

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Yes this is useful, where linked to increasing broader EU potential and accelerating wider implementation of RE, through cooperation. However, to build strong EU renewable energy markets, as stated above, the focus should remain on doing that within the EU member states. In other words it depends on what the specific objective is.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Yes, this is important for maximising the potential of offshore wind, and to manage high-penetration of variable power. Cross-border cooperation can help build policy stability.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Other (please specify)
Please specify which other key challenges	Low Carbon Finance Group is primarily involved in investment to deploy the more mature RE technologies, and has not had direct experience of SET plan provisions. A general comment is the need to anticipate regulatory and infrastructure requirements of new technologies (system integration) to ensure near-term decisions retain options (remove/reduce obstacles, delays) to future implementation/integration of technologies that are currently in the early stages of development at present, in so far as this can be foreseen.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	ENEA / massimo.busuoli@enea.it
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Public Research Agency
3. Please indicate your country	Italy
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate Yes, a combination of EU and sectoral level targets is appropriate

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	An overall EU target, as a mandatory legally binding target, appears to be necessary in order to identify the EU objectives and instruments of a common policy for setting up and implement strategies and actions. This mandatory target can be combined with indicative but non-legally binding sectorial targets, in order to allow the adoption, at national level, of the appropriate basket of sectorial actions and measures for achieving the overall EU target, taking into account the possibilities and capabilities of each Member State. Renewable energies and energy efficiency are essential contributors to the European energy mix in order to increase security of European supply and reduce dependency on fossil fuels. Then, a special consideration should be devoted to improve the efficient use of energy, to encourage the widespread use of renewables and to discourage the use of fossil fuels. Such outcomes can be reached both by providing incentives to promote renewable energy technologies (including renewable power generation and energy efficiency), and by phasing out fossil fuel subsides. Finally promoting a linked scientific research plan and the development of the new energy infrastructures, and in particular of the smart grids, can support and speed up the development of the renewables.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	This depends on specific technology under examination and its cost/price reduction by 2020 compared with price and cost of non-renewables, particularly fossil energy sources. At present we could expect for 2020 onwards: • Wind power: no need for financial support; • PV power: financial support only for new advanced technologies, to support the achievement of grid parity; • Concentrating solar power (CSP): financial support still needed, particularly to support the introduction of European technology in North Africa (with transfer to Europe of part of electricity produced); • Biomass: significant differences between biogas, biomass for heat and power, biomass cofiring, biofuels; in general, financial support post 2020 needed only for new advanced technologies and 2nd generation biofuels. Moreover, more advanced technologies will need specific support and actions to counterbalance potential unfair competition from Non EU countries like China. Thus market mechanisms based on the quality of the products and the certification not only of components but also of technological systems and how they have been produced will be necessary (a good example on this is the "carbon footprint").
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes Open up national support schemes to cross-border projects Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	1. Link financial support to the price of fossil fuels; 2. Switching support for renewable electricity from feed in tariffs to premiums.
Please specify for which technologies (if applicable) to phase out support schemes over time	In general, financial support to an emerging technology should change according to its development status and market conditions and should be phased out when it can operate in a competitive market. Long term incentives are not economically justified and translate into market distortion.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	No

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	The difference between questions B.3 and B.4 is not relevant with regards to different energy sectors, but may be important without regard to energy sectors, if we compare the technological quality and level of innovation. The criteria should be the different technological capacities of reducing carbon emission per energy unity, in order to achieve the objective of zero carbon emissions.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	The authorization process is crucial for wide spread diffusion of Renewable Energy (RE), however, usually, the authorization procedures are too lengthy. This not only discourages the investors and the markets but unfortunately create distortions linked to market of permits/authorization. Serious attempts done to simplify the relevant procedures for authorisation at different levels with specific technologies, dimensions of the systems and territorial obligations/specifications, are too complex and often lead to different interpretations. The main problems generally encountered are very slow and different. Useful initiatives that could help the whole authorization mechanism would be to increase enactment of simplified specific national guidelines for installation of renewable energy systems as well as to develop authorization procedures both under national and EU norms/regulations. In addition, diffusion of best-practises at authorization level and communication actions, are desirable, as well.

C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	The presence of different grid connection rules in different countries is a significant obstacle to the increase of renewable energy production. A suitable harmonization of these rules in an unique pan- European standard is an important driver to promote the participation of new operators to an innovative Europe scaled energy market.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access Other (please specify)
Please specify which other rules	In addition to the obligation for network operators to develop network infrastructures, a post-2020 perspective needs other suitable rules. The main aspects to a new pan-European vision involves many factors and operators: - The integration of national networks, strategies and technologies in a unique European network responding to common standards and connection requirements; - The creation of significant policy incentives necessary to promote the participation of new players. Key factors are also represented by the simplification of the bureaucratic process to access these European government programs, the creation of equal conditions for every new network operator in all the European countries, the shorting of the timing necessary to complete the whole market access process; - The need of higher attention to promote secure and efficient energy management systems also in rural areas; - Appropriate policy support for TSO and DSO to improve network technologies efficiency, reliability and safety; - The creation of research programs to support the development of innovative network devices and control strategies in order to reach higher levels of security, reliability and efficiency, to provide ancillary services and to significantly reduce the overall cost of renewables access to the European energy market.
D.2.1. Please explain why	

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage Enable renewable generators to offer balancing services to TSOs Other (please specify)
Please specify which other measures	In addition to the above mentioned ones, other actions are necessary to improve the flexibility reserve of the system: - implementation of energy management systems equipped with advanced functionalities such as reactive and active power control, power factor control, devices to the voltage regulation, smart metering services, intelligent network monitoring equipments; - storage systems installation strategies to reduce over voltages, network congestion conditions and to reduce the phase imbalance; - community grid connection rules, network devices test plans, common standards; - designation and development of interoperability frameworks in order to optimize the ability and capability of different systems, components, devices, etc. in the network infrastructures (smart grids) and the definition of standards for communication and information exchange.

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	The producer of electricity from renewables may be required to ensure that energy storage facilities are available (this way he also becomes operator of the transmission network and is paid for this function).
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING

F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of capacity (installers, other) Other (please specify)
Please specify which other barriers	If on one side solar air conditioning (solar heating & cooling) is an easy and cheap technology to be implemented in new buildings, this do not apply in the case of existing buildings (with particular reference to the historical ones) where the costs are significantly higher due to difficulties an integration as well as to limitations given by architectural constraints. Given the large number of existing buildings, a big support to the achievement of the targets for the implementation of such technologies will be given by the improvements of their energy efficiency. These considerations lead to the need to promote research and technological development of systems that can be easily integrated into buildings as well as to adopt incentive mechanisms rewarding installations in new buildings.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	This is particularly true in the residential sector where an increasing use of renewable sources should be achieved through interventions on the building envelope, to be implemented both in new buildings (through the adoption of eco-building oriented design criteria) as well as through energy retrofit interventions in the existing buildings. Similarly, the promotion of renewable energy to produce heat and / or cold to be used in optimized industrial processes, may represent a further step to promote the penetration of such technologies.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Lack of infrastructure Limits of availability of sustainably produced biofuels
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Rail Air

G.2.1. Please explain your answer	Electricity generated using renewable sources can be used in flexible ways. The need is to find best possible ways that could increase its use in the transportation. The urban road transport both for freight and passenger is a good field of application for electric vehicles. Here, the main problem of the electrical storage systems used in the electric vehicles, as compared to fossil fuels, is their insufficient autonomy. We think that technological development aimed to reduce weight and cost of electric vehicles, improved logistics platforms for freight transportation in the cities, imposition of new traffic restrictions (for conventional vehicles) and dedicated incentives for use electric cars in the cities, will improve the present situation significantly. Biofuels for transport though beneficial in term of autonomy as compared to electricity still suffer from the problem of their production thus requiring use of non-edible secondary materials. Use of thermo-chemical processes and biotechnology converting lignocellulose agricultural by-products into biofuels, is very important not only to increase energy production but also to supplement the farmers' incomes and help to increase the employment at local level. Utilization of organic biomass for production of bio methane at larger scale, is important in the Country with high diffusion of CNG cars, like Italy.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement
H.1.1. Please explain	The Italian legislative decree n. 55 of the 31st March 2011 about the implementation of the European Directive 2009/30/CE on the possession of the sustainability qualifications, foresees three methods of certification. At the state of affairs, those methods are not completely implemented, so it is necessary to analyse how to implement them and if they allow to reach the aforementioned sustainability qualification before to foresee others criteria.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)

Please specify how they should be amended or which elements added	Member States (MS) are already implementing several measures at national level to deal with their renewable energy (RE) and energy efficiency (EE) targets, but those initiatives are not linked with those in other countries. The Commission should support the creation of a European framework for both white and green certificates, where countries that over perform their targets can sell part of the additional certificates to companies or member states that did not meet their obligations. The European White Certificate scheme is a tool that if well-developed could deliver the necessary incentives needed to speed up the single national energy efficiency plans, in order to meet the 20% efficiency target in 2020. The Commission should work closely with MS in order to prevent market distortions such as oversupply of certificates and limit the possibility to generate certificates through "cheap" EE measures that would create an inefficient market and an overflow of cheap certificates. If a European White Certificate scheme will not be created, the EU has other possible tools to address the challenge. One of those, could be the creation of a European Efficiency Fund (proposed by Germany) where energy companies can "buy out" a small part of their annual efficiency targets by investing in the fund.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)

Please specify how and with whom, i.e. only neighbouring countries or more widely	On the short term, Europe will not be able to develop a secure and competitive energy market if we don't cooperate with third countries. On our side, we'll have to reinforce the European Energy Community and build stronger relationships with strategic partners. Cooperation with the MENA regions is a very important step in order to enter new markets with a very high RE potential. It could supply 15% of our future energy demand and at the same time create European and local jobs (ex: Desertec).With Latin America: the Commission will have to strengthen the cooperation with South America. These countries have many natural resources that could be also exploited by Europe. An EU-Latin America Free Trade Agreement is a crucial factor that will determine our future economic partnership. Another important country is China. During the last year, many European companies in the solar and wind manufacturing suffered the consolidation of the markets and the Chinese competition. To avoid future legal disputes and especially the collapse of our manufacturing sector, the EU needs to cooperate with China to build a "fair" competitive market. This will bring benefits to both, the EU and the Chinese economy, but the efforts have to come from both sides: China has to create a stronger internal demand, and the EU has to give a stronger financial and regulatory support to the manufacturing sector.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)

Please explain in which way and to which degree	It makes economic sense to invest in electricity networks in the Mediterranean and North sea countries. Being able of producing clean energy at competitive prices due to their favourable geographic position, they will play a crucial role in the European energy mix. Giving priority to electricity networks in these regions, will allow neighbouring countries to easily purchase cheap RE, that would luckily be much more expensive if produced internally. It doesn't mean that the rest of the European grid is less important, but investing in transmission networks in countries where the technology is more mature and the RE potential is higher, will drive down costs, especially in the short term. If we begin by focusing on Spain, Italy, Greece, Norway, Scotland etc…the whole European energy market will benefit from it. It will contribute to create economies of scale that will increase the number of projects and allow other MS to invest in their own energy market, knowing that they will always be backed up by the strategic countries already identified.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	An EU-Mediterranean energy partnership is one of the most important initiatives for ensuring energy security in the future. It has to be one of the top priorities in the EU energy agenda. Investing in North African countries in CSP, PV or wind farms it is seen by many countries as a potential solution to the upcoming energy crisis. In our opinion, these projects could perfectly fit into the European energy policy, as they could provide clean electricity at competitive prices and at the same time create jobs, but there are still some major points to be defined. During the negotiation phase it will become of primary importance for Europe to define: a) the exact quantity of electricity that could be imported, b) clearer costs estimations, c) who will operate the plants, d)implement the best HVDC technology to reduce losses during long distances, e) and how much we will want to rely on these sources located in countries that are political unstable.. The EU-Mediterranean energy partnership will have to be achieved to place Europe in "pole position" in the international energy negotiations. To increase energy production from renewable sources, the EU will have to produce the largest share locally, following a decentralized energy model avoiding dependencies from unstable countries typical of the current situation with conventional energy.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	The benefits generated by the NSCOGI could be even greater than those of other initiatives beyond European borders. The problems related to the transmission of off shore wind power to onshore utilities are well known. Several projects have been delayed in the North sea or the Atlantic coast, the difficulties of transferring with reduced losses the electricity to the coast must be addressed. This type of cooperation is a key initiative to make off shore wind power, a technology that will grow more than any other in the next years, available to European consumers. The NSCOGI could link the electricity networks and take advantage of the differences of the participating countries' power grids and storage systems. By transferring best practices and knowledge, the countries involved in the partnership will reduce the errors during the development of these infrastructures and even more important, they will share the risks associated to the project. The main barrier, that could become a major opportunity for some countries, is the financial support given to the project. The extension of similar initiatives to other technologies and other countries should be supported by the Commission. It will allow MS to exploit the full potential of their RE technologies and reduce the negative impacts in case of underperformance.

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Industrial manufacturing and supply chain

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	The current level of maturity of renewable energy technologies is still at its first step. There is still the need to further research in order to increase their efficiency and, where possible, reduce their dimensional scale. While on one side the current support to the deployment of the first renewable energy production plants could represent the first step towards the creation of a replication effect, there is still the need to invest on research so to make the cost of the Kw produced by renewables competitive with the one produced by fossil fuels. This means that actions supporting the consolidation of important actions like the European Energy Research Alliance aimed to make it a profitable counterpart for the current European industrial initiatives should be pursued. Such actions should not only be addressed to a mere financial support (in any case highly necessary to help the EERA to make a decisive step forward) but also to facilitate and improve an effective dialogue with industry so to achieve a clear definition of roles and improvement of the understanding of the mutual benefits that could derive from it.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Geothermic should represent one of the choices given the great potential behind them as even demonstrated by the recently published IAEA technology roadmap. Here particular attention should be devoted not only to the industrial side, but also to the need of achieving again a good level of social acceptance which is a crucial ingredient to ensure a satisfactory technology deployment Another candidate are the enabling technologies like the energy vectors at low environmental impact such as: Hydrogen, Heat and Electricity. Their horizontality towards different application areas makes worth to further invest on them.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Deadlines associated to results achievement are for sure a good way to motivate people to work seriously and with commitment so to respect the proposed milestones. However, in a development process uncertainty about the achievable results is still present. This means that under justified circumstances and demonstrated validity of the approach taken, deadlines extensions could be provided. This will lead to the need to define a clear procedure and rules under which such extensions can be given.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Jean-Marc Jossart, AEBIOM, info@aebiom.org
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Non-profit International Organisation
3. Please indicate your country	European organisation
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Mandatory target is obligatory to give a political vision to RES, to further develop renewable energy and ensure the investments after 2020. The sectoral targets can be set by member states to take their specific conditions into account whilst ensuring that the EU member states do not focus on electricity only but also on heating and transport sectors. The mandatory target would help to further reduce the GHG emissions whilst providing sustainable energy. AEBIOM believes that in order to deliver EU's climate and energy policy commitments, a legally binding target of 45% is necessary. Security of supply will become increasingly important and it is crucial to ensure that the energy the EU citizens use is affordable and does not increase energy poverty due to increasing oil prices.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities Continue to ensure sustainability and scalability Other (please specify)
Please specify which other policy elements?	- A strengthened EU Emission Trading Scheme: if well designed, the emission trading scheme could be an effective tool for reducing carbon emissions. It should be strengthened and prolonged to 2030 with an ambitious cap. - Introduction of carbon tax at EU level - for the applications below 20 MW, this is the most important tool to reduce CO2 emissions and ensure energy efficiency and pollutter pays principle whilst making RES more competitive. - Financial support mechanisms - Continuation of removal of administrative barriers to renewable energy and obstacles to grid access across the EU - Measures ensuring the increase of bioheat in buildings such as building obligation, incentives etc. - Energy efficiency targets should be combined with renewable energy targets. They can indirectly promote RES technologies, which have higher levels of efficiency.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	Financial support will continue to be necessary to support renewables post-2020 if: - subsidies to fossil fuel and nuclear are not removed hereby applying the “polluter pays principle” - external costs are not internalised through an efficient EU Emission Trading Scheme/ Energy taxation - if key barriers to RES development in each Member State are not removed - there is no well-functioning internal electricity market and no level playing field

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Open up national support schemes to cross-border projects Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	Ensuring market competitiveness and a level playing field would enable a cost-effective deployment of RES. Regarding the transport sector, making support schemes more market oriented has not been a success in terms of EU production as it leads to imports from third countries.
Please specify for which technologies (if applicable) to phase out support schemes over time	Once technology has achieved market maturity, support should be phased out but not R&D support.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Support schemes for heating is a complex issue due to the variety and complexity of the heating sector which includes individual houses, small scale heating, heat from cogeneration processes, district heating etc. The heating sector is a local issue, therefore, it would be more efficient to handle it in a decentralised way. Statistics are also missing for the RES heating sector, therefore, it is more difficult to choose the most appropriate schemes and incentives. Several tools are available to Member States to develop the heating sector, however, the instruments adopted by the Member States should be as much as possible independent from annual budget decisions to provide more investor certainty. The Renewable Heat Incentive recently put in place in the UK is an interesting example in this regard. The design of support scheme in the heating and cooling sector tends to be increasingly similar: many Member States have adopted building obligation. It is worth noting that in order to be successful, this obligation should be always accompanied by financing measures as well as certification measures. Regarding transport sector, however, there is a need for harmonised implementation of mandatory sustainability rules in the EU in order to avoid distortion of the fuel market in the EU. Feed-in-tariffs are a successful tool for electricity (ETS sector) whilst carbon taxation for other forms of energy (non ETS).

B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of information on support schemes or other Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment
D.2.1. Please explain why	

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Enable renewable generators to offer balancing services to TSOs Other (please specify)
Please specify which other measures	There is a complementarity between variable and flexible RES technologies that can help balancing the grid locally and regionally. Flexible RES technologies such as biomass, hydropower and geothermal can cover the variability of the grid. To cover variability in the net load, power systems must contain a sufficient contribution from flexible RES.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	N/A

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness Lack of suitable information Other (please specify)
Please specify which other barriers	It is the investment costs that are the main barriers to switch from fossil to renewable energy, while running costs are already acceptable. An effort should also be made regarding the information to the public. An appropriate message should be that RES are the maintstream long term solution and a reliable and cost effective solution already available at a present moment.

F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal Other (please specify)
Please specify which other pathways	Electrification would be the most inefficient way to reduce GHG emissions in the heating sector and the most expensive way to ensure the security of supply in this sector. Heat sector can be entirely decarbonised using the RES technologies such as solar, biomass and geothermal by 2050. Heat production from biomass, for example, reaches high energy conversion efficiency which ensures cost effectiveness and sustainable use of biomass. If we replace fossil fuels based heat with RES today, it would not only be more efficient and cheaper but will also create local jobs all along the value chain. Increasing electricity consumption in the transport sector and for heating would make a high share of RESe extremely challenging to produce in the short term.
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	In order to enhance energy efficiency, the best way is to combine both RES heating technologies (avoid electrification as it is energy and cost inefficient) and energy efficiency measures. Both will add up to reduce fossil fuel dependancy. Regarding biomass, high conversion efficiency from primary to final bioenergy should be promoted so that we use less biomass but produce more final energy.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Lack of standards Lack of awareness Lack of suitable information Other (please specify)

Please specify which other barriers	Renewable energy in transport can be biomethane, ethanol, biodiesel, PVO, electricity and others. The situation for all these sources is different. Biodiesel, bioethanol and PVO cannot compete on free market with current prices of fossil alternatives. Obligations to have a certain share of biofuels in transport fuels, eventually accompanied with tax exemptions, are good supporting measures. Biomethane needs priority access to the grid which is already done in several countries as a follow up of the RES directive. Biomethane is capital intensive and requires long term financing possibilities. Biofuels have suffered from public dissaproval, therefore, biofuels need to regain their image as a sustainable fuel. The latter is one of the most important barriers against a strong uptake of biofuels in transport.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods
G.2.1. Please explain your answer	Road transport is the most energy consuming segment, while air transport is increasing. Technical solutions are easier to implement in vehicles compared to planes. All sectors: biofuels including biogas and renewable electricity will have to be considered in order to make the transport sector more renewable. Biofuels, due to their high flexibility, would in future cover many market segments (road, rail, water, air). Biommethane should be increased in road transport as an efficient, sustainable and renewable solution for cars and trucks. Rail sector would be promising via RES electrification.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels

H.1.1. Please explain	There should be more level playing field regarding the sustainability of biofuels/biomass and fossil fuels. The unconventional fossil fuels (tar sand, deep water, etc.) should be evaluated. Sustainability criteria, in ideal case, should be applicable to all uses: energy, food, material and feed. Biomass for energy is only one path of forestry and agricultural uses. Forestry, for example, is used to produce timber, paper, bioenergy and it is difficult to apply different criteria for different parts of the same tree (one tree can be a source for timber and biomass simultaneously). Nevertheless, sustainability criteria should be extended to biomass and later aimed at extending it further to the whole forestry and agricultural sectors. Only by extending sustainability criteria to all sectors, we can truly ensure sustainability of biomass and of the whole forestry and agricultural uses disregarding its final use. Social criteria as currently laid in the RES directive should be broadened in such a way that it takes into account not only the minimum social criteria in developing countries but also ensures the social aspects of EU citizens, for example, it should aim to ensure that EU citizens do not suffer from energy poverty which is a worrying issue because of increasing oil prices. Sustainability aspects should also take into account positive social aspects/benefits such as welfare.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Renewable energy is often a decentralised ressource, therefore, local and decentralsied production should have a priority. It is also very important in terms of security of supply that Europe develops its'own RES sources. On top of it, imported products are often questionable when it comes to sustainability standards. Nevertheless, a certain part of RES will have to be imported including biomass feedstock, therefore, a cooperation with exporting countries would be a good way forward.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)

Please explain why	Member States should retain sovereignty over the projects they would like to support or not.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	N/A
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness Industrial manufacturing and supply chain

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	There is a need to facilitate a system transformation towards a renewable-energy based system. For a number of renewable energy technologies, European Industrial initiatives (EIIs) have been set up in the framework of the SET plan. In this regard, and as a first step towards 2050, it is important to: - include in the EU budget a dedicated budget line for each of these SET-Plan renewable energy technologies to ensure its implementation. - to clarify and increase the EU financial contribution in the framework of these EIIs to mobilize private investments and push the industry to develop ambitious project proposals. In a post-2020 framework, setting a 2030 mandatory renewable energy target would go a long way to stimulate innovation in the renewable energy sector. An EU programme similar to the SET Plan covering the period 2020-2050 will be needed entailing a research agenda for each renewable energy technologies as well as a stable regulatory framework and financial support for research and innovation.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Biorefineries. The energy system develops into a system where the most efficient way is to simultaneously produce several products and use the waste/residues for energy production. Furthermore, deep retrofit of district heating can be efficient way to promote renewable heat in a technology neutral way.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Not successful
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Fachagentur Nachwachsende Rohstoffe-Agency for Renewable Resources, Mr V. Pelikan, v.pelikan@fnr.de
2. Are you responding to this questionnaire on behalf of /as:	Public Authority
3. Please indicate your country	Germany
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Voluntary targets have been proven unsuccessful in the past. Binding rules need to be established to ensure a sustainable transition to renewable energies and energy efficiency. Also, it is important for market players to have security in planning and coherence of political decisions. Thus a set of ambitious but achievable targets for RES should be included in the legislation beyond 2020. These targets should be technologically neutral and the market should stay flexible in the aspect how to reach the objectives. Sectoral level targets are important as conditions are different. E.g. the high oil dependence in the transport sector and its increasing emissions of GHG call for specific targets in future RES legislation. To ensure further development beyond the 20/20/20 targets a combination of EU and sectoral level targets would be appropriate also after 2020.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Public procurement obligations in support of renewables Better financing possibilities Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	Although RES market penetration in general will be greater by 2020, specific markets and circumstances may justify a continued targeted market support until a certain market share is achieved. Support measures should be technology neutral.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	Market orientation of support schemes and gradual phasing out of support should be general guiding principles for good policy making. In addition phasing out is a precondition under EU state aid legislation.
Please specify for which technologies (if applicable) to phase out support schemes over time	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	The different areas of energy consumption: electricity, transport, heating and cooling have huge differences regarding the national energy mix and the tradability of the end product. Therefore the importance of benchmarking support values has to be decided case by case.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)

Please specify which support schemes you consider most distorting	Market distortion depends widely on the support level, the market size and share and the specific support instrument. For products traded globally or within Europe, diverging national implementation can create additional market distortions. One recent example are the sustainability provisions for biofuels in the RED (definitions of residues; feedstocks eligible for double counting, certification systems).

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Lack of commonly agreed technical specifications
C.1.1. Please provide explanations and specific examples where available	E.g. Diverging technical specifications for biomethane for feed-in EU Member States may be difficult for a common market.
C.2. Which policy response to the problems identified above do you consider appropriate?	The approach of the current Directive to lay down a general framework for Member State action is fine

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Other (please specify)
Please specify which other measures	Biomass, biogas and biomethane storage can have an important role to increase the flexibility reserve of the system both on its own, but also in intelligent combination with wind and solar energy production.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid

E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Favourable regulatory treatment of storage operators
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness Lack of public support
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	There has to be close interaction. All RES targets can only be achieved with much higher energy efficiency.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of infrastructure Lack of awareness Other (please specify)
Please specify which other barriers	Specification: Pace of technology development for advanced biofuels, lack of infrastructure for gaseous fuels.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Water Air

G.2.1. Please explain your answer	The fuelling in the transport sector especially for road transport, followed by international navigation and aviation is the biggest source for CO2-emittance. The total or partial substitution of fossil fuels or gas for transportation on the road, water or air can contribute to a huge increase of biofuels in these sectors and the reduction of overall emissions. Heavy duty road transport and aviation have to rely on liquid biofuels as main alternative to fossil fuels. Rail and water are sectors which could easily accommodate also higher biofuels blends. Biofuels and -gas can theoretically save significant levels of greenhouse gas emissions. However, this is very sensitive to the feedstock and production pathway used, as well as fundamental assumptions in the calculation of savings.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	Direct and indirect land use change, monocultures or competition between food and energy crops are main obstacles to sustainability of renewable resources. But most sustainability issues are relevant independently from the use of biomass for food, feed, industry or energy. Therefore legally binding and standardized sustainability criteria are needed to ensure a sustainable development of biomass over all applications. Current approaches are not yet sufficient and a level playing field for international trade is still missing. For bioenergy and industrial use, the fossil alternative has to be considered as well. To ensure sustainable use of biomass a cascading utilization is preferable: first food -> feed -> material us and second energy production should be applied wherever possible. “Best performing biomass” may vary widely due to plenty of external circumstances (e.g. availability of feedstock, climatic conditions, gas and electricity grid etc.). Promotional criteria need to be designed carefully to ensure locally adequate solutions.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A

I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	To ensure sustainability in transport and plantation of biomass as well as resource security for renewable resources, primarily cooperation with neighbouring countries need to be developed. Further on a wide international cooperation to face above mentioned topics is absolutely vital.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Other measures (please specify)
Please specify which other measures	A general answer can't be given – decision must be made case by case.
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness Industrial manufacturing and supply chain

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	R&D will stay absolutely vital to ensure that the EU innovation in the area of renewable resources to guarantee economical and sustainable development within the Community. Further on, scientific cooperation and transfer of knowledge will stay on top of the agenda. Integration with existing industrial processes will also remain crucial.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	The significant development of the share of renewable energies and the limitation of GHG emission in the last decade proofed a far-reaching impact of European legislation such as the RED, and national legislation. Stronger attention may be put on energy efficiency. The biggest drawback is the lack of finance for upscaling advanced bioenergy technologies. The European Industrial Bioenergy Initiative under the SET-Plan is a good example for this.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Yes: To link assistance to a certain result to be achieved by a certain deadline brings support within Europe in-line to each other. Moreover, targets and deadlines may warrant that European innovation precedes international competition. But it is more important to focus on results than on deadlines. So an assistance framework should allow for a certain degree of flexibility.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	European Photovoltaic Technology Platform
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	EU initiative - Independent and objective body
3. Please indicate your country	European organisation
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Yes, a combination of mandatory EU and sectoral level targets is appropriate. EU targets remain important to ensure the private sector investments needed for rapid progress in RES deployment and to create a level playing field between member states. Sector-specific targets are needed for progress in all areas, primarily as part of a long-term strategy (i.e. beyond 2030).
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Better financing possibilities Continue to ensure sustainability and scalability Other (please specify)

Please specify which other policy elements?	Public procurement obligations are expected to follow mandatory targets. Financing is expected to become available once RES technologies are competitive and considered a low-risk investment opportunity. There may still be, however, a strong need for easy access to capital (next section).

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	In general PV generation should not need financial support post 2020, as according to all major projections grid parity will have been reached in most markets (see also next point). Financial support should be transformed from electricity production support (in particular FiT) to support schemes aimed at lowering the barriers for the upfront investments that are inherent to PV (and other renewables). Specific financial support to building integrated PB (BIPV) projects may still be needed, but preferably in the framework of Energy Efficient Buildings targets, i.e. not as an isolated option. Specific financial support may also still be needed in some geographical regions or specific locations/situations with reduced electricity yield, to open up the full potential of PV.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)
Please specify how to make support schemes more market-oriented	In order to achieve cost-effective deployment, market orientation of support schemes is required. It is necessary to avoid situations where PV support leads to (too) high profit margins or to high, avoidable non-technology related costs. For instance, if easily accessible and low cost financing of PV projects through loans is available, cost-effective rapid market deployment is facilitated.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State
B.4. Should the structure of financial support be gradually aligned EU-wide?	No

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	There is a clear difference between the different sectors, even inside a Member State. Right now there are different schemes across Europe, according to each one: Electricity: Feed in Tariff, Feed In Premium and Quota Obligations Heating & Cooling: Investment Grants and Tax Exemptions. Transport: Quota Obligation and Tax Exemptions These ranges of support schemes are logical as the difference between sectors is not only the technology for generation but also its usage. The maturity of each technology is not linked and cannot be comparable in terms of current generation cost. At the same time, while Electricity interacts in a global and multiplayer scenario (electricity market), Heating and Cooling depend on a short number of simultaneous users (such as a community or a district) and Transport is usually depending on an individual consumer.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules Curtailment regime

D.1.1. Please specify which obstacles and the nature and degree of them for each	Obstacles related to grid connection rules: The connection of PV systems to the electricity grid depends mainly on the criteria defined by grid operators and electricity market regulators. Usually these criteria are very well defined for centralized systems but do not take into consideration the characteristics of PV systems, mainly the possibility to build small and medium size generator systems which changes the concept of centralized to distributed energy systems. The variability of generation represents one of the main barriers for PV. These barriers are characterised by lack of clarity, transparency and uniformity in rules and standards and by the insufficient participation of PV industry in their definition process. It is necessary to take into account more fully the specificities of variable energy sources such as PV (predictability, provision of reactive power, synthetic inertia and black start capability). Obstacles related to balancing rules: current wholesale electricity market rules were designed at a time when centralised based-load generation was predominant. With a more decentralised, variable European electricity portfolio, these rules will have to be adapted. Renewable energies and PV in particular are distributed energy sources, installed anywhere, closer to the demand (lower grid losses), but it is necessary to create the rules to control the interaction with the grid network and with the demand.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment
D.2.1. Please explain why	Policy frameworks should evolve from centralized to distributed sources of generation to better contribute to the transition towards a more sustainable energy future. Electricity consumers will become a very active part of the electricity framework, enabling them not only to produce and consume their own renewable electricity (through self-consumption and net-metering), but also to store energy and interact with the electricity framework not only buying but selling electricity and contributing to balance the grid network. This will be particularly important. Priority and guaranteed access should be assured to those systems closer to electricity demand.

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage Enable renewable generators to offer balancing services to TSOs Other (please specify)
Please specify which other measures	Appropriate interconnections and transmission capacities are necessary to ensure an efficient market coupling and a progressive convergence in the wholesale electricity price. But at the same time, grids should not be developed with a highly centralised approach; deployment of smart distribution grids will be of crucial importance. The flexibility of the energy system should be fostered through a better use of demand responsive instruments (smart interaction with the grid).The availability of demand side management, organized through aggregation of large industrial and commercial customers and through automatic services at the residential level, will increase efficiency and cost-effectiveness. Availability of storage will be one of the keys for PV and RES deployment in the medium-long term. In this respect, Hydrogen could be important as well as the interaction with electrical mobility (car batteries interacting with the grid).

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk – producers of renewable energy should operate without any aid
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)

Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	Current distribution grid infrastructures are neither flexible nor intelligent enough to integrate renewable energies in a flexible way. As conditions for PV integration are not uniform throughout Europe, it is necessary to implement different levels of improvement in transmission and distribution grids to maximize flexibility. Self-consumption is the key success factor for PV deployment due to the benefits that provides to the system, and it requests primarily legal development of net-metering, technical development of smart grids and tools to monitor consumption on real time. Deployment of Electrical Vehicle is an important driver of flexibility. Its flexible capacity for storage and its potential for programmed charge is the most immediate solution for decentralised storage.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of infrastructure Limits of availability of sustainably produced biofuels Other (please specify)
Please specify which other barriers	The availability of truly equivalent alternatives (in terms of range, price and comfort) is expected to be the major challenge. This is related to cost and technology development as well as a long-standing uncertainty about which options are going to survive or to be the mainstream option. Awareness and information should not be a limiting factor after 2020.

G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Rail
G.2.1. Please explain your answer	Electric transport is expected to become a major form of renewable-driven transport. The first obvious options are EVs, HEVs and trains.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	If sustainability criteria are applied to biomass fuels, then it is logical that similar criteria should be applied to the fossil fuels that they are expected to replace. By extension, if biofuels are for transport purposes, then the criteria should probably also apply to other complete systems of "sustainable" transport e.g. HEV / EV taking into consideration the prime energy source such as nuclear, fossil, solar or wind. In the case of EVs the other benefits should probably be considered such as their contribution to providing buffer storage in a future smart grid. In any case, this ultimately brings us to the necessity to base such criteria on normalized and rigorous life cycle analysis with respect to resource use applicable to all forms of energy for comparison purposes.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)

Please specify how and with whom, i.e. only neighbouring countries or more widely	Cooperation between Member States and third countries should serve the purpose to facilitate RES markets in different countries according to their potential as well as to secure the necessary infrastructure needed for an increased in-country and cross-border transport of electricity. This should fulfil the goal to develop RES markets in the individual countries but not simply as a least cost option in the short term. Cooperation between Member States should thus help to overcome barriers to RES markets where those would otherwise not develop appropriately. Security of supply can be addressed with a diversified mix and an increased domestic production by RES. Photovoltaics has the benefit of being the most widely applicable RES technology because solar irradiation is abundantly available, although with the natural variation between north and south. There is ample potential to economically deploy PV in many areas of Europe. Furthermore, PV has the possibility to shave local peak demand and hence contribute to optimize the local energy infrastructure. Cooperation mechanisms should take these facts adequately into account.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	Where grids are weak, they need to be strengthened and/or made more flexible in order to accommodate increasing amounts of variable production, including from photovoltaics.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Cooperation mechanisms should be developed for solar energy between southern Europe and Northern Africa, capturing the benefits of the strong resource potential while aiming at an overall macroeconomic optimum.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Other (please specify)
Please specify which other key challenges	Although we expect major self-sustained markets for photovoltaics across Europe by 2020, there will still be significant potential for performance advancement, in terms of efficiency and functionality, and for cost reduction. This will allow further markets to be addressed and increased penetration levels to meet growing demand for electricity. Detailed discussions of the technology prospects from continued R,D&D can be found in the 2nd edition of the Strategic Research Agenda for Photovoltaic Solar Energy Technology, published by the PV TP in September 2011. The integration of renewable energy into the energy delivery system will continue to be a challenge after 2020, not least due to the continuing development of a range of technologies and changing demands (e.g. the wider use of electricity for transport). We do not expect a major challenge in relation to manufacturing and supply chain, since the PV industry will be well established at this time, but there will remain a strong need for support in the transition from laboratory to manufacturing. The headings above do not include the social challenge of ensuring widespread take-up of renewable energy across Europe and the lifestyle changes this might require. This is of interest for photovoltaics because of the ability for the technology to be used over the full range of society, from individual users to institutions, and in the particular case of contribution to the functionality of the built environment.

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Whilst we do not see a need for specific additional measures or instruments, it is important that there is continued support for R&D into new approaches to improve performance, for demonstration of the results in the field and for transfer of the results to industry. The current instruments are generally good for the first of these tasks, but we would also welcome suitable measures for bridging the so-called valley of death between R&D and manufacturing and for field demonstration of new technologies to allow them to demonstrate their advantages at user level. An increased share of joint research activities between Member States and between the European Commission and Member States would also be useful.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	This response is provided on behalf of the European Photovoltaic Technology Platform and we do not feel it is appropriate for us to attempt to prioritise other renewable energy technologies, except to comment that we expect that Europe will need as full a range of renewable technologies as possible to meet out future energy needs. However, in terms of the implementation of photovoltaic, technologies that facilitate the integration of renewable energy systems into the electrical delivery network, including storage options, are important.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Existing measures have been successful on the level of technology development, with Europe leading on innovation in many areas relating to solar energy. There is a need to ensure sufficient continuity in R&D funding so as to avoid the effects of interruptions in funding to promising approaches. This has not always been the case in recent R&D programmes. As discussed in previous answers, we also believe that there could be improvement in the measures to support the transition from R&D to commercialisation, which has led to many European advances being first commercialised outside Europe, and to facilitate field evaluation of new developments. This means that there should be suitable industry policies alongside R&D policies. Clearly, the industrial initiatives could contribute strongly to this, if current problems in regard to how these can be appropriately funded can be addressed.

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	By their nature, R,D&D projects are objective led and it is clear that we should expect those objectives to be such that they have a reasonable expectation of contribution to targets for 2030 and beyond. The extent to which support is linked to specific results and deadlines should depend on the positioning of the project in the spectrum between research and demonstration, recognizing that R&D is a best effort commitment to achieve the objectives.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Luigi Napoli ASSOELETTRICA, luigi.napoli@assoelettrica.it
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	National Association of Electricity Enterprises
3. Please indicate your country	Italy
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, an indicative and non-legally binding target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	L'Europa persegue la lotta ai cambiamenti climatici attraverso la definizione di target vincolanti di riduzione dei gas serra. In tale contesto ciascun paese, sulla base dei propri consumi di energia e considerando i propri potenziali tecnologici, dovrà valorizzare gli strumenti delle RES e dell'Efficienza Energetica per raggiungere gli obiettivi secondo una tempistica efficace ed una ottimizzazione economica ed industriale. La definizione di obiettivi indicativi non vincolanti per il periodo successivo al 2020 appare il sistema migliore per promuovere le energie rinnovabili, considerato anche l'impulso crescente verso la "low-carbon strategy" che dovrebbe fare emergere, nel contesto del mercato della CO2, opportuni segnali di prezzo in grado di consentire lo sviluppo delle fonti rinnovabili più promettenti e assicurare un progressivo phased out dei regimi di supporto.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Better financing possibilities Other (please specify)
Please specify which other policy elements?	Si ritiene che un adeguato sostegno alla ricerca e allo sviluppo sia la strada migliore per consentire il "salto tecnologico" indispensabile per la diffusione nel mercato di nuove RES che sono ancora nella fase di sviluppo, evitando di affidare agli strumenti di incentivazione il compito di promuovere le tecnologie non ancora mature. Si ritiene, inoltre, che molte delle problematiche che inibiscono lo sviluppo delle RES saranno risolte prima del 2020, tuttavia nel breve-medio termine, si reputano opportune e necessarie, a livello comunitario, politiche di facilitazione mirate al trasferimento e alla diffusione di buone pratiche e alla creazione di un più stabile contesto per gli investimenti. Occorre, infine, migliorare la politica di sostegno delle attività di ricerca e sviluppo per il ruolo che rivestono, come prima segnalato.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	Gli schemi di incentivazione dovranno evolversi in modo da garantire il contenimento della quota di mercato di produzione incentivata e l'adozione di appropriati strumenti in relazione al grado di maturità tecnologica delle diverse tecnologie. Ad esempio, per quelle a livello di progetto pilota sarà opportuno un supporto alle attività di ricerca e sviluppo, per quelle nella fase iniziale di sviluppo sarà opportuno ricorrere a meccanismi di supporto tariffari, , per quelle vicine alla fase commerciale sono auspicabili strumenti d'incentivazione di mercato. Occorre pertanto applicare un approccio dinamico alle politiche di supporto in funzione dello stato di sviluppo delle diverse tecnologie e porre la massima attenzione al controllo del costo complessivo degli incentivi, alla loro sostenibilità in termini di assetto del mercato e di tutela dei consumatori.

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	Come illustrato nella risposta precedente i meccanismi di incentivazione dovrebbero essere calibrati in relazione allo stato dell'evoluzione tecnologica di ogni specifica tecnologia. L'efficientamento dei costi dei meccanismi di supporto è il principio chiave di una buona politica d'incentivazione con l'obiettivo di supportare le RES in condizioni di sostenibilità di mercato. Da una parte, strumenti e politiche di sostegno della R&S potrebbero essere più appropriati per quanto riguarda le tecnologie innovative e pre-commerciali, dall'altra, per le tecnologie più mature, incentivi "market-oriented rappresentano le soluzioni"più appropriate ai fini dell'ingresso nel mercato di tali tecnologie attraverso lo stimolo alla competizione.
Please specify for which technologies (if applicable) to phase out support schemes over time	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	Nell'ambito di ciascuno specifico strumento di supporto appare opportuna una armonizzazione della struttura, individuando i parametri che dovranno essere considerati. Ciò potrà aiutare gli investitori a valutare e comparare i meccanismi d'incentivazione dei diversi Stati Membri. I livelli di supporto dovrebbero essere interamente lasciati agli Stati Membri in quanto non dipendono unicamente dai costi tecnologici ma anche dalla disponibilità della specifica fonte rinnovabile, dalla maturità e dalle condizioni del mercato dell'offerta di impianti e componenti, dal differente rischio d'investimento in relazione ai tempi e agli esiti delle procedure autorizzative e da determinate scelte politica energetica e del territorio. Ad esempio uno SM potrebbe decidere di promuovere alcune tecnologie RES pur in presenza di una bassa disponibilità della risorsa per agli impatti positivi attesi a livello locale e in relazione alle strategie nazionali in tema di energia e cambiamenti climatici.

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Ogni settore è caratterizzato da elementi specifici quali la domanda di energia, le tecnologie ad esso afferenti, il mix energetico che ne soddisfa il fabbisogno. Pertanto ciascun settore dovrebbe essere analizzato separatamente e dovrebbe essere oggetto di misure specifiche.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States Member States should open their support schemes to renewable generation from third countries
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	Gli SM dovrebbero poter consentire l'acceso ai propri meccanismi di supporto alla produzione da fonti rinnovabili da altri SM e da paesi terzi. In ogni caso tale opzione dovrebbe essere lasciata alla volontà di ciascuno SM, dipendendo dalle singole politiche energetiche e sui cambiamenti climatici. Al riguardo si ritiene che l'attuale disciplina prevista nella Direttiva RES sia adeguata.
Please explain how it could be achieved for third countries	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Alcuni schemi di supporto creano più distorsioni rispetto ad altri. Tariffe incentivanti troppo generose in assenza di meccanismi di revisione in grado di recepire tempestivamente le riduzioni dei costi derivanti, ad esempio, dalla curva di apprendimento tecnologico, creano distorsione nel mercato rispetto a altri schemi di supporto più market oriented.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of information on support schemes or other Lack of credible and certified training and qualification Other (please specify)
C.1.1. Please provide explanations and specific examples where available	Lunghezza e complessità delle procedure per la connessione.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	L'approccio della Direttiva attuale, nel definire il quadro generale di azione per gli Stati Membri, è appropriato. In aggunta si auspica un aumento della trasparenza e visibilità delle informazioni. Per permettere ai mercati di giocare un ruolo benefico dovrebbe esserci un maggiore accesso alle informazioni riguardanti i processi autorizzativi, le connessioni, I livelli e la struttura degli incentivi.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	Si ritiene e si auspica, che nessuna delle problematiche segnalate sussisterà ancora dopo il 2020. Comunque in prospettiva il tema dell'integrazione delle fonti rinnovabili costituirà una delle maggiori sfide che dovrà essere affrontata con un approccio di largo respiro in termini di sviluppo della rete e di flessibilità della generazione termoelettrica. In questo contesto gli investimenti nella rete diventano aspetti chiave. Inoltre per garantire un pieno sviluppo delle FER post 2020 dovranno essere indicati, a livello europeo, chiari principi sull'allocazione dei costi fra TSOs/DSOs e produttori. Sarebbero, altresì, necessarie alcune azioni in vista della crescente integrazione dei mercati (market coupling, cross border intra-day markets etc.).
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Other (please specify)
Please specify which other rules	Anche qui si auspica che l'integrazione delle FER sia rispetto al mercato, sia nei confronti della rete consentano di trattare le FER in una maniera equa e sostenibile con uno sguardo anche alle fonti convenzionali. Tuttavia preme segnalare che dovranno essere intensificati gli sforzi da qui al 2020 per rendere possibile accogliere nuova generazione rinnovabile, anche nell'ottica di una crescente startegia di "smart grid"
D.2.1. Please explain why	

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Enable renewable generators to offer balancing services to TSOs Other (please specify)
Please specify which other measures	Per migliorare la flessibilità del sistema di regolazione occorrerebbe accrescere il ruolo dei DSO e supportare l'interazione con i consumatori finali attraverso diversi servizi. In particolare la regolazione dovrebbe prevedere potenza reattiva, potenza in immissione, controllo e distacco remoto e gestione della domanda. Dovrebbe essere riconosciuta la funzione di dispacciamento al DSO in base a una più chiara definizione delle sue responsabilità e della sua area di azione. Questi aspetti sono fondamentali per permettere lo sviluppo delle smart grid.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should bear greater responsibility for system costs Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	

E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)
Please specify which instruments incentivising investment	L'elettricità prodotta da molte RES ha costi marginali prossimi a zero, pertanto i prezzi orari all'ingrosso potrebbero essere vicini allo zero per molte ore. D'altra parte il sistema elettrico deve dare sicurezza di fornitura. Ciò può essere garantito dagli impianti convenzionali termoelettrici, quali i cicli combinati, che hanno costi marginali positivi. Assoelettrica ritiene pertanto necessaria l'introduzione di meccanismi di remunerazione della capacità attraverso i quali gli impianti convenzionali possano recuperare i loro costi fissi.

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Lack of suitable information Other (please specify)
Please specify which other barriers	Barriere non economiche (disinformazione, accesso al credito, disorganizzazione lato offerta, mancanza di regolamentazione).
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Electrification together with higher share of renewables in electricity production Other (please specify)
Please specify which other pathways	L'utilizzo delle più efficienti elettrotecnologie, quali ad esempio le pompe di calore e il riscaldamento a infrarosso, grazie alla sempre più alta quota di produzione elettrica da fonti rinnovabili assicurano un doppio dividendo dal punto di vista energetico e ambientale.
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Esiste una forte interazione tra la promozione delle RES nel riscaldamento e nel raffrescamento e il miglioramento dell'efficienza energetica. Uno dei migliori modi per incrementare l'efficienza energetica è proprio il riscaldamento/raffrescamento tramite elettrotecnologie in sostituzione di energia termica. In particolare le pompe di calore sono il più importante esempio di sfruttamento efficiente dell'energia elettrica prodotta da fonti rinnovabili per il soddisfacimento dei fabbisogni di riscaldamento e raffrescamento.

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Lack of infrastructure
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail
G.2.1. Please explain your answer	Dovrebbe essere perseguita una più ampia elettrificazione del settore per permettere di soddisfare una sempre più ampia quota della domanda di mobilità attraverso le energie rinnovabili riducendo così la dipendenza dal petrolio e le emissioni di gas serra. Inoltre lo sviluppo del trasporto elettrico su gomma e su rotaia avrebbe impatti positivi sulla congestione del traffico e sull'inquinamento locale.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing binding sustainability criteria are sufficient
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	La UE dovrebbe provvedere a realizzare una efficace e aggiornata piattaforma informativa sull'uso da parte dei paesi membri dei meccanismi di cooperazione. Grandi sforzi dovrebbero essere effettuati per assicurare più trasparenza e tempestività nelle informazioni su come e su chi utilizza tali meccanismi. La scelta effettiva circa l'uso dei meccanismi dovrebbe comunque essere lasciati agli stati membri.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	Non si ritiene condivisibile dare priorità a interventi specifici in interconnessioni cross-border rispetto a quelli necessari sulle reti nazionali per risolvere i problemi di congestione di rete e assecondare l'aumento della quota di capacità da fonti rinnovabili.

I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Si valutano positivamente tali iniziative che dovrebbero essere promosse tramite piattaforme informative di scambio e forum pubblici.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	NSCOGI è una iniziativa positive che può costituire un esempio da seguire in altre aree.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness Industrial manufacturing and supply chain Other (please specify)
Please specify which other key challenges	E' necessario continuare a sostenere la R&D per migliorare il binomio riduzione costo e maggiore sostenibilità intesa su tutta la filiera delle rinnovabili. Solo attraverso l'attività di R&D è possibile attuare un approccio trasversale costituito da smart infrastructures, smart cities, smart harbours, smart building, smart grids, e-health, etc. Nel caso delle biomasse è necessario individuare aree e coltivazioni sostenibili.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Appare necessario incentivare gli investimenti privati di nuove tecnologie attraverso l'introduzione di strumenti finanziari atti anche a promuovere/facilitare la collaborazione tra aziende manifatturiere. Inoltre sarebbe necessario avviare immediatamente lo sviluppo dei progetti pilota e delle TEN-E.

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Lo sviluppo dei sistemi flessibilità e delle smart grid consentirà il miglioramento della sicurezza del sistema elettrico ed una gestione più efficiente dell'energia prodotta da fonti intermittenti. Inoltre è necessario puntare sulla integrazione delle grid technologies e grid users.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Le misure esistenti hanno avuto lo svantaggio di favorire solo alcuni settori tecnologie a scapito di altri e di non risolvere i problemi burocratici legati a tempistiche eccessivamente lunghe per le procedure amministrative per la implementazione dei progetti.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Sì, per quanto concerne lo sviluppo industriale

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	European Biofuels Technology Platform, secretariat@biofuelstp.eu
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Technology Platform
3. Please indicate your country	European organisation
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Mandatory targets associated with penalties for failure to comply are the way to go as the progress made towards meeting the EU's 20-20-20 targets shows: while Europe is on track for its 20% GHG emissions reductions and its 20% renewables share, it is lagging behind for its 20% efficiency increase target. Because the main energy demand growth comes from transport, resulting in increasing GHG emissions in the sector, it is equally important to pursue sectorial targets as initiated by the RED towards 2020. The experience from the first Biofuels Directive (Directive 2003/30), whose indicative targets were largely missed by the vast majority of the Member States, is an illustration of the need for mandatory targets in the transport sector. A blend-in target for advanced biofuels would reduce investment risk and lower competition with well established biofuel pathways. Mandatory targets will only be effective if they are combined with high and stable, mandatory penalties for non-compliance – the proceeds of which could be returned to producers or contribute to the financing of demonstration and flagship plants. Advanced biofuels would remain eligible for the rest of the blending target, once the sub-target is fulfilled. Technology neutrality is critical for this measure- no winners should be picked upfront. With this measure the market would settle the price needed to ensure sufficient production. There would therefore be no budgetary implications for the EU or its Member States
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities Continue to ensure sustainability and scalability Other (please specify)
Please specify which other policy elements?	It is necessary to achieve a level playing field between renewable energy and fossil energy (be it conventional or unconventional) to ensure that support to renewables can be phased out in the long term.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	Financial incentives can be phased out once a certain market penetration has been achieved. The journey towards competitiveness is expected to be the same for most European biofuels in the medium term provided mandatory targets are maintained. For advanced biofuels however, without additional policy measures to stimulate investment in scale-up, supply of relevant feedstocks and up-take of advanced biofuels, Europe is missing a unique, sustainable industrialization opportunity within the wider concept of bioeconomy that offers leveraging with biotechnology and thermochemistry based industries. A combination of the incentives below (B-2) will help to overcome the obstacles inhibiting investment into advanced biofuel scale-up and bring advanced biofuel technologies across the "valley of death" between R&D and commercialization – a valley we need to cross to ensure future low cost and EU-based production of advanced biofuels.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)
Please specify how to make support schemes more market-oriented	On the demand side: • Tax incentives for advanced biofuels could be implemented in the Energy Taxation Directive currently under revision. • Production support. Initial fixed sales prices or fixed premiums help improve the case for the investors that are needed to build the first wave of commercial-scale plants. The costs of such a scheme could be capped by limiting it to a fixed accumulated volume for specific plants. On the supply side: •Feedstock collection and supply-chain incentives. In most EU countries there is no or limited experience with large-scale collection and storage of biomass. Therefore incentives are needed to help establish agriculture and forestry biomass supply-chains and thus reduce feedstock uncertainty and the overall risk of advanced biofuel scale-up investments. On the investment side •A realistic investment support for demonstration and first-of-its-kind commercial-scale plants. The up-front investments required for building these plants is significant (€50-600 million) and risky – not least because they will have to compete with existing, non-renewable and un-sustainable energy technologies. Compounding this, the ongoing global financial and economic crisis has made investors and lenders more risk averse; equity and especially debt finance for these plants is therefore proving close to impossible. Financing the European Industrial Bioenergy Initiative (EIBI) is one of the last opportunities not to miss the train of the advanced bioeconomy.

B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	EBTP's answer will focus on the transport sector which has a full European dimension both in terms of fuels and vehicles calling for a common approach towards support measures. Two support measures in the RED may illustrate the need for a common approach: Support to RED art. 21.2 material (the so called double counting provision) should be applied exclusively for advanced biofuels that provide additional benefits, including the diversification of feedstocks, higher yields, and need time to be competitive. These are solely based on cutting edge technologies, new routes and/or new molecules with similar or improved quality. Residues for biofuel applications will have to be defined uniformly across Europe. A unique, European grid of analysis and associated selection criteria and a positive list of qualifying material, maintained by an independent body may well support this definition. Properly implemented, the double counting could become an excellent way to accelerate the industrialization of advanced biofuels. In order to reduce regulation uncertainty and accelerate private investment, an ambitious European tender that would give well targeted advanced biofuel pathways projects the benefit of the double counting during a fixed period of time (15 to 20 years) could substantially accelerate the implementation of these advanced routes. Biofuel consignments from double counting plants would benefit from the mutual recognition by Member States.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)

Please specify which support schemes you consider most distorting	Support schemes whose interpretation remains at the discretion of Member States create distortion because of uneven application, as seen for biofuels in the RED: •Lack of definition of residues and diverging implementation. The concept of residues, in particular processing residues, has not been sufficiently defined neither in the RED nor in the EC's communications. These legislative gaps create a lot of uncertainty and undoubtedly lead to several interpretations in different states: one substance might be eligible for the double counting in State A, whereas it is not in State B, creating internal market distortions. •Uniform controls of its application are required in all Member States. •Unfair competition and conflicts of use between sectors may occur if material is diverted from existing value chains. Additionally, giving the benefit of double counting for biofuels that are not really advanced biofuels creates unfair competition with really advanced biofuels pathways and thus delays their industrialization. Thus it is of high importance to keep the double counting support for cutting edge biofuel technologies with high potential of industrialization and good market fit (see above).

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)
C.1.1. Please provide explanations and specific examples where available	Harmonization on EU level and mutual recognition among differents Member States are required. That's the case of sustainable certification at this moment. Although 7 voluntary schemes are officially recognised by the EU, in the practical implementation some member states are giving priority to one scheme and refusing Biofuels certified by others, so at the end what is sustainable in a country is not in another. The same thing is foreseen going to happen among different national certification schemes. This issue affects to all Biofuels (advanced and conventional), but undoubtedly affects developments and increases uncertainties
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of awareness Other (please specify)

Please specify which other barriers	It is a combination of several barriers slowing down market uptake for renewable energies. Over the past five years, barriers for advanced biofuels have been gradually moving from technology to policy and financing. Commercialization depends now on political leadership and adequate long-term and stable policies, as it has to be acknowledged that new innovative energy technologies like advanced biofuels are not yet cost competitive against conventional biofuels and fossil fuels. The issue of financing innovative biofuels pathways is crucial to ensure large scale deployment across Europe. To that end, the issue needs to be addressed holistically and consistent EU action in form of legislation as follows: • Reviewing the Energy Taxation Directive (ETD): The Commission proposal for amending the existing ETD aims at ending the volume based taxation of energy products and replacing it with a tax consisting of two elements: a CO2-tax based on the emissions and a general energy consumption-tax based on the energy content of the product. This adaption is absolutely necessary to solve the paradox of clean renewable fuels being taxed at a higher rate than fossil fuels. It is also a prerequisite for the successful market introduction of higher biofuel blends.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Air
G.2.1. Please explain your answer	Renewable energy options are different for the five transport sectors listed above. For short distance transport of passengers and goods, electric vehicles, using renewable electricity, will gain importance. But considering the lifetime of vehicles in Europe and the time it takes to introduce new technologies via new vehicles only, biofuels will provide the lionshare of renewable energy even in these market segments far beyond 2020. Other sectors will have to rely even more on biofuels due to limited renewable alternatives. This holds true for heavy duty and long distance road transport. In the aviation sector liquid biofuels will remain the only renewable alternative for the time being. Rail development will depend mainly on the share of renewables in electricity production. Water is technically attractive, but from the cost side the transition to renewables would require an appropriate political framework.

H. SUSTAINABILITY

H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	It is crucial to set a level playing field between energy sources (all renewables and fossil) as well as for all energy uses (irrespective of the use, transport, heating and cooling) and therefore sustainability criteria should apply to all. This must be done assuring energy supply at affordable prices to the population.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Third countries, due to their climate, soil, availability of land, etc., can be the sources of new raw biomaterials for advanced Biofuels: new bioliquids, high yield oleaginous, etc. which may require technology/R&D developments of relevance. So, fostering cooperation with third countries is required and not limited to neighbouring countries
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	System integration Industrial manufacturing and supply chain Other (please specify)
Please specify which other key challenges	As per answer to B-2, In most EU countries there is no or limited experience with large-scale collection and storage of biomass, also requiring substantial investments in equipment. Therefore incentives are needed to help establish agriculture and forestry biomass supply-chains and thus reduce feedstock uncertainty and the overall risk of advanced biofuel scale-up investments. It would also promote EU production and self sufficiency. These incentives could be implemented in the Common Agricultural Policy (CAP) revision as part of redirecting the CAP towards sustainable and renewable energy but it should also cover the mobilization of woody biomass from forest, underpinning recent initiatives in the forest sector. Integration of processes with existing industries is also a key issue.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	

J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	As per B2, a realistic investment support for demonstration and first-of-its-kind commercial-scale plants (financing of European Industrial Bioenergy Initiative) is needed. The up-front investments required for building these plants is significant (€50 -600 million per plant; the lower limit for demo mainly, the upper for first-of-its-kind plants) and risky. Compounding this, the ongoing global financial and economic crisis has made investors and lenders more risk averse. Getting equity and especially debt finance for demonstration of first-of-its-kind commercial scale plants is therefore proving close to impossible. Appropriate financing the EIBI is one of the last opportunities not to miss the train of the advanced bioeconomy.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	The approach of key performance indicators (KPI) applied in the Industrial Initiatives of the SET Plan is useful. Deadlines have to be set with caution and flexibility.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Union for the Promtion of Oilseed and Protein Plants - info@ufop.de
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Agricultural Organisation
3. Please indicate your country	Germany
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	- a distinct "pressure" supports the development of Marktes and technology - the Commission and member stes have to check, whether the target will be reached
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Better financing possibilities Continue to ensure sustainability and scalability Other (please specify)
Please specify which other policy elements?	trade policy: to establish common rules for a fair competition e.g no export subsidies for biofuels by tax exemption or diferent export taxes

B. FINANCIAL SUPPORT

B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Accelerate convergence of national support schemes
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	The empowerment of memberstates to introduce or to keep tax exemption for biofuels has to be maintained (EU directive 2003/96/EC Art. 16)
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	e.g. the renewable energy law promotes the number of installations of biogas plants with the result of regional competition of land - therefore depending on the support schemes experiences which are already made should be taken into account with in the memberstate and by other member states, who are in the beginning to introduce cooresponding support schems (learning curve)

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of suitable information Lack of public support
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	biofuel as a blend component in heating oil are an appropriate alternative - heating oild blends with 5% fame have already a warranty from the heating manufactures, blends with 20% are under investigation, with heating oil blends alos the requirents of the GHG-reduction could be fulfilled, this kind of heating oil will be sold with a special brand name

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of suitable information

G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods
G.2.1. Please explain your answer	The coreresponding experiences are already made in germany: in 2007 about 4 Mio. tons of biodiesel (3,3 Mio. tons) and veg. oil (0,7) Mio. tons had been used and replaced alomost 12% of the national demand of diesel fuel. For B100 warranties for trucks are avlaible, today warranties for EURO IV engines are avlaible and for EURO V in the future (projects), EURO VI engines have to be checked asap. The technology and the improved quality of biodiesel (see UFOP report"A short study to assess the metal, phosphorus and sulfur content in biodiesel") - no aging of after treatment systems. For the introduction of B10 (see mandate of the FQD) and B30 (see the working group agreement in CEN) the precondtions are alreday given. B10 and B30 must be taken into account in a European Roadmap for Biofuels!

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing binding sustainability criteria are sufficient Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	In the case of biofuels the whole suplly chain ahs to be certified -including the social requirements - the introduction of corresponding requirements fpr fossil fuel would prevent the exploration of environment sensitive areas for fossil fuels (e.g. Canada, Alasaka, Africa))

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	the current expirences confirm the need of mor detailed regulations to ensure a fair competition and free trade. There is a need to install an advisory committee at the GD "Energy" which should constist of representatives of the whole supply chain, including from third countries. The Commission itsel was noot able to answer questions concerning the implemetation of the RED due to alck of infrmation exchange.

I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	to fulfill the targets an international market is necessary (imports), the ccopertaion is necessary to implement regulations based on bilateral agreements to protect environmental senistive aereas, instead of intrducing iLUC-factors!
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	T. Freudenberg/Dr. J. Weigt (policy officers), VKU, Register Number 1420587986-32, weigt@vku.de
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Association of Local Utilities
3. Please indicate your country	Germany
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Mandatory national overall targets for the use of energy from renewable sources must be set in accordance with the Member States' different starting points, potentials and specific characteristics. National sectoral targets should be indicative and non-legally binding, in order to give Member States flexibility in reaching their overall targets.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Better financing possibilities Other (please specify)

Please specify which other policy elements?	Other policy element: Financial support Financing possibilities can be improved by support programs such as the KfW Renewable Energies Program (The KfW is a German promotional bank). It gives incentives for the use of renewable energy by providing low-interest loans. In particular, the financing of cross-border renewable energy projects is difficult.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes
Please specify how to make support schemes more market-oriented	It is the Member States´ task to make their support schemes more market-oriented. The necessary reforms should be done on national level. For that purpose Member States should learn from each other. This may lead to a gradual convergence of national support schemes. However, a centralized approach on EU level at this time is not helpful. Cross-border project should be supported, though open up national support schemes is the wrong way as that would jeopardize their functioning. If Member States had to open their support schemes to renewable generation from other states, they would finance the development of renewables there. In particular, Member States with highly developed support schemes would attract renewable imports from states with lower support standards. As a result, some Member States would not only bear other Member State´s burdens but also lose control over their expenses, which is unacceptable. Instead, the European renewable energy strategy should be based on the principle that every Member State gives its best to realize its own renewable potential. Moreover, national support schemes are adjusted to the specific requirements in the respective Member State and do not fit with the conditions in other States.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Primarily not the type (feed-in or quota) but the design of the support scheme decides to what extent competition is being distorted. For the sake of competition it is important that not only large market players profit by the support but also small and local players. Therefore it is important, that the support categorizes according to technologies and size.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Other (please specify)
C.1.1. Please provide explanations and specific examples where available	- public opposition - problems with financing
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	- policy should help investors to overcome public opposition - financial support such as low-interest loans The problems arising from length and complexity of administrative procedures as well as public opposition can be best solved on the local level, and should therefore not be object to harmonization. However, financial support programs should be provided not only by the Member States but also by the EU.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Curtailment regime

D.1.1. Please specify which obstacles and the nature and degree of them for each	More than 90 % of renewable energy in Germany is connected to the distribution network (Bundesnetzagentur Monitoring Report 2011). The curtailment regime may create obstacles to renewable energy production after 2020, if the necessary investments for connection of renewable energy generation, demand response and smart metering will not be approved. The national regulators shall focus on shortening refinancing cycles to ensure, that further investments can be executed.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access Other (please specify)
Please specify which other rules	The regulatory rules must allow investments.
D.2.1. Please explain why	The obligation for network operators to develop the network can only take place if flanked by regulatory rules, which allow investments.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Other (please specify)
Please specify which other measures	The need of increased storage-availability applies in particular to the distribution grid level! At present there is no need to introduce a market design for capacity markets. Instead, the existing balancing service markets should be further developed. Regulation should be avoided as far as possible.

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Producers of renewable energy should bear greater responsibility for system costs Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)

Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	The balancing responsibility should be centrally organized in the sense that the balancing must be coordinated with the marketer respectively with the network operators. The rules should only apply to variable generation but all operators should try to increase their variability. The balancing responsibility of producers of renewable energy should apply to network operators in general, not just to the TSO!
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	- Use of storages, e-mobility, smart grids, demand aggregation, interruptible demand - An important step towards integration of volatile renewable Energy would be fixed standards for smart meter, after passing a cost-benefit-analysis.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)
Please specify which instruments incentivising investment	The current wholesale market model based on short-run marginal cost pricing should be supplemented by the enhancement of balancing markets. In order to incentivize investments in flexible fossil power plants, balancing markets should be able to provide a price element for ensured capacity and an efficient medium-term price formation. It is desirable that wholesale markets reflect the full costs. The advancement of energy markets must not lead to a regulatory overkill. The current development leads to a change of electricity markets into energy services markets, but it is not necessary to enhance that through further incentives or obligations for energy suppliers. If obligations are seen as necessary, they should rather address the final consumer.

F. RENEWABLES IN HEATING AND COOLING

F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness Lack of suitable information Lack of public support

F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal Electrification together with higher share of renewables in electricity production Other (please specify)
Please specify which other pathways	- Biosolids, sewage gas, landfill gas, mine gas, biowaste, waste heat - The possibilities to increase the share of renewable energy in heating and cooling are manifold. The choice depends on the specific region and the local conditions. Also the costs may differ according to the existing network infrastructure or the requirement to adapt to existing energy systems.
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	The lower the demand of heating and cooling the easier it is to reach a high renewable share. Therefor all energy efficiency potentials should be used to decrease the demand for heating and cooling, the remaining demand should be covered by district heating and cooling, ideally fired by renewable energy. If district heating and cooling is locally not available, decentral installations based on combined heat and power and/or renewable energy should be used. Measures for the promotion of renewable energies must not impede the use of combined heat and power generation. Where an area is supplied by district heating no incentives should be given for investments in renewable heating installations.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels

H.1.1. Please explain	The cultivation of biomass/ biofuels and the land application of the digestate may not increase the loads of not-used nutrients, heavy metals and other pollutants in the soil and their run-off/leaching into water bodies. Statutory provisions for water protection have also to be respected when growing energy crops. The water framework directive 2000/60 and the Groundwater directive 2006/118 aim at reaching a good status of all water bodies till 2015. Article 11.3 (a) of the water framework directive and Article 6.1 of the Ground water directive define the standards which the cultivation of energy crops has to fulfill. In no event, the environmental objectives of the water framework directive may be undermined by increased biomass production for renewable energy.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Cross-border project should be supported, though open up national support schemes is the wrong way as that would jeopardize their functioning. Nevertheless member states should primarily be responsible to exhaust their renewable potential. Cooperation shall be supported especially if technical reasons and the improvement of performance require such measures.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	Prioritizing investments in certain Member States would lead to an unbalanced relation between member states, discriminating those states which were prime movers. Each country has specific potentials for different kinds of renewable energy sources and should therefore equally treated.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	We consider the potential for production and integration of renewable energy within the EU as sufficient in order to satisfy the demand. Concentrating on the potential within the EU has the advantage that the added value achieved with renewable energy remains in the EU. Moreover, renewable energy partnerships with Southern Mediterranean countries bear the risk of becoming too dependent to political unstable regions.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Network expansion and new interconnectors
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	The measures are too slow.

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Le Cercle de l´Industrie (e-mail: francois.gayet@cercleindustrie.eu)
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	An exchange forum for large industrial companies
3. Please indicate your country	France
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Le Cercle de l'Industrie strongly supports a transition to a low carbon economy and acknowledges that setting long term horizons is important for helping industries to plan ahead. In an integrated system approach to energy and sustainability, le Cercle de l'Industrie considers that renewable energy sources (RES) have a key role to play for a low-carbon energy mix. Le Cercle de l'Industrie believes that the carbon price signal should be the key driver of the EU renewable energy strategy post-2020 and that CO2 emissions reduction should be the overriding objective of the EU 2020 onwards.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities Continue to ensure sustainability and scalability Other (please specify)
Please specify which other policy elements?	Le Cercle de l'Industrie believes that the policy to promote renewable energies should be primarily guided by cost-efficiency, sustainability and competitiveness criteria, on the basis of carbon price levels and energy costs signals. Efforts to achieve a low-carbon economy must be pursued in an adequate way in order to minimize disturbances to European external competitiveness. In particular: (i) There should be a greater emphasis on the cumulative impact of energy policies, in particular for energy-intensive industries. (ii) The definition and the implementation of renewable energy strategy for the period 2020-2030 require a closer cooperation between Member States and also with third countries. (iii) Successful growth in RES also depends on all actors' ability to address the essential issue of public acceptance. Taking into account the need for flexible back-up generation capacities (required due to the mainly intermittent nature of RES) will also be a critical issue and will require appropriate investments.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	Financial support should always reflect political priorities and translate them consistently into concrete actions and results. Le Cercle de l'Industrie believes that supportive financial schemes will continue to be needed after 2020. The design and intensity of the support schemes may change, for selected technologies, to reflect the maturity of technology on the market and to incentivize progressively RES to enter the wholesale market; but support should remain necessary over the medium term, especially for R&D purposes and for the deployment of the new technologies.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes Open up national support schemes to cross-border projects Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	Patchwork of national supporting schemes can be conflicting for some technologies. In order to achieve a level playing field in Europe and to integrate RES into the internal electricity and gas markets, le Cercle de l'Industrie supports (i) at first, a coordinated approach between Member States and then, based in the short term among others on existing cooperation mechanism (ii) a progressive convergence of national support schemes for those technologies that will rely on support schemes in 2020. Le Cercle de l'Industrie believes that such a European approach mirrors the way investors approach the marketplace and that it will enable RES projects to be built where they would be best suited. Le Cercle de l'Industrie stresses that critical success factors are the stability and predictability of the financial schemes.
Please specify for which technologies (if applicable) to phase out support schemes over time	No information to provide.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	N/A
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	No information to provide.

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Considering that each sector has its own starting point and potential, le Cercle de l'Industrie supports an enhanced sectoral approach, and invites the European commission to constructively interact with stakeholders from the above-mentioned sectors.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States Member States should open their support schemes to renewable generation from third countries
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	No information to provide.
Please explain how it could be achieved for third countries	No information to provide.
B.7. Do national support schemes and differences between such schemes distort competition?	N/A

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Other (please specify)
C.1.1. Please provide explanations and specific examples where available	Le Cercle de l'Industrie encourages Member States to develop efficient and streamlined decision-making processes to help more renewable energy projects to get off the grounds and in shorter time. According to le Cercle de l'Industrie, the most serious impediments to further growth of renewables the Commission should focus on are the followings: (i) Length and complexity of administrative procedures relating to authorisation/certification/licensing; (ii)Social acceptance barriers related to other stakeholders involved in the process (such as the "not in my backyard" attitude); (iii) Lack of a common understanding of regulations between the large number of parties (e.g. NGOs, operators) and authorities (local, regional) involved; (iv) Lack of visibility and legal framework uncertainties (such as retroactive changes).
C.2. Which policy response to the problems identified above do you consider appropriate?	N/A

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	No information to provide.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment
D.2.1. Please explain why	No information to provide.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Enable renewable generators to offer balancing services to TSOs

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	No information to provide.

E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	No information to provide.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness Lack of suitable information Lack of public support Lack of capacity (installers, other) Other (please specify)
Please specify which other barriers	Le Cercle de l'Industrie would like to stress two others major barriers for the greater uptake of renewable energy in the heating and cooling (REHC) technologies: (i) The disperse nature of the heating and cooling market. REHC technologies are often not taken into account in municipal planning. Le Cercle de l'Industrie encourages the Commission to promote a 'whole system' approach to heating and cooling systems (district or even cities approach); on top of current regulations such as Building Regulations which provide specific measures for products and technologies. (ii) The 'split incentives' problem is another major market failure undermining a stronger uptake of REHC market. Split incentive problems arise when the economic benefits of energy conservation do not accrue to the person who is trying to conserve. In the heating and cooling market, it describes the situation where investors (owner) cannot reap the benefits of energy efficiency improvements, since the burden of energy/utility costs relies on the leaseholder.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal Other (please specify)

Please specify which other pathways	Other promising pathways include, according to le Cercle de l'Industrie, renewable energy recovered from: - the biogenic part of waste, either through direct incineration, through biogas recovery from landfill or from waste mechanical-biological treatment plants, - the use of waste derived fuels, - the organic part of wastewater treated in wastewater treatment plants through biomethane recovery, - biogas or biomethane, either through injection into gas distribution networks or through heat and electricity recovered in gas fired combined heat and power plants.
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	No information to provide.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of infrastructure Lack of suitable information Limits of availability of sustainably produced biofuels
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Air
G.2.1. Please explain your answer	No information to provide.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)
Please specify which criteria	No information to provide.

H.1.1. Please explain	Le Cercle de l'Industrie underlines the need for a stable framework and for clear criteria and thus calls for an EU-wide harmonized sustainability criteria scheme, applying to all biomass and fossil fuels (indigenous and imported). These criteria should take into account environment and sustainable issues (such as. indirect land use change issues), reflect a more pragmatic and realistic approach and be implemented worldwide (both for ethics and European competitiveness concerns).

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	The role of the operators (which is not explained under the RES Directive rules for cooperation between Member States) should be clarified.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	N/A
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	Investments in networks should be favoured in all EU countries where the implementation of RES proves to be the most competitive.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	N/A
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	No information to provide.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	No information to provide.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Industrial manufacturing and supply chain Other (please specify)
Please specify which other key challenges	Le Cercle de l'Industrie believes that renewable technologies development is also confronted with societal challenges, such as such as education and public acceptance, which will need to be addressed. Accordingly, le Cercle de l'Industrie underlines the importance of further developing strong training programs and university research in order to adapt education to breakthrough technologies.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	The EU should now deliver on the commitment to implement the Strategic Energy Technology (SET) Plan, and the 2014-20 EU Budget must provide adequate support for this. Additionally, le Cercle de l'Industrie considers that coordination of EU and Member States investments and support programmes would create synergies and yield mutually beneficial results.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	No information to provide.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	No information to provide.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Alexandru Ionescu, alexandruionescuro@gmail.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Romania
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	To consider the Security of supply and technological development benefits.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc)

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Open up national support schemes to cross-border projects
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State

B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	The convergence of national support schemes. Investment aid.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Yes.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States Member States should open their support schemes to renewable generation from third countries
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	Through convergence of the national schemes and compensation mechanisms among the countries involved.
Please explain how it could be achieved for third countries	Through compensation mechanisms agreed with third countries.
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Curtailment regime None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment
D.2.1. Please explain why	

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	Centrally organised responsability on the national level per technology (wind, solar).
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	Smart grids, smart meters, demand aggregation, interruptible demand.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Building regulations etc. Lack of awareness
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	It should be correlated.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Pace of technology development Lack of awareness Limits of availability of sustainably produced biofuels
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail
G.2.1. Please explain your answer	Rail transport may prevail in the near future against roads for goods and passengers.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	To optimize the use of the renewable potential on the regional levels, considering the network constraints.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Cooperation with all third countries integrated in ENTSO-E area.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	In order to optimize the use of the renewable potential on regional level, it should be more reasonable to increase the share of renewable energy in some Member States which have higher renewable potential. Additional investments in electricity networks would be allowed up to the gains as a result of higher efficiency rate in the respective Member States.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	The EU internal renewables policy should focus on such EU-Mediterranean energy partnership. It is more reasonable to redirect investments in renewable energy from some Member States with less renewable potential (e.g. solar) to the Southern Mediterranean countries.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Yes, it should be further fostered. The main benefit could be a better experience which could be generalised and applied elsewhere.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Innovation and research in developing new method of integration of such technologies.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	No.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Σολανάκης Εμμανουήλ solanos94@hotmail.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Greece
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Στα χωριά μας, Κάντανος, Φλώρια, Ρούματα, που κατακρεούργησαν οι Ναζί το 1941-1945 ήρθε και η αιολική βιομηχανία και άρπαξε τις περιουσίες των κατοίκων. Έναντι των διαμαρτυριών των κατοίκων οι αρχές προχώρησαν σε συλλήψεις και παραπομπή σε δίκες, δείτε την σχετική ταινία εδώ http://www.youtube.com/watch?v=OwKv2RnWarw&feature=email&email=comment_received Η Ε.Ε. μεταμορφώνεται σε μία γραφειοκρατία των πολυεθνικών, η δημοκρατία καταρρέει. Είμαστε αντιτιθέμενοι στην αιολική βιομηχανικής κλίμακας ενεργειακή πλατφόρμα. Η στρατηγική για τις ΑΠΕ της Επιτροπής οδηγεί τους πολίτες στην ενεργειακή φτώχεια. Δεν επιβεβαιώνονται άξιες λόγου αποσοβήσεις εκπομπών καύσης άνθρακα λόγω ΑΠΕ, μόνο από την ύφεση έχουμε αυτό το αποτέλεσμα και την μετατόπιση της βιομηχανικής παραγωγής σε Κίνα, Ινδία. Το σύστημα εμπορίας άνθρακα αποσκοπεί σε ένα μαύρο κύκλο εργασιών και μόνο
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)

Please specify which other policy elements?	Οποιαδήποτε περαιτέρω στήριξη στην αιολική ενεργειακή πλατφόρμα πρέπει να εκλείψει. Προσφάτως, η Ελληνική κυβέρνηση ενέταξε στον αναπτυξιακό νόμο ν. 3299/2004 αιολικά και φωτοβολταϊκά της EEN HELLAS-EDF EN GREECE AE για την επιχορήγηση τους με 26.920.200 ¤. Θέσεις εργασίας ; Πέντε για τέσσερα έργα. Τα ντοκουμέντα εδώ : http://www.kandanos.eu/node/1725. Κάθε θέση εργασίας στην Ελλάδα μας κόστισε 5.384.040 ¤. Αποσόβηση εκπομπών ; Να μας πει η Κομισιόν, το βράδυ αλλά και άλλες ώρες, που πηγαίνει το ρεύμα από τα αιολικά. Πουθενά. Τα λιγνιτικά της ΔΕΗ δουλεύουν παράλληλα. Να που πηγαίνουν τα χρήματα με τον αναπτυξιακό νόμο ενώ οι Έλληνες είναι άνεργοι και πεινάνε : επιδοτούν θυγατρικές της EDF και θέσεις εργασίας στην Γερμανία και Δανία. Πρέπει να απεμπλακούν τα κράτη-μέλη της Ε.Ε. που έχουν κατ΄ουσίαν χρεωκοπήσει από τους δεσμευτικούς στόχους για τις ΑΠΕ της οδηγίας 2009/08/ΕΚ και περαιτέρω χρονικά. Πρέπει να υποστηριχθούν ενδεχομένως μόνο ενεργειακοί τομείς με πολλαπλασιαστικά αναπτυξιακά αποτελέσματα, σε άλλες τεχνολογίες όπως το φυσικό αέριο σε συνδυασμένο κύκλο . Τα κοιτάσματα της Μεσογείου μας αρκούν, προς τι να επιδοτούμε τα αιολικά ; Κύριοι τέλος δεν προκύπτει από κάποιο νομικό κείμενο ότι οι κρίσιμες διαβουλεύσεις βάσει της σύμβασης Arhus θα διεξάγονται στην Αγγλική γλώσσα κατά το μέρος του κειμένου διαβούλευσης. Η αρμόδια Υπηρεσία περιορίζει στον μέγιστο βαθμό την συμμετοχή των πολιτών και τα συμπεράσματα της δεν είναι αντιπροσωπευτικά.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	

B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?

G. RENEWABLES IN TRANSPORT
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?
G.2.1. Please explain your answer

H. SUSTAINABILITY
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?
H.1.1. Please explain

I. REGIONAL AND INTERNATIONAL DIMENSIONS
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Καρυωτάκης Κωστής , spinakantanos@gmail.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Greece
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Στα χωριά μας, Κάντανος, Φλώρια, Ρούματα, που κατακρεούργησαν οι Ναζί το 1941-1945 ήρθε και η αιολική βιομηχανία και άρπαξε τις περιουσίες των κατοίκων. Έναντι των διαμαρτυριών των κατοίκων οι αρχές προχώρησαν σε συλλήψεις και παραπομπή σε δίκες, δείτε την σχετική ταινία εδώ http://www.youtube.com/watch?v=OwKv2RnWarw&feature=email&email=comment_received Η Ε.Ε. μεταμορφώνεται σε μία γραφειοκρατία των πολυεθνικών, η δημοκρατία καταρρέει. Είμαστε αντιτιθέμενοι στην αιολική βιομηχανικής κλίμακας ενεργειακή πλατφόρμα. Η στρατηγική για τις ΑΠΕ της Επιτροπής οδηγεί τους πολίτες στην ενεργειακή φτώχεια. Δεν επιβεβαιώνονται άξιες λόγου αποσοβήσεις εκπομπών καύσης άνθρακα λόγω ΑΠΕ, μόνο από την ύφεση έχουμε αυτό το αποτέλεσμα και την μετατόπιση της βιομηχανικής παραγωγής σε Κίνα, Ινδία. Το σύστημα εμπορίας άνθρακα αποσκοπεί σε ένα μαύρο κύκλο εργασιών και μόνο
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)

Please specify which other policy elements?	Οποιαδήποτε περαιτέρω στήριξη στην αιολική ενεργειακή πλατφόρμα πρέπει να εκλείψει. Προσφάτως, η Ελληνική κυβέρνηση ενέταξε στον αναπτυξιακό νόμο ν. 3299/2004 αιολικά και φωτοβολταϊκά της EEN HELLAS-EDF EN GREECE AE για την επιχορήγηση τους με 26.920.200 ¤. Θέσεις εργασίας ; Πέντε για τέσσερα έργα. Τα ντοκουμέντα εδώ : http://www.kandanos.eu/node/1725. Κάθε θέση εργασίας στην Ελλάδα μας κόστισε 5.384.040 ¤. Αποσόβηση εκπομπών ; Να μας πει η Κομισιόν, το βράδυ αλλά και άλλες ώρες, που πηγαίνει το ρεύμα από τα αιολικά. Πουθενά. Τα λιγνιτικά της ΔΕΗ δουλεύουν παράλληλα. Να που πηγαίνουν τα χρήματα με τον αναπτυξιακό νόμο ενώ οι Έλληνες είναι άνεργοι και πεινάνε : επιδοτούν θυγατρικές της EDF και θέσεις εργασίας στην Γερμανία και Δανία. Πρέπει να απεμπλακούν τα κράτη-μέλη της Ε.Ε. που έχουν κατ΄ουσίαν χρεωκοπήσει από τους δεσμευτικούς στόχους για τις ΑΠΕ της οδηγίας 2009/08/ΕΚ και περαιτέρω χρονικά. Πρέπει να υποστηριχθούν ενδεχομένως μόνο ενεργειακοί τομείς με πολλαπλασιαστικά αναπτυξιακά αποτελέσματα, σε άλλες τεχνολογίες όπως το φυσικό αέριο σε συνδυασμένο κύκλο . Τα κοιτάσματα της Μεσογείου μας αρκούν, προς τι να επιδοτούμε τα αιολικά ; Κύριοι τέλος δεν προκύπτει από κάποιο νομικό κείμενο ότι οι κρίσιμες διαβουλεύσεις βάσει της σύμβασης Arhus θα διεξάγονται στην Αγγλική γλώσσα κατά το μέρος του κειμένου διαβούλευσης. Η αρμόδια Υπηρεσία περιορίζει στον μέγιστο βαθμό την συμμετοχή των πολιτών και τα συμπεράσματα της δεν είναι αντιπροσωπευτικά.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	Οποιαδήποτε περαιτέρω στήριξη στην αιολική ενεργειακή πλατφόρμα πρέπει να εκλείψει. Προσφάτως, η Ελληνική κυβέρνηση ενέταξε στον αναπτυξιακό νόμο ν. 3299/2004 αιολικά και φωτοβολταϊκά της EEN HELLAS-EDF EN GREECE AE για την επιχορήγηση τους με 26.920.200 ¤. Θέσεις εργασίας ; Πέντε για τέσσερα έργα. Τα ντοκουμέντα εδώ : http://www.kandanos.eu/node/1725. Κάθε θέση εργασίας στην Ελλάδα μας κόστισε 5.384.040 ¤. Αποσόβηση εκπομπών ; Να μας πει η Κομισιόν, το βράδυ αλλά και άλλες ώρες, που πηγαίνει το ρεύμα από τα αιολικά. Πουθενά. Τα λιγνιτικά της ΔΕΗ δουλεύουν παράλληλα. Να που πηγαίνουν τα χρήματα με τον αναπτυξιακό νόμο ενώ οι Έλληνες είναι άνεργοι και πεινάνε : επιδοτούν θυγατρικές της EDF και θέσεις εργασίας στην Γερμανία και Δανία. Πρέπει να απεμπλακούν τα κράτη-μέλη της Ε.Ε. που έχουν κατ΄ουσίαν χρεωκοπήσει από τους δεσμευτικούς στόχους για τις ΑΠΕ της οδηγίας 2009/08/ΕΚ και περαιτέρω χρονικά. Πρέπει να υποστηριχθούν ενδεχομένως μόνο ενεργειακοί τομείς με πολλαπλασιαστικά αναπτυξιακά αποτελέσματα, σε άλλες τεχνολογίες όπως το φυσικό αέριο σε συνδυασμένο κύκλο . Τα κοιτάσματα της Μεσογείου μας αρκούν, προς τι να επιδοτούμε τα αιολικά ; Κύριοι τέλος δεν προκύπτει από κάποιο νομικό κείμενο ότι οι κρίσιμες διαβουλεύσεις βάσει της σύμβασης Arhus θα διεξάγονται στην Αγγλική γλώσσα κατά το μέρος του κειμένου διαβούλευσης. Η αρμόδια Υπηρεσία περιορίζει στον μέγιστο βαθμό την συμμετοχή των πολιτών και τα συμπεράσματα της δεν είναι αντιπροσωπευτικά.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?
G.2.1. Please explain your answer

H. SUSTAINABILITY
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?
H.1.1. Please explain

I. REGIONAL AND INTERNATIONAL DIMENSIONS
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Confagricoltura
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	rappresentanza nazionale delle imprese agricole
3. Please indicate your country	Italy
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Better financing possibilities Other (please specify)
Please specify which other policy elements?	Per quanto riguarda il settore agricolo, tra le ulteriori misure per promuovere lo sviluppo delle rinnovabili, c'è la possibilità di accedere al finaziamento pubblico degli impianti attraverso le politiche di sviluppo rurale che ad oggi evidenizano alcuni limiti come ad esempio la possibilità di accedere a finanziamenti solo per impianti di produzione elettrica commisurati all'autoconsumo aziendale (misura 121 dei piani di sviluppo rurale).

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	si ritiene che il supporto finanziario rimarrà necessario per le filiere bioenergetiche dove diversamente da eolico e fotovlatico non si registrano infatti riduzioni dei costi di realizzazione degli impianti e dove inoltre, si evidenzia un aumento dei costo di gestione collegato al costo crescente dei mezzi tecnici.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)
Please specify how to make support schemes more market-oriented	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	N/A

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications

C.1.1. Please provide explanations and specific examples where available	nonostante la legislazione italiana abbia preveda un procedimento autorizzativo unico per la costruzione e l'esrcizo degli impianti (impianto di produzione e impianto di rete) tale termine non viene rispettato. Si registrano numerosi casi di procedimenti durati almemno 1 anno per impianti a biogas fino ad 1 MWe. addirittura nel caso delle biomasse questi tempi superano i 24 mesi soprattutto se si utilizzano sottoprodotti invece dei prodotti (ad esempio combustione di pollina). con il dlgs 28/11 sono stati ridotti ridotti i tempi di auotirzzazione che sono passati così da 180 giorni a 90 giorni.
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Balancing rules Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	il principale ostacolo in italia è la mancanza di un piano energetico nazionale che affianchi il piano di azione per le rinnovabili (PAN). dopo il referendum che nel 2011 ha votato no al nucleare che avrebbe dovuto coprire il 25% dei consumi nazionali, l'ITalia non ha ancora dichiarato da quale fonte sarà coperto quel 25% venuto meno. tale situazione incide fortemente sulla programmazione di sviluppo delle reti di distribuzione e trasmissione del paese ad oggi inadeguate nel sud del paese dove invece si è concentrato lo sviluppo degli impianti eolici e fotovoltaici. si evidenzia che nelle regioni del sud italia i tempi di connessione alla rete sono del tutto inadeguati rispetto a quelli di realizzazione degli impianti. In regioni come la puglia, la basilicata e la calabria ci possono volere fino a 3 anni per realizzare un impianto di rete a servizo di un impianto in media tensione (es. biogas da 250 kW) a causa, prevalentemente, dei tempi di autorizzazione dell'elettrodotto.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment
D.2.1. Please explain why	tali punti si ritengono indispensabili per lo sviluppo della microgenerazione (impianti fino ad 1 MWe) e garantire l'accesso alla rete da parte degi produttori.

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Enable renewable generators to offer balancing services to TSOs

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of public support Other (please specify)
Please specify which other barriers	nel caso della microgenerazione, o micro-cogenerazione, da biomasse, si registra la difficoltà ad avere nei siti di produzione energetica un numero sufficiente di utenze termiche a distanze tali da rendere economica una rete di teleriscaldamento. nel caso, del biometano (ad esempio da biogas da matrici agricole), che potrebbe essere immesso nella rete del gas naturale ed utilizzato per il riscaldamento, in italia non ci sono ancora le normative per consentirne l'immisisone in rete nè gli incentivi alla produzione. infine poichè il calore dovrebbe provenire prevalentemhnet dalla combustione delle biomasse, si evidenziano le difficoltà dovute all'applicazione della legislazione ambientale sull emissioni in atmosfera.

F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of infrastructure Limits of availability of sustainably produced biofuels
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing binding sustainability criteria are sufficient
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Federal Environment Agency (Umweltbundesamt), carla.vollmer@uba.de
2. Are you responding to this questionnaire on behalf of /as:	Public Authority
3. Please indicate your country	Germany
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	For the post-2020 period there is a need above all for binding targets in order to address climate change with appropriate measures and set an example for other countries - both at EU level and for the various sectors. It is necessary not only to continue to pursue existing targets but also to formulate new targets as a function of the development of renewable energies in coming years.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities Continue to ensure sustainability and scalability Other (please specify)

Please specify which other policy elements?	Facilitation policies (not ticked above) are also necessary, but permitting should not only be made faster and easier, but should above all be based on thorough planning and be geared explicitly and transparently to clearly defined sustainability criteria set within the bounds of 'ecological guard-rails'. Access of renewable energies to the grid should not only be improved, but should have priority. In the long term, efforts should focus more on transforming the system than purely on integrating renewable energies in the market. The steps towards this goal must be taken in line with the development of renewable energies.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	The integration of renewable energies in the market should take place step by step. Support schemes should be made more market-oriented, as long as it leads to the transformation of the energy system into one that is based 100 percent on renewable energies. Accompanying measures are network extension, extension of storage and demand management. Support for bioenergy should be made more conditional on system services, and support should be directed at demand-based feed-in.
Please specify for which technologies (if applicable) to phase out support schemes over time	Costs for building and installing PV systems and land-based wind turbines are currently falling in Germany. Depending on the further cost development, supporting these two technologies may no longer be necessary in Germany in the long term, i.e. beyond 2020.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)

Please explain how this could be achieved and which support structure you consider most suitable	Even if national support regimes remain in existence, they can increasingly take EU-wide requirements into account. The long-term goal should be the convergence of support structures. Any support must, above all, be effective in order to ensure that the development targets for renewable energies are achieved. In addition, efficiency of the support and avoiding excessive displacement effects are also important. Focussing solely on minimising renewable energy production costs is not enough.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	The electricity sector has a grid which everybody uses, which makes for easy implementation of rules encouraging growth of renewable energy. In the transport sector, conditions still vary greatly in part, e.g. due to non-uniform energy tax rates. Support policies for REs must take this into account. In the heat sector, conditions (e.g. connection to a heat network, fuels, settlement structures, demographic development) vary greatly even within Germany.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)

C.1.1. Please provide explanations and specific examples where available	As the growth of infrastructures and plants for renewables has been satisfactory in Germany, there exists no general impediment in administrative procedures, information and training. Evidently, the overall planning culture in Germany in combination with economic incentives in favor of renewables is quite satisfactory. Hence, we see no need for further acceleration of procedures in Germany by regulation on EU level. We know from practical experience that broad public acceptance is one of the most relevant factors for speeding up planning and authorization processes. Therefore, we think it is much more important to apply the existing regulations on Strategic Environmental Assessment and Environmental Impact Assessment carefully, assuring ambitious environmental standards and involving the public in order to further increase the acceptance of infrastructures and plants.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	As Germany has no real problems in that regard, we see no necessity for a response on EU level.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	Add: Recognition of the costs for underground and HVDC transmission lines (in Germany, cost recognition under the Electricity Grid Expansion Act (EnLAG) and the Energy Industry Act (EnWG) is limited to a few pilot projects: 1 HVDC project, 4 EnLAG projects)
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment Other (please specify)
Please specify which other rules	Fixed tariffs as provided for by the German Renewable Energy Sources Act (EEG)

D.2.1. Please explain why	Grid expansion will have a key role to play in coming decades in integrating renewable energies into the energy system. Network bottlenecks impeding growth of renewable energies are already looming. The present network is not designed to handle the high-volume power transits resulting from the expansion of renewable energies and increasing trading on the European electricity market. Therefore, an obligation for transmission system operators to expand, optimise and strengthen the network is essential.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Enable renewable generators to offer balancing services to TSOs Other (please specify)
Please specify which other measures	There is a need for flexible generation systems comparable with today's peak-load power plants (no need for back-up capacities and capacity payments). Germany has dealt well with the issue of speeding up network expansion. With regard to cross-border network development, other countries could adopt similar regulations, taking care to maintain a good planning and participatory culture.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	Removal of organisational barriers to tapping load management potentials on the electricity and balancing power market. This concerns in particular the flexbilitisation of the balancing power market. The Federal Network Agency has already taken initial steps in that direction by setting rules for primary and secondary balancing power and for tertiary control power, and has indicated that more will follow.

E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	N/A

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness Lack of suitable information Lack of capacity (installers, other) Other (please specify)
Please specify which other barriers	"Costs" in terms of overall costs are a barrier resulting from low fossil energy prices or too-high investment costs (for example, costs for solar thermal are still too high). A lack of capacity can be observed for solar thermal cooling, because solar thermal installers are focused on heating whereas air conditioning installers are focused on electric air conditioners. Trading in guarantees of orgins (GOs) for heating/cooling from renewable energies is optional under the Directive. There are no plans in Germany so far to issue such GOs. Thought could be given to how disclosure at national level using GOs could make trading (especially import/export) more transparent.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Geothermal Solar thermal Other (please specify)
Please specify which other pathways	Comment on biomass: Biomass has low potential in quantitative terms. Due to its scarcity, it should be used at the highest-possible quality level, i.e. for producing materials and subsequently for energy production - the latter in cogeneration as far as possible. Other options: heat pumps (run on renewable energies)
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Enhancing the energy efficiency of buildings is a fundamental condition for making renewables for heating and cooling more successful: For example, an efficient building allows low heating temperatures which make solar thermal and geothermal energy more effective. An efficient building with a low cooling demand makes shallow geothermal energy be sufficient for a large share of cooling needs.

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Limits of availability of sustainably produced biofuels Other (please specify)
Please specify which other barriers	1) Like answer in F3: Enhancing energy efficiency in transport, i.e. of vehicles, is a fundamental precondition. 2) Lack of standards in terms of sustainability: GHG emissions from iLUC need to be accounted for in an appropriate way. Risk mitigation measures should be incentivized, e.g. to avoid iLUC as a precondition for sustainable production. 3) Lack of a long term political road map for R, D & D as well as deployment of future fuels. This uncertainty is a main barrier to the development of 2nd generation biofuel technology.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail
G.2.1. Please explain your answer	Road for goods: only short distance goods delivery (last mile) by light duty vehicles Rail: share easy to increase because system is already mostly based on electric propulsion

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)

Please specify which criteria	Sustainability criteria for selected areas of biomass use will have very limited positive impacts if producers/ traders can easily meet demand for sustainably produced feedstock by shifting easy to certify amounts of feedstock from sectors without sustainability requirements (e.g. food production) into certified sectors (e.g. bioenergy). Therefore sustainability criteria would have to be applied to all feedstocks and sectors in order to avoid the circumvention of regulations/ ambitions and to create a level playing field for those who seek to comply to the rules with ambition. Completeness of sustainability requirements in terms of feedstock and sectors covered could also improve the availability of data useful for assessing sustainability thresholds of resource potentials in general. Generally, the very use of fossil energy isn't sustainable with regard to climate change and should be treated as being dispensable due to the fact that energy efficiency has generally increased and fossil energy can be replaced by renewables in the long run. Comparability of fossils and renewables is limited with regard to aspects of sustainability (e.g. land use, renewability, externalities). However, setting ambitious sustainability requirements for production and use of fossil energies certainly could have quick and tremendously positive effects.
H.1.1. Please explain	Feedstocks and their life cycle impacts significantly differ with regard to sustainability aspects. GHG life cycle emissions is one aspect which provides a good means for comparing renewable energy options. This criterion should, however, be accompanied by ambitious requirements regarding socioeconomic aspects which are not currently considered (e.g. land- and labour rights, human rights incl. food security). Indirect effects on land use (iLUC) and other aspects should be taken into account and strategies for risk mitigation should be incentivized, which could help to reduce displacement of existing activities to other areas or sectors. Such measures can include: • Biomass production on "unused land" or "degraded land"provided this status can be verified. • Introducing energy crop cultivation without displacing the original land use through increased land productivity or integration models, • Bioenergy production from residues that are not currently used Generally, tax reduction schemes could and should be tailored to the exact and verifiable GHG savings of the different types of biofuels/ bioenergy.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	As regards the electricity sector, the electricity disclosure requirements are far from sufficient. Guarantees of origin, as tradable commodity, bring about a cost-efficient expansion of REs and additional profits, but consumers are misled if international trade is not properly reflected in national electricity labelling. Concrete EU-wide electricity disclosure requirements are urgently needed.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	The EU should exploit existing renewable energy potentials in Europe. A number of third countries already play a large role in the electricity sector, and this role will continue to grow. That is why it is especially important to make these countries aware of the EU rules and to take care that they comply with these rules in case of cooperation. In addition to renewable electricity imports, other forms of energy such as biomass should also be addressed. The expansion of cooperation with third countries (direct neighbours or other states depending on supply and ecological assessment) should go hand in hand with the development of EU renewable energy potentials. The two areas should be coordinated in such a way that they do not hinder each other.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	Further extending the European connected network and cross-border interconnections will be necessary in order to utilise Europe-wide and transcontinental renewable energy and storage potentials for large-scale balancing of fluctuating renewable feed-in and to develop cost-effective sites. An overall approach at European level could also reduce the need for network and storage expansion in Germany.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	In the area of electricity disclosure, agreements with third countries which participate in GO trading are absolutely necessary. For example, Norway and Switzerland are already important trading partners today and their importance will continue to grow. The Re-Diss project provides "best-practice" recommendations which could serve as a guideline for electricity disclosure agreements.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	In addition, this strategy would offer planning security for manufacturers and operators of offshore wind farms with regard to network connection and may thus speed up the development of offshore wind energy. Offshore wind farms should be linked with the mainland preferably through cluster connections, since this reduces both, the costs for connection to the network as well as the environmental impacts of connection by sub-marine cables in protected coastal regions. Another advantage of an offshore grid is the pooling of the technological expertise of the countries involved. Implementation of the offshore grid requires the creation of a uniform regulatory framework for the participating states (with respect to e.g. network connection guidelines, cost-sharing, etc.).

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Industrial manufacturing and supply chain Other (please specify)
Please specify which other key challenges	1) Most paths of bioenergy won´t become cost competitive in the long term. Bioenergy paths that fulfil key functions in system integration (biogas plants via biochemical pathway and perhaps thermochemical pathway) need to reach higher conversion efficiency. 2) Developing and demonstrating storage techniques to integrate high shares of renewables into the grid system has to become a main focus.

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	EU and national policies must define clear framework conditions and goals. Important instruments and measures are: network expansion and integration, development and expansion of storage technologies, improvement of measuring techniques, and enhancing the precision of estimates of renewable energy potentials. Furthermore, there is a need for further research (e.g. new concepts for offshore energy: two-bladed turbines, etc.).
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Petrothermal geothermal energy is ubiquitously available. The development in the industry is still at an early stage because geothermal energy is lagging behind other energy sources in its technological development. Networks of expertise on geothermal energy are growing at present. There is enormous development potential, especially for the period after 2020. Many geothermal power stations are currently under construction outside the EU (some with huge capacities: 100-150 MW at 8000 full-load hours per year), which raises hopes of learning effects for the European area. In addition to deep geothermal energy as a reliable renewable energy source, in the post-2020 perspective priority should also be given to further developing on an industrial scale technologies for short-term (batteries, adiabatic compressed energy storage systems) and long-term (electrolysis, methanisation) energy storage as well as smart grids for load management. The latter will contribute decisively to system transformation.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Drawbacks in Germany: Onshore wind energy: Drawbacks include limited designation of areas, restrictions due to height limitations in land use plans, delayed repowering due, among other things,to insufficient incentive instruments. Bioenergy: The high level of support biomass receives in Germany steers it into bioenergy instead of a cascading use where it is used first for material production and subsequently for energy recovery. It also displaces the growing of food crops. Another drawback is the EU's priorisation of CCS over the expansion of geothermal energy.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Energy systems with large proportions of renewable energy must have inexpensive storage facilities. Therefore, storage capacities must be extended as quickly as possible. For a structured process, certain targets with deadlines are important.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	MEDREG Association of Mediterranean Regulators for Electricity and Gas info@medreg-regulators.org
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Association non-profit
3. Please indicate your country	Italy
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, an indicative and non-legally binding target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Better financing possibilities

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	N/A
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	N/A
B.4. Should the structure of financial support be gradually aligned EU-wide?	N/A

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)

Please specify how and with whom, i.e. only neighbouring countries or more widely	The energy sector is experiencing a period of growing challenges characterized by rising energy demand especially in the South of the Mediterranean basin. In this context, a renovated EU energy policy towards the neighbouring Mediterranean Countries aimed at facilitating cooperation and promoting North-South and also South-South integration through new electricity interconnections and an enhanced regulatory convergence is becoming essential for the development of the potential for renewable energy in the region. This radically changed energy scenario has given neighbouring Mediterranean Countries a new important weight in the Mediterranean energy balance, not only as conventional energy exporting Countries but also as producers and consumers of renewable energy. This latter should be to the benefit of both the North and South-East Mediterranean Countries, by taking specific steps to achieve socio-economic targets. When EU Member States undertake joint projects with Third Countries, the RES Directive requires that projects relate only to new capacity, thus helping the objectives not to reduce the proportion of renewable energy in the total energy produced in the Third Country. Enhanced regional cooperation in the energy field has therefore become one of the key priorities in view of the integration of Mediterranean energy markets, the harmonization of their legal and regulatory frameworks, and the promotion of energy efficiency mechanisms and renewable energy sources.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Envisaged regional cooperation among regulators and transmission system operators in the Mediterranean is certainly conducive to the integration of electricity markets, as well as transparent and harmonised legal and technical frameworks that are essential to attract long-term investments in energy infrastructures and interconnections. In this context, MEDREG plays a pivotal role and its manifest support to the creation of its counterpart, the Association of Mediterranean Transmission System Operators for electricity (METSO), has proven to be strategic for a synergy between regulators and transmission operators in the region. MEDREG-METSO cooperation has a very important role in defining minimum common standards for electricity exchange, the needs for infrastructures development, and the integration of energy market in the Mediterranean. The regional perspective is essential for the suitable and coordinated development of renewable energy and for its exchange and integration in the Mediterranean energy system. To sum up, the cooperation among regional governments, transmission system operators, and energy regulators is the precondition for the creation of a Mediterranean Energy Community.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Isabel Cancela de Abreu - APREN (Portuguese Renewable Energy Association) - dep.tecnico@apren.pt
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Renewable Elec. Producers Non-profit Association
3. Please indicate your country	Portugal
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Previous examples have shown that only binding targets prove to be effective. The target's deadline should not be more than one investment cycle away, to be more realistic, and lead to timely and effective measures. For this reason APREN supports, along with EREC, the need for an overall 45% RES target for 2030. Besides the overall target, there is also a need for sectoral targets. The recent NREAPs experience has shown that Heating & Cooling (H&C) sector is falling behind, due to a lack of a binding sectoral target. It suffers from the fact that the biggest impacts rely at domestic level (which needs political and economic signs given by Governments, to ensure a change in behaviours) and lack National Associations to lobby for their development (unlike electricity). Therefore, the only way to make sure Governments take proper actions is by introducing mandatory sectoral targets. Both overall and sectoral targets would be defined at Member State (MS) level, and should follow a simple rule of an "at least" increase. Sectoral targets could be negotiated overtime, in case MS feel the need for adjustments between sectors, as long as they are informed in advance and thoroughly justified, and do not put at stake the overall target. Sectoral targets should not jeopardize existent or predicted support schemes. The latter should be independent between sectors, meaning that an increase in the target of one sector should not lead to a decrease of support schemes of the other sectors
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Other (please specify)

Please specify which other policy elements?	The REPAP Project was an excellent opportunity to indentify policy gaps for RES promotion. At a general level REPAP findings show that non-cost barriers (permitting procedures, grid access, land allocation and administrative issues) are still the main bottlenecks for the development of renewable energies. At the Portuguese level the most imperative needs are: harmonization of Environmental and Energy Policy (ensuring that renewables are a common strategy supported by both), increase in transparency (publication of the current energy policy in force, integration of all energy sources producers in decision making processes not neglecting RES producers), and calculation and disclosure of economic data regarding all energy technologies (independent and complete survey of subsidies over time, real production costs, impact in consumers tariff and macroeconomic impacts). Regarding other energy sources, the most important issue to unsure is the internalisation of environmental, social and health costs, during all project lifetime (LCOE approach). Until then, conventional generation sources are artificially cheap, preventing renewables to become fully competitive. The fact that renewable electricity production is decentralized should also be encouraged. Thus a policy is needed that allows distribution network operators to work better and closer together with renewable plant operators, providing Demand Side Management energy services and smarter grids.

B. FINANCIAL SUPPORT

B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	Technologies, markets and MS resources are very different. Therefore financial support to renewable energy should continue to be mandated and institutionally backed by the EU, but it should remain up to MS to tailor their financial support scheme, to adapt to cost learning curves and to eventually decide when a technology is competitive and no longer needs the financial support. In this respect, financial support does should not only mean direct payments. It also means stable framework conditions, such as in particular grid access: renewable energy should have priority access to the grid in all Member States – otherwise even cost-competitive technologies cannot develop their full potential. Those stable conditions could be created and developed further on EU Level. A very important aspect to ensure, whatever support scheme is in place, is regulatory stability. Existing contracts must be kept unchanged and be immune to Government changes or economic backgrounds. This would avoid retroactive changes like has happened in Spain, Check Republic and we are trying to avoid in Portugal (despite the contradictory indications of the Memorandum of Understanding for the bailout of the Portuguese Economy). MS should have national sovereignty to set targets and design support schemes, but the EU should monitor them to ensure stability and correct implementation.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Phase out support schemes over time (please specify for which technologies if applicable)

Please specify how to make support schemes more market-oriented	First of all it's important to highlight that the main gap to overcome is not to make RES support schemes more market oriented, but to abolish market distortions and make it proper for renewables integration at a level playing field. Apart from it, the Feed in Premium limited by a cap and a floor, as in the Spanish case, is a good example of a market oriented support scheme. The amount of the premium should thoroughly calculated, depending on the amount of subsidies given actually and/or in the past to conventional generation, and according to the CO2 emission savings and corresponding market price. The existence of a floor is essential for the healthy functioning of the renewable sector, since it mitigates the project's risks, improving the financing in overall terms, and more specifically to smaller and more vulnerable producers. A very important aspect to ensure, whatever support scheme is in place, is regulatory stability. Existing contracts must be kept unchanged and be immune to Government changes or economic backgrounds. This would avoid retroactive changes like has happened in Spain, Check Republic and we are trying to avoid in Portugal (despite the contradictory indications of the Memorandum of Understanding for the bailout of the Portuguese Economy). MS should have national sovereignty to set targets and design support schemes, but the EU should monitor them to ensure stability and correct implementation.

Please specify for which technologies (if applicable) to phase out support schemes over time	Support schemes should decrease over time and evolve to market oriented support schemes. The rate of the decrease of support schemes should be closely analysed and any decision should come from a negotiation between all stakeholders. This rate differs between technologies, depending on their maturity and availability of the resource in each country. Therefore the structure of the support scheme should always be technology and country specific. Moreover it is very important that the evolution of the support scheme is defined as earlier as possible, to ensure regulatory stability and no retroactive changes. A very important aspect to ensure, whatever support scheme is in place, is regulatory stability. Existing contracts must be kept unchanged and be immune to Government changes or economic backgrounds. This would avoid retroactive changes like has happened in Spain, Check Republic and we are trying to avoid in Portugal (despite the contradictory indications of the Memorandum of Understanding for the bailout of the Portuguese Economy). MS should have national sovereignty to set targets and design support schemes, but the EU should monitor them to ensure stability and correct implementation.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Each MS has totally different realities in terms of RES, very difficult to overcome and harmonise. Several differences must be accounted such as: type of energy needs (for example depending on the climate), resources availability, support schemes, consumption level, structure of companies operating in the market, cultural heritage, political support of Governments to Renewables, organization of ministries, etc. This means that support schemes should be country, technology and sector specific. However, no harmonization does not mean that MS should not be aware and learn from best practices, not only between MS but al so between sectors. Financial support should be at a continuous improvement, to adapt to technology developments and new market models that show to be more effective, according to overall EU experience. The choice of support schemes should be kept within MS, not the EU as a whole should have a more active role in collecting information of all support schemes of each MS, and providing a short analysis of each, providing a list of best practices to be looked at. Several tools are available to Member States to develop the sector. What is essential is that, independently of MS choice, the instruments adopted should as much as possible be independent from annual budget decisions to provide more investor certainty.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing

C.1.1. Please provide explanations and specific examples where available	The findings of the Wind Barriers Project are a good showcase of the administrative procedures problems in Portugal. Despite the fact that it Portugal is the second European country with the highest wind penetration in the electricity mix, it is also the country with the highest administrative lead times, and number of stakeholders to be contacted. Several reasons can be appointed. No coordination between national licensing authorities, resulting in delays in deadlines and extra costs to promoters. No previous integration of RES projects in spatial planning instruments, which are not revised as required by law, and are sometimes misinterpreted (eg. the intention to prevent man-caused forest fires hampers the licensing of RES projects in forestry areas, which cover most of the territory suitable for wind power). The legislation that rules licensing procedures is complicated and spread over more than 350 documents. Complicated and time-consuming Environmental Licensing procedures. The Environmental Impact Assessment Committees exceed the scope of its evaluation role, evaluate a (too) large set of descriptors, but fail to evaluate economical impacts and promoters are not allowed to assist to meetings. Adoption of power granting schemes with incongruous criteria, not negotiated with RES promoters, and lately with a highest financial compensation paid to the State objective, which subverts the logic of the tenders and jeopardizes the quality of the projects.
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Balancing rules Curtailment regime

D.1.1. Please specify which obstacles and the nature and degree of them for each	APREN has been calling the attention of national authorities to the fact that currently there is no legislation defining balancing rules and curtailment regime for RES in Portugal. The increase in RES electricity production will worsen the need for such rules. These rules must be carefully drafted, analyzed and agreed amongst all stakeholders. Both balancing and curtailment regimes will need to evolve over time, to adapt to an electricity mix reaching 100% renewables, which means they will always be key issues. Best operation practices between TSOs must be further developed and properly shared at a European level. The dedicated RES Control Centre CECRE in Spain is a good example: as well as relying on the most sophisticated forecast tools for wind power generation which help minimising the need of curtailments, the centre allows for reduced imbalances and a cost-efficient operation of the power system with high shares of variable RES like wind. It is well documented that pooling of generation units and shorter gate-closure times have significant system cost-reduction effects. Both the time-horizon (day-ahead and intraday markets) and the geographical scope of the balancing regime should better reflect the characteristics of RES.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment Other (please specify)
Please specify which other rules	In addition to priority or guaranteed dispatch, the German so-called “hardship clause ” is recommended: the grid operator has to pay damages to the renewable energy plant owner, for the time and in case of the curtailment. As the grid operator is responsible for the balancing in the grid, as well as for sufficiently strong and stable grid infrastructure, he is also held liable. Reducing curtailment of variable renewable is the best way to maximize the contributions of renewables, especially renewables that are not easily dispatchable or have no opportunistic fuel costs, like wind and solar.

D.2.1. Please explain why	If these priorities are not assured there is no guaranty that all renewable electricity production potential is sold and introduced in the grid. This introduces a big uncertainty on the project income, increasing financing risks and excluding project finance schemes, which are the only option available for small producers. If the guarantees stated before are taken, it would mean financing would only be available to big companies which can present other types of corporate guarantees, leading to market discrimination and a monopoly situation. Moreover the need of these guarantees depends on how far the creation of a truly liberalized Internal Electricity Market (IEM) will progress by 2020. Priority grid access and dispatch are a compensation to new entrants given there is no functioning IEM). They are necessary in the absence of effective competition and in view of the historical development of power generation – vertically integrated national incumbents having developed their power generation portfolio enjoying the advantages of a natural monopoly and passing on costs and risks on to the consumer bills. They are especially justified for non-dispatchable renewables like wind and solar. Were all the electricity markets to function properly and were they more adapted to variable RES (incl. shorter gate closure time in intra-day and day ahead), wind's low marginal cost would ensure that all wind generated electricity would be sold in the market ahead of any other technology.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Enable renewable generators to offer balancing services to TSOs Other (please specify)

Please specify which other measures	There is a complementarity between variable and flexible RES technologies that can help balancing the grid locally and regionally. Flexible RES technologies such as hydropower, geothermal or biomass can cover the variability of the grid. A flexible renewable-based power system should contain a broad range of renewable electricity technologies. The deployment of smart distribution grids and electric mobility will also be of crucial importance. The flexibility of the energy system should be fostered through a better use of demand response instruments (demand aggregation).

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	Producers of renewable energy should be accountable for their deviations under the condition that the design of the market is also adapted to take into account the inherent technical specificities of these technologies. Non-dispatchable technologies should have their own regulation, with more tolerance than conventional dispatchable generation.
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)

Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	Renewables are often generated decentrally, which allows for local generation and local consumption and if those are better aligned, for a reduced need for storage. Demand Response can thus play a crucial rule – and in particular DSOs can play a central role in such a system. Retail electricity market rules should foster self-consumption in various market segments (residential, commercial, industrial): availability of real-time production and consumption data (metering), clear and informative bills and time-of-use tariffs will therefore play a key role. In addition, aggregation strategies through, for instance, virtual power plants combining different renewable energy sources on a large scale will also have to develop in order to facilitate market access for distributed generation.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness Lack of public support
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Solar thermal Electrification together with higher share of renewables in electricity production

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Both renewable energy in heating and cooling as well as energy efficiency must be fostered, together as well as independently. Regarding biomass specifically, high conversion efficiency from primary to final bioenergy should be promoted in order to consume less biomass for more energy. Electrification would only contribute where abundant electricity from renewable sources is available, and could even play a great role in avoiding curtailment, or to reduce the need of storage. It does not offer a solution to entirely replace all heating and cooling. Electrification of the heating sector should not be encouraged when other renewable heat technologies are available and deliver more efficient solutions. Thermal needs should be primarily supplied by thermal sources and decentralized energy demand should also primarily be supplied by decentralized energy supply. As a result lower costs and better efficiency will be achieved. Therefore, reducing the electrification of heating and cooling will relieve the stress on the power system and shave peak loads. Also, the role and obligations of architects will become more and more important – renewables need to be integrated in modern architecture to reflect our modern lifestyle.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Lack of awareness Limits of availability of sustainably produced biofuels Other (please specify)
Please specify which other barriers	Lack of a long-term stable legislative framework that will provide certainty over future investments and that will not discriminate technologies as it currently happens.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail

G.2.1. Please explain your answer	Road transport is the most energy consuming segment and technical solutions are easier to implement in vehicles. On the roads, the share of electric cars should be increased, as well as on larger rail tracks. Supported by an appropriate recharging infrastructure, they could represent an interesting electricity storage network for renewable energy. Biofuels including biogas and renewable electricity will have to be considered in order to make the transport sector more renewable. Biofuels, due to their high flexibility, would in future cover many market segments (road, rail, water, air).

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	Sustainability criteria, in ideal case, should be applicable to all uses: energy, food, wood material and feed. Biomass for energy is only one path of forestry and agricultural uses. Forestry, for example, is also used to produce timber and paper and it is difficult to apply different criteria for different parts of the same tree (one tree can be a source for timber and biomass simultaneously). Sustainability criteria should be extended to biomass and -later on - to the whole forestry and agricultural sectors.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)

Please explain why	The investment in electricity networks should be a priority, but the main purpose must be the development of EU´s own renewable potential and not the import of electricity from third countries. For Portugal this is crucial as it is much affected, although not directly involved, in the interconnection capacity between Spain and France. Currently, the limited interconnection is preventing both Portugal and Spain from exporting its renewable excess electricity to Europe. Other negative side effects are also occurring such as, curtailment activation and consequent loss of renewable electricity, prices reaching zero in windy nights, and a decrease in the ambition of wind development plans. Several national interests are at stake, and their harmonisation has been delaying the process. Nevertheless, France is one of the most active promoters of the Mediterranean Solar Plan and Desertec, and, in the scope of those initiatives, is willing to invest and accelerate the interconnection capacity increase. This pressure does not solve Portugal´s problem, on the contrary. The new capacity would be used to transport electricity from third countries, congesting the grid and withholding Portuguese renewable electricity, which would be lost and preferred over that of third countries. Costs are also to be considered, as the costs of grid infrastructure to import electricity from third countries to Europe would be higher than developing and distributing the internal potential.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Please refer to answer #3 of this chapter. Again APREN highlights that the top priority should be the development of Europe's internal potential, and we alert for the fact that the Iberian potential is being limited due to the lack of interconnection capacity between France and Spain, which should not be increased only for the purpose of imports from third countries. Taking in consideration the situation described above, the priority should be the increase of interconnection capacity, along with the adoption of targets for 2030, as also stated before, to ensure that all the internal potential is being exploited.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	The experience should be generalized and applied to ocean energy (wind offshore and wave) on the Iberian Atlantic coast, and to solar energy on the European Mediterranean countries.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness Other (please specify)
Please specify which other key challenges	There has so far been only very little positive outcome from the SET Plan for renewables. The Commission first will have to give a comprehensive and detailed report on the outcome and direct positive signal reflected in concrete quantity from SET support, before any assessment can be made. However, what can definitely already be added is that there is a need for facilitating system transformation towards a renewables based energy system, and not so much for integration of renewables into an outdated system designed for fossil and nuclear, and the like, but rather for a system transformation. When moving to a future with renewable energy as the main source of supply, it can no longer be called a question of integration – this will be a transformation. Around this paradigm shift, research and innovation could be a great contribution.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Focus on regional structural funds priorities, EIB priorities, Intelligent Energy for Europe.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	The future energy system will have to be based on a broad mix of renewable energy technologies combining both variable and flexible RES not only large-scale, but definitely also on smaller scale and on distributed levels. Hence, we would not “prioritise” one or the other technology, but rather ensure that the potential of each of them is tapped.

J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	No, technology development will reach autonomously a balancing point, according to the technical developments and its costs when compared to other solutions. However, a stable framework based on success criteria, good indicators and realistic time planning from the beginning could contribute to a successful monitoring and stimulate innovation.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	CEEP - European Centre of Employers and Enterprises Providing Public Services
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	European cross-industry Social Partner
3. Please indicate your country	European organisation
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	CEEP considers Renewable Energy development is a way to fight climate change by decarbonisation and to increase energy independence. CEEP is in favour of European targets but considers mandatory targets at national level with caution. Nevertheless targets are important to tackle climate change and energy dependence. At the same time, a mandatory target at EU level meets investors need for planning liability. Taking the subsidiary principle into account, an EU-wide target has to be set by formulating national approaches keeping in mind specific regional and national circumstances. If so, national efforts have to be monitored and coordinated on a European level, to ensure that flexible balancing capacities and sufficient grid connections are available for added renewable energy generation and distribution. Up till now, the different sectors addressed by the renewable energy directive have developed more or less ambitiously. Therefore, CEEP welcomes sectoral targets (electricity generation, heat and cooling generation, transport etc) for the post 2020 period.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Other (please specify)
Please specify which other policy elements?	When it comes to promoting certain renewable energy sources, certain focus could be laid on the primary energy factor. Only if the whole amount of energy consumed through the supply chain is taken into account, the most energy-efficient renewable source can be found, being in line with EU energy and environmental targets until 2050. Therefore a holistic approach will be necessary, focusing on the life-cycle of an energy source as well as its related technology (extraction, transport, production, distribution, waste collection, reuse and recycling).

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	In order to continue the implementation of renewable energy sources, CEEP sees a need for financial support for certain technologies and in some regions after 2020. The amount of financial support for renewable energy depends on political targets, state-of-the-art of technologies, electricity market conditions, availability of resources etc. Therefore it is of great importance to find the most cost-effective policy that stimulates a competitive environment taking national circumstances into account. At the end of the day, renewable energy technologies might reach market maturity. Even today, experiences from various member states show that certain technologies like on- and offshore wind generation will survive without financial aid in the mid-term, whereas other renewable sources (i.e. photovoltaic installation, biomass- and biogas-power plants) will still need subsidies.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Open up national support schemes to cross-border projects Phase out support schemes over time (please specify for which technologies if applicable)

Please specify how to make support schemes more market-oriented	Market oriented support schemes seem best fit to give higher financial security to investors. These instruments can also be made less distorting towards one specific technology as other models tend to do. Market instruments should be designed in a way that focuses on a holistic approach in order to identify to most cost- but also energy-efficient technologies (see general approach). In future, national support schemes will have to be coherent to a certain extend in order to guarantee cost-efficient allocation of production capacity from renewable energy. Also, national support schemes will have to open up for cross-border projects if economically and technically feasible. Cooperation between member states has to be coordinated and monitored on a European level in a non-discriminating way, but operated through public bodies on a national level. In view of financial realisation, CEEP calls for adequate financial instruments. Financial investments have to be realised in EU regions, generating added-value as a very crucial additional effect. Support mechanisms should be cost efficient in order to minimize the impact on electricity bills, and financial costs have to be fairly distributed between all end-consumers (households, commerce, SMEs and industry, etc). Anyway, financial support for RES development should be transparent to all consumers.
Please specify for which technologies (if applicable) to phase out support schemes over time	It is of great importance to find the most cost-effective policy that stimulates a competitive environment taking national circumstances into account. At the end of the day, renewable energy technologies might reach market maturity. Even today, experiences from various member states show that certain technologies like on- and offshore wind generation will survive without financial aid in the mid-term, whereas other renewable sources (i.e. photovoltaic installation, biomass- and biogas-power plants) will still need subsidies.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	

B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	Length and complexity of administrative procedures are main barriers for market entry of renewable energy sources. Examples of various countries show that it can take up to a decade to receive permit for a new installation. CEEP pledges for simple, fast and low-cost procedures, so that projects can easily be implemented in praxis. Therefore, CEEP urges for more standardisation on the one hand, but rejects complicated harmonising procedures on the other hand. Administrative solutions may be coordinated on a European level. Allocation of state aid has to remain a national competence. Nevertheless, the notification process in Brussels must be more simple, easier and faster.
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	

D.1.1. Please specify which obstacles and the nature and degree of them for each	Fast grid development will be the major challenge for the integration of renewable energy into the grid. CEEP wants to highlight that this will affect investment of both Transmission System Operators as well as Distribution System Operators. In many European member states, current grid investment is to be questioned for its ability to allow network companies to invest in new infrastructure. High investment costs in necessary infrastructure development affect the efficiency of network companies' economic outcome. The association wants to underline that investment costs must be accepted by national regulators - otherwise, essential investments cannot be realised. CEEP is of the opinion that it is of great importance that new generation capacities are included into a robust net. CEEP member companies are accorded a key function to promote the use of renewable energy resources. Allowing these network companies to be rewarded for making the necessary investments would help secure grid development.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Other (please specify)
Please specify which other rules	CEEP detects the handling of unregulated electricity generation as a barrier to the implementation of renewable energy. Adding grid connection expenses into investment costs might be a way to meet this problem. By doing so, it is more probable to accelerate projects that are more likely to reach the point of self-sufficient revenue generation. The cost-benefit analysis of project to develop renewable sources should at least consider the connection to the network.

D.2.1. Please explain why	Exposing well-engineered renewable energy technologies to the market (for wind or hydro power for instance) is likely to be realised in the mid-term. Other technologies, like wave, tidal and PV technologies will still need subsidies in order to be competitive over fossil fuels on the electricity - as well as heating and cooling - market. As technology matures, subsidies can gradually be phased out. Furthermore, CEEP views that renewable energy producers will have to bear greater responsibility for system costs. A way to secure more flexibility within the system will lie in the development of storage capacity. Unfortunately, there is no storage technology (except pump storage) to be operated on competitive costs in the short to medium term. Storage capacity will not only be essential in terms of volatile feeding, but also when very high amounts of energy are taken out of the grid within a short time, as it is the case when charging the battery of electric vehicles. Cost of storage and back up equipment should be financially taken into account. Besides, overregulation and little competition hinder market-flexibility. Capacity mechanisms and DSM, including smart grids, can also contribute to flexibility.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	N/A

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Electrification together with higher share of renewables in electricity production

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	When it comes to the implementation of renewables for heating and cooling, CEEP wants to highlight the fact that the building of necessary infrastructure remains a major impediment. From today's point of view, CEEP detects a lack of financial support in this field. Also building regulations remain a great barrier. In the associations' opinion, new buildings should be connected to district heating and cooling if there is a certain demand and if a positive cost-benefit analysis exists. This can be realised by mandatory regulations, economic incentives or both. While energy efficiency should be addressed first, renewable energy sources have to be examined for their added value. Hereby, the primary energy factor has to be taken into account. Development of renewable heat from biomass including CHP and heat pumps should be incentivised.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail
G.2.1. Please explain your answer	CEEP regards the promotion of biofuels with great caution. This is because of various reasons like the lack of sustainability regarding the production of biofuels (see "Sustainability"). Biofuels economic valuation should take account of a sustainable management of soils. CEEP therefore emphasises the promotion of electric molibity in general, but especially for public transport, both for short and long distances! It is easier to produce and transport electricity from renewable energy sources than biofuels. Besides, it avoids above-mentioned considerations. When it comes to e-Mobility, main barriers are the costs of technology and infrastructure development, the lack of harmonised standards as well as the lack of awareness and information. Road transport users should bear a fair part of the costs induced by the development of renewables.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	

H.1.1. Please explain	Biofuels have to comply with sustainable criteria! Regarding the supply chain, EU legislators have to take into account the amount of negative impacts related to the production of ethanol and biodiesel as are: high amount of unintended release of CO2 emissions due to indirect land use change, use of other important natural resources like water as well as its related social impacts: High food prices arise because of balancing global food supply and demand or worker migration – just to name a few. CEEP welcomes the fact that the European Commission plans to introduce additional sustainability criteria. From a global point of view, the production and trade of biofuels is not in line with any social, environmental or energy related EU policy. CEEP rejects EU promotion of biofuels, since acceleration of bioethanol and biodiesel would lead to paradoxical EU policies as more CO2 is being emitted on a global base and sustainability approaches cannot be addressed in any way.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	CEEP views current EU legislation as not sufficient to achieve the full potential of cooperation between Member States and third countries. Hence, the EU should focus on legislative actions in order to develop the great potential within the EU while assessing perspectives regarding cooperation with third countries.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Without any doubt the EU will face great differences in technology standards within member states. Therefore special emphasis should be put on convergence in this field. Furthermore optimisation throughout the whole value chain will remain necessary. Moreover, CEEP sees system integration as a main challenge in the post 2020 period. Measures to meet these challenges are network expansion and new interconnectors for instance. Current measures are regarded as successful but implemented too slow.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	

J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Current measures are regarded as successful but implemented too slow.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Πετράκης Κωστής, petrakiskostis@gmail.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Greece
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Στα χωριά μας, Κάντανος, Φλώρια, Ρούματα, που κατακρεούργησαν οι Ναζί το 1941-1945 ήρθε και η αιολική βιομηχανία και άρπαξε τις περιουσίες των κατοίκων. Έναντι των διαμαρτυριών των κατοίκων οι αρχές προχώρησαν σε συλλήψεις και παραπομπή σε δίκες, δείτε την σχετική ταινία εδώ http://www.youtube.com/watch?v=OwKv2RnWarw&feature=email&email=comment_received Η Ε.Ε. μεταμορφώνεται σε μία γραφειοκρατία των πολυεθνικών, η δημοκρατία καταρρέει. Είμαστε αντιτιθέμενοι στην αιολική βιομηχανικής κλίμακας ενεργειακή πλατφόρμα. Η στρατηγική για τις ΑΠΕ της Επιτροπής οδηγεί τους πολίτες στην ενεργειακή φτώχεια. Δεν επιβεβαιώνονται άξιες λόγου αποσοβήσεις εκπομπών καύσης άνθρακα λόγω ΑΠΕ, μόνο από την ύφεση έχουμε αυτό το αποτέλεσμα και την μετατόπιση της βιομηχανικής παραγωγής σε Κίνα, Ινδία. Το σύστημα εμπορίας άνθρακα αποσκοπεί σε ένα μαύρο κύκλο εργασιών και μόνο.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)

Please specify which other policy elements?	Οποιαδήποτε περαιτέρω στήριξη στην αιολική ενεργειακή πλατφόρμα πρέπει να εκλείψει. Προσφάτως, η Ελληνική κυβέρνηση ενέταξε στον αναπτυξιακό νόμο ν. 3299/2004 αιολικά και φωτοβολταϊκά της EEN HELLAS-EDF EN GREECE AE για την επιχορήγηση τους με 26.920.200 Ευρώ. Θέσεις εργασίας ; Πέντε για τέσσερα έργα. Τα ντοκουμέντα εδώ : http://www.kandanos.eu/node/1725. Κάθε θέση εργασίας στην Ελλάδα μας κόστισε 5.384.040 Ευρώ. Αποσόβηση εκπομπών ; Να μας πει η Κομισιόν, το βράδυ αλλά και άλλες ώρες, που πηγαίνει το ρεύμα από τα αιολικά. Πουθενά. Τα λιγνιτικά της ΔΕΗ δουλεύουν παράλληλα. Να που πηγαίνουν τα χρήματα με τον αναπτυξιακό νόμο ενώ οι Έλληνες είναι άνεργοι και πεινάνε : επιδοτούν θυγατρικές της EDF και θέσεις εργασίας στην Γερμανία και Δανία. Πρέπει να απεμπλακούν τα κράτη-μέλη της Ε.Ε. που έχουν κατ΄ουσίαν χρεοκοπήσει από τους δεσμευτικούς στόχους για τις ΑΠΕ της οδηγίας 2009/08/ΕΚ και περαιτέρω χρονικά. Πρέπει να υποστηριχθούν ενδεχομένως μόνο ενεργειακοί τομείς με πολλαπλασιαστικά αναπτυξιακά αποτελέσματα, σε άλλες τεχνολογίες όπως το φυσικό αέριο σε συνδυασμένο κύκλο . Τα κοιτάσματα της Μεσογείου μας αρκούν, προς τι να επιδοτούμε τα αιολικά ; Κύριοι τέλος δεν προκύπτει από κάποιο νομικό κείμενο ότι οι κρίσιμες διαβουλεύσεις βάσει της σύμβασης Arhus θα διεξάγονται στην Αγγλική γλώσσα κατά το μέρος του κειμένου διαβούλευσης. Η αρμόδια Υπηρεσία περιορίζει στον μέγιστο βαθμό την συμμετοχή των πολιτών και τα συμπεράσματα της δεν είναι αντιπροσωπευτικά

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	Οποιαδήποτε περαιτέρω στήριξη στην αιολική ενεργειακή πλατφόρμα πρέπει να εκλείψει. Προσφάτως, η Ελληνική κυβέρνηση ενέταξε στον αναπτυξιακό νόμο ν. 3299/2004 αιολικά και φωτοβολταϊκά της EEN HELLAS-EDF EN GREECE AE για την επιχορήγηση τους με 26.920.200 Ευρώ. Θέσεις εργασίας ; Πέντε για τέσσερα έργα. Τα ντοκουμέντα εδώ : http://www.kandanos.eu/node/1725. Κάθε θέση εργασίας στην Ελλάδα μας κόστισε 5.384.040 Ευρώ. Αποσόβηση εκπομπών ; Να μας πει η Κομισιόν, το βράδυ αλλά και άλλες ώρες, που πηγαίνει το ρεύμα από τα αιολικά. Πουθενά. Τα λιγνιτικά της ΔΕΗ δουλεύουν παράλληλα. Να που πηγαίνουν τα χρήματα με τον αναπτυξιακό νόμο ενώ οι Έλληνες είναι άνεργοι και πεινάνε : επιδοτούν θυγατρικές της EDF και θέσεις εργασίας στην Γερμανία και Δανία. Πρέπει να απεμπλακούν τα κράτη-μέλη της Ε.Ε. που έχουν κατ΄ουσίαν χρεοκοπήσει από τους δεσμευτικούς στόχους για τις ΑΠΕ της οδηγίας 2009/08/ΕΚ και περαιτέρω χρονικά. Πρέπει να υποστηριχθούν ενδεχομένως μόνο ενεργειακοί τομείς με πολλαπλασιαστικά αναπτυξιακά αποτελέσματα, σε άλλες τεχνολογίες όπως το φυσικό αέριο σε συνδυασμένο κύκλο . Τα κοιτάσματα της Μεσογείου μας αρκούν, προς τι να επιδοτούμε τα αιολικά ; Κύριοι τέλος δεν προκύπτει από κάποιο νομικό κείμενο ότι οι κρίσιμες διαβουλεύσεις βάσει της σύμβασης Arhus θα διεξάγονται στην Αγγλική γλώσσα κατά το μέρος του κειμένου διαβούλευσης. Η αρμόδια Υπηρεσία περιορίζει στον μέγιστο βαθμό την συμμετοχή των πολιτών και τα συμπεράσματα της δεν είναι αντιπροσωπευτικά
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?
G.2.1. Please explain your answer

H. SUSTAINABILITY
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?
H.1.1. Please explain

I. REGIONAL AND INTERNATIONAL DIMENSIONS
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Andrea Marroni [andreamarroni@yahoo.it]
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Italy
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, an indicative and non-legally binding target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	EU should give an indicative target: this is necessary to drive national policies. Single Member State should decide which target (and subsequent sectoral targets) is more appropriate, considering its potential, related scenarios and technology roadmaps. Main drivers for an appropriate Energy strategy should be: security of supply and technological development benefits. EU should provide a common platform to share general objective, where single Member States can fit. The bottom-up approach should be considered as important as the top-down.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Abolition of support mechanism or subsidies to other energy sources

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	Financial support is not necessary to support technologies that have reached a certain degree of maturity. Policy mechanisms to bridge the financing gap should be considered for early R&D: incubators, creation of national research centers, state-funded venture capital (under certain conditions), capital gains tax waivers, R&D tax credits and Demonstration and Scale up. Moreover, mechanisms to bridge the financing gap should be considered for Demonstration and Scale up, such as public guarantees for private loans to technologically risky projects or companies, development zones (tax exemptions to encourage innovations) or specific credit lines
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	Abolition of support mechanisms or subsidies (direct and direct) to all energy sources is one of the main policy elements necessary to promote renewable energy post-2020. At the same time, this is the more market-oriented support scheme, achieving a cost-effective deployment...
Please specify for which technologies (if applicable) to phase out support schemes over time	The latest updates in analysis of the levelised cost of energy from power generation technologies see important changes and evolution. Onshore wind, some biomass based generation technologies and geothermal flash are cost competitive with fossil fuels in developed markets, even in absence of support mechanisms. With the imposition of a carbon price, onshore wind and lanfill gas beat coal.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	Some EU-wide benchmark values would be very important to align financial support, in particular coming to best available technology requirements, utilities regulation and policy risk insurance.

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	I see a difference for transport. Europe will see significant investment between 2015 and 2020. To meet rising demand, global production of biofuels diesel and gasoline substitutes will nearly doubled this decade. It is expected that second-generation biofuels will attract significant asset finance. Under this scenario, I am convinced EU should define a biofuels infrastructure targeting next-generation facilities up to 2030.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	As a general approach, I consider appropriate any sort of harmonization and mutual recognition at EU level. Through the convergence of phasing-out all support schemes over time, Member States will open renewable generation from other Member States. It is not necessary that a Member State would retain control over who benefit from a national scheme, when no benefit is granted.
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	The administrative procedures will be less complex when support mechanisms or subsidies (direct and direct) will be abolished
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	

D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …)

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk – producers of renewable energy should operate without any aid
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	The demand side management technologies will enable customers to make more informed decisions about their energy consumptions adjusting when (timing) they use electricity and how much (quantity). Those technologies comprise two main activities: demand response program (load shifting) and energy efficiency / conservation. Demand response programs transfer customer load during periods of high demand to off-peak periods, reducing critical peak demand. The smart meter deployments over next few years in EU, associated with advanced metering infrastructure and digital energy will be the key element.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Building regulations etc.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of infrastructure
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	In order to achieve the objectives assigned by Dir 2009/28/EC, Member States should develop its national potential and resources and, in the context of growing integration of the European and Mediterranean market, also use means other than domestic production. Italy estimates to import electricity from renewable sources (around 1.1 Mtoe/year in 2020). The Italian law, under certain conditions, is going to grant the Italian incentives to electricity from renewable sources produced in third countries and imported to Italy. There are various initiatives in this area; Tunisia, Montenegro, Serbia. The Government intends to foster cooperation initiatives for statistical transfers and joint projects with Member States and third countries, including through the involvement of the regional authorities and private operators. There are two interconnection projects proposed by Terna, the transmission system operator (TSO) for electricity throughout Italy, while the other projects concern merchant lines proposed by private undertakings other than the TSO. The new interconnection appears capable of making a contribution to achievement of the Italian objectives on renewable sources. This experience should be considered as a sort of an EU plan and could be very important for the post-2020 strategy

I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	See answer I.2
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Irina Kaehler, Thorsten Marquardt, Desert Energy Industrial Initiative (marquardt@dii-eumena.com)
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Dii GmbH, Desert Energy Industrial Initiative
3. Please indicate your country	Other (please specify)
Which other country?	Dii is a Network of 55 partners from 14 countries
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	In order to achieve the decarbonization objectives set by the Energy Roadmap 2050, a higher share of renewable energy will be necessary (assumed to be at least 30% in gross final energy consumption). An improvement of market conditions in order to create a level playing field for all technologies, including renewables, will be necessary in order to meet these objectives as well as other market measures to encourage investment in low carbon technologies, e.g. adequate pricing of Co2. However, only market based mechanisms are not considered sufficient in order to ensure the fulfillment of the EU's objective. Therefore, binding renewable energy targets at EU level will continue to be necessary after 2020 (2030 and 2040 targets) to create a long term demand of renewables. Investors will increase R&D activities and MS will strive for improved cost-efficiency. EU industry will thereby improve their competitiveness in the RES technology. EU Energy policy is committed to foster international energy partnerships with third countries and especially with the Southern-Mediterranean region. In order to incentivize such energy partnerships, a minimum percentage of the mandatory targets should be covered by renewable energy generated in third countries (a mandatory target for RE from NA is needed).
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Better financing possibilities Continue to ensure sustainability and scalability Other (please specify)

Please specify which other policy elements?	Different policy elements are considered necessary to promote RE technologies post 2020: • In order to create a sustainable RE market, it is necessary to have in place a favorable and comprehensive regulatory framework that considers the requirements of these technologies beyond power production, e.g. grid regulation, permitting processes and financing possibilities. This holistic system approach to the development of RE is essential to attract private sector investment. • The different policy tools should take into consideration the degree of maturity of the different RE technologies. In this regard, R&D policies are especially relevant to promote the development of less mature technologies. • An adequate pricing of CO2 as well phasing out fossil fuel subsides, would be essential to promote low carbon investment • These policy elements should also be applicable, to the largest possible extent, to Joint Projects with third countries. For instance, grid regulation aspects, e.g. priority dispatch, should also be applicable to imports of RE from outside the EU. • Enhanced "financing possibilities" are especially relevant for projects outside the EU where a) off-take is not yet secured; b) conventional energy sources are highly subsidized; and c) high country risk increases investment costs. For example, the creation of an EU RE fund that could provide the necessary guarantees to these projects.

B. FINANCIAL SUPPORT

B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	Financial support shall only be provided until RE technologies reach market parity and shall foster this in the shortest period of time. Financial support will continue to be necessary post 2020 especially concerning: • Less mature technologies, such as CSP and other with the added value of dispatchability (different types of "storage"); and • Projects located outside the EU where currently investment risks are still considerably higher due to, amongst others, less favorable regulatory frameworks and political risk. • Financial support for projects in third countries should ideally be a combination of performance oriented support (such as a market premium per kWh) and upfront grants (reducing the financial risk for investors) and/or concessional financing • Financial support should also contain risk mitigating products like guarantees Creating the right market conditions by, amongst others, providing an adequate CO2 pricing and phasing out non-RES subsidies, would significantly reduce the need for financial support.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Open up national support schemes to cross-border projects

Please specify how to make support schemes more market-oriented	A combination of market oriented support mechanisms and the opening up of such mechanisms to cross-border projects would lead to a more cost-efficient deployment of RE and finally to market parity. On one hand, market oriented support schemes, e.g. sliding market premiums, provide an incentive to RE generators to produce at times of peak demand, when electricity prices are higher, thereby lowering the need for financial support. Therefore, the promotion of market integration fosters the adaptation of RE production to the power demand and optimizes financial support. Market oriented support will also contribute to foster generation and grid technologies that provide dispachability. On the other hand, opening national support schemes to cross-border projects, also outside the EU, would contribute to cost-efficiency by: • Encouraging that RE projects are developed where natural resources offer better conditions; • Lowering the costs for consumers in off-taking Member States, since it is assumed that RE imports would be more cost-efficient than domestic generation; and • Providing an off-take possibility for the development of RE in regions with high potential but where such off-take possibilities are missing, e.g. NA countries where the generation of a stable cash flow is one of the major challenges.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	N/A
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	Dii is currently analyzing the implications for desert power of an alignment of the financial support structure for projects within the EU. Final results will be provided during 2012. So far it can be pointed out, that the same financial support in EU for all eligible RE projects outside the EU, e.g. NA, would be an advantage in the long term. This applies for upfront and for performance based support as well as for physical and/ or statistical imports of RE. This support should be coordinated amongst IFIs as well as amongst Member States and third countries. Concerning operating support, an EU-wide and technology specific market oriented support, e.g. a premium, for third countries would be favorable post 2020.

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States Member States should open their support schemes to renewable generation from third countries
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	On an internal electricity market, either coupled or at a later stage on single market platform, there will be one single price mechanism (assuming a bottleneck free exchange of electricity by the TSO). A rising share of RE will have a effect on the merit orders (either by prioritized grid access with FIT's or by FIP's with direct access to wholesale market). Until support schemes are not open for RE from other countries, RE cannot be exchanged as any other energy sources because of its geographical/ national limitation. Differences in costs for RE generation in different regions will not taken into consideration on the internal wholesale market. To countries with less favourable RE conditions the opportunity to benefit from regions with better conditions, support schemes would need to be opened for other MS. This applies especially for an internal electricity market, where different generation resources are treated equally in a single market. Generators of RE in countries with unfavorable support schemes could sell into countries with better support schemes. Thus opening means, that RE can be sold in other regions similar to an internal electricity wholesale market mechanism. For the same reason MSs support schemes should also be opened for RE generation from outside EU. This will increase the efficiency in the support schemes. Cheaper generation from outside EU would compete with domestic generation. Exchanging electricity across national borders is key.

Please explain how it could be achieved for third countries	For Desert Power, it is important to differentiate between, (i) a common approach for projects within the EU and, (ii) a common EU approach for projects in third countries. We argue for (ii): (i) Dii is currently analyzing the implications of a fragmented vs. a common approach within the EU for Desert Power. So far we can observe that, even though the existence of different support schemes adds complexity this could be overcome. (ii) Concerning support schemes applicable to RE from third countries, a bilateral approach between MSs and third countries is considered sufficient to encourage investment in initial reference projects, as long as MS have the political will to provide the required financial support. However, for the longer term, a common approach of the EU towards the support of RE in third countries, e.g. countries in NA, could be very positive. A common approach would improve the efficiency by attracting RE project developments to the best site conditions. A common EU approach towards RE imports would also simplify the process for cash flow generation for investors (one instead of multiple EU partners). Large scale developments will be better predictable, investments will be accelerated. Therefore, concerning the financial support applicable to RE imports, a long-term EU wide alignment is desirable beyond 2020. However, for the short-term implementation of reference projects bilateral agreements provide the required flexibility.
B.7. Do national support schemes and differences between such schemes distort competition?	N/A

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)

C.1.1. Please provide explanations and specific examples where available	The length and complexity of administrative procedures can be a serious obstacle for the implementation of renewable energy projects. Specifically for Joint Projects with Third Countries, today, the lack of a regulated administrative procedure is causing very important delays in the implementation of such projects. A clarification on the permitting regime as well as on the rules applicable to the requirements of traceability of imports would be a great contribution towards making the implementation of these projects more agile and less burdensome for public and private participants.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	Assuming a (strongly required) EU-wide harmonization of grid access and operational responsibilities for renewables, the abovementioned obstacles should be eased by 2020. Generally, it is very important to create a level playing field for renewables in the EU, i.e. harmonized rules for grid access, balancing and curtailment. These are all important prerequisite to prioritize the use of the most attractive renewables sites for an efficient implementation of the EU renewable targets.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access Other (please specify)

Please specify which other rules	To achieve a higher RE share a more market orientated operation of renewable generation will be required for efficient market integration. Priority dispatch will have to be assessed on a broader economical perspective, i.e. RE should be dispatched based on their low marginal costs and not on a priority dispatch. In this context it will be necessary to guarantee that renewables are not discriminated against conventional generation and that possible benefits from other elements of the value chain can be transferred to RE (e.g. avoided start up costs of conventional power plants). A crucial point is the obligation for network operators to develop the network, i.e. provide sufficient grid capacity for the connection of renewables to the grid under economically viable conditions. Grid development must be aligned with RE development and that RE has - in case of a conflict with conventional generation - priority access to the grid. RE needs to be developed on and for a European market. This is particularly important, as RE resources are not evenly distributed across Europe and beyond. To be able to move to larger shares of RE cost-efficiently, and assuring system security, availability of interconnectors for the transport and transit of RES power is crucial. This applies for electricity imports from third countries, in the MENA region, where different time zones and weather patterns allow for a more even distribution of RES production across days/seasons.
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Favourable regulatory treatment of storage operators

E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	N/A

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)

Please specify how they should be amended or which elements added	The current RES Directive offers different levels of cooperation, ranging from project specific cooperation to joint support schemes. However, the current framework does not entail enough incentives for MS to make use of such cooperation mechanisms which would lead to a more cost-efficiently deployment of RE. The use of these mechanisms has proven to be very difficult at an administrative level for MS. Therefore, more detailed guidelines from the EU Commission on the procedural aspects of these mechanisms would be very useful. The transposition of these mechanisms into national law should be encouraged in order to facilitate private initiative in these projects. Target setting could also offer additional incentives for cross-border cooperation between MS. For example, in order for these projects to take place within a shorter timeframe, more guidance on the mandatory targets beyond 2020 would be useful to allow better planning by MS as well as allowing the bankability of the excess of renewable energy amounts for meeting future targets. In order to foster statistical transfers, a common mechanism for exchanging "renewable energy amounts" amongst MS should be established.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)

Please specify how and with whom, i.e. only neighbouring countries or more widely	Energy partnerships with a special focus on RE, should be concluded with MENA countries in order to contribute to (a) security of supply; and (b) cost-efficiency in the development of RE. Such partnerships are aligned with EU policy goals in the fields of energy, neighborhood and development. Neighboring countries, e.g. NA, should be prioritized but, in the mid-term, the EU should also contemplate other regions, e.g. ME. Cooperation with third countries should include: • Conclusion of bilateral energy agreements between MS and NA countries (project-based) • Conclusion of a framework agreement between the EU and MENA countries (broader scope) • A minimum percentage of the EU targets should be covered by RE generated in third countries • In the short term for an intermediate period of eg. 10 years, Art 9 should be improved in order to allow the participation of countries that are not yet connected to the EU, e.g. Algeria and Egypt, for instance, by opening imports to other energy sources such as natural gas. "Swaps" of natural gas for RE could be a good interim solution. • Joint Projects are not sufficient to trigger large scale RE development thus, in the mid to long-term, a broader scope of cooperation that does not require physical import will be necessary. • Effects on importing countries (Spain, Italy) should be considered, e.g. grid upgrades. • Bilateral agreements EU-MENA should be in place in order for RE projects in MENA to qualify as CDM post 2012.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)

Please explain in which way and to which degree	In order to benefit from the excellent RE potential in MENA, the EU needs to greatly increase its interconnections. Today, only weak connections exist between Morocco-Spain, Turkey-Bulgaria/Greece. There is a need for increasing interconnections, mainly via submarine cables, between Morocco and Algeria to Spain, Tunisia and Libya to Italy, in the mid-to long term, also Libya and Egypt to Greece or, via OHL, across the Mashreq countries and Turkey to the EU. Different submarine cable interconnections have been analyzed already and proven feasible. If larger amounts (several GW) should be imported from MENA, Spain and Italy will become important transit countries. For Spain, interconnections to France will have to be upgraded, possibly via submarine cables. In Italy, initial need for upgrading networks in the North with France, Austria and Switzerland, might be more limited, as a change in load flow patterns from North- South (today) to South– North could occur. Consequently, identified network reinforcements will serve common European interests. Both connections to neighbouring countries and within Spain and Italy should be prioritized. They should be eligible for funding of the Connecting Europe Facility. In the mid-term, efficient regulatory tools need to be developed, which allow for funding/efficient cost allocation of the build-up of a HVDC long distance transport infrastructure, which take into account split and benefits of infrastructure in transit countries.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Other measures (please specify)

Please specify which other measures	First and foremost bilateral agreements between MS and NA countries should be in place to implement initial reference projects in the short term and start attracting private investment. However, post 2020 or before, these bilateral agreements should be complemented by a broader framework provided by an energy partnership between the EU and MENA countries. Such a framework would entail moving from a project-specific mechanism to a larger scope of cooperation that could create a level playing field for these projects. Moreover, it would provide investors with greater visibility and could initiate a convergence of the main regulatory aspects between such third countries and the EU, e.g. fostering the opening up of the energy market in this region to private investment. Such an energy partnership would be aligned with the EU's neighborhood, enlargement and external energy policy. Even though physical import to the EU is relevant for initial projects, this requirement is considered a limitating factor for the large scale development of RE in the MENA region. Therefore, in the long term a mechanism similar to existing "statistical transfers" should be applicable also with third countries. This would not imply that cross-border exchange of electricity between EU and NA will not take place, rather this measure would lead to market driven cross-border transactions. Therefore, grid infrastructure development would still be essential.

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Dii highly welcomes the EU's support of a comprehensive EU- Southern Mediterranean energy partnership, focused on renewable energy cooperation. Projects developed under this agreement should relate to the internal RE policy by: A) Forming part of the RE targets; e.g. a minimum percentage of EU targets should be mandatorily met by RE generated in these countries B) Imports of RE should enjoy the same benefits as RE generated in the EU in terms of regulatory prerogatives, e.g. priority dispatch C) Having access to all financial tools applicable to RE projects in the EU D) Including gird upgrades necessary to render this projects feasible in the EU's infrastructure planning The priorities of this partnership, in order to result in initial tangible projects and in the creation of a new renewable energy market in the longer term, should be to: A) facilitate intergovernmental agreements between MS and NA countries to foster first reference projects B) Facilitate access to the financial support necessary to develop these projects in a combination of upfront and operating support; and C) Adapting the existing regulatory framework to mitigate current regulatory risks and start convergence between both regions, e.g. promoting the opening up of Southern-Mediterranean energy markets to private investment.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	There is a strong link between the build-up of RES-E and the ability to transport electricity generated at new production centres such as the North Sea or Southern Europe and North Africa to major demand centers. Only a coordinated approach both between the involved countries, and investors, TSOs and regulatory authorities, will make business cases for large scale renewable plants feasible and allow a least cost build-up of infrastructure. The NSCOGI is an important initiative in this direction, which could well be transferred also to the Southern Mediterranean countries neighbouring to the EU, in order to strengthen the initiative of the Mediterranean Solar Plan.

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Other (please specify)
Please specify which other key challenges	The SET Plan is meant to accelerate the development and deployment of cost-effective low carbon technologies. Initiation of learning curves for immature technologies is key for the development of a sustainable market. The SET-Plan offers the right policy framework, however it is not yet fully applicable for large-scale international projects such as Desertec. It remains unclear how this instrument can be used for these purposes.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Additional measures could be as follows: - Open the NER 300 and EU structural funds for projects beyond EU borders in third countries, e.g. MENA countries - Support large-scale projects with substantial financial contribution to trigger a scale-up phase (open the limit of 20m€ of the SET Plan) - Facilitate co-financing and align EU-funds with IFI's instruments such as EIBs Risk Sharing Finance Facility (RFSS) - Speed up priority projects under the newly established Connecting Europe Fund (CEF) and foster renewable energy integration from third countries and within the EU into the EU's electricity grid.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Priority should be given to projects in the deserts. There is large suitable sites and good conditions which make large scale RE developments possible without substantial effects on the environment. Industry is committed to investments in the region also in PPP.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Not successful
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	It remains unclear why eg the SET Plan has not been made operational and successful so far.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Grattan Healy, grattan_healy@compuserve.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Ireland
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	From direct experience in Ireland, it is clear that nothing less is effective in making Governments take action, and in time
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Other (please specify)
Please specify which other policy elements?	Requirement for evidence completely independent of TSOs for technical arguments restricting integration of renewables

B. FINANCIAL SUPPORT

B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Open up national support schemes to cross-border projects
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	While we still have subsidies to fossil and nuclear, Mss must maintain robust support schemes, and the guaranteed price scheme is the most effective; market integration can come once distortions are removed; this applies to al f the subsectors
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	First of all, continue to develop joint projects and statistical transfer mechanisms under Rnewables Direcitve
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	Tortuous planning including retrospective annulment as result of Habitats Directives - lack of joined up policy at EU level Ridiculous grid access, taking 15 yeas from date of application to firm access Lack of integration of planning, grid and support Lack of real enforceable obligation on authorities to sort out these admin issues
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	Legal obligations to: - remove barriers, and - to adopt German style model of automatic grid and support following receipt of project planning

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	Connection in Ireland can take 15 years, which is well beyond the life of any planning permission Significant barriers caused by the cost of grid connection, and the need to share the cost of shared assets with other projects Significant unnecessary complication in grid connection process, causing massive delay No sense of obligation on authorities to really avoid curtailment (only 'inappropriate' curtailment!) Loss of support during constraint and curtailment leading to collapse of renewable sector
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment Other (please specify)
Please specify which other rules	Guaranteed Transmission, which is an obligation, is not being delivered
D.2.1. Please explain why	None of these measures is being delivered in Ireland Lack of clear definitions and excuse of grid stability being used to avoid obligations There is as general need to define clearly in the Directive what each of these terms means There is a further need to restrict the exceptions in the Directive 'Develop the network' has to specifically include operational methodologies, special protection schemes, storage, interconnection and their rules
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Other (please specify)
Please specify which other measures	Use of ancillary Service payments to incentivize suitable back up plant lie OCGT, by provision of ramping payments etc

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	Real time ex-ante single market price mechanism to drive demand response
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)
Please specify which instruments incentivising investment	First and foremost remove distortions caused by fossil, nuclear and general utility monopoly power Ancillary Service payments for ramping duty to incentivize OCGT

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	The electric economy

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Other (please specify)
Please specify which other barriers	Lack of support schemes for electric vehicles and biofuels

G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Water Air
G.2.1. Please explain your answer	Use of electric, hydrogen and biofuels covers all forms of transport

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	Why should such a burden only apply to the best fuels and not the worst ones; this should also be applied to nuclear

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	N/A
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	This initiative fails to recognize a serious lack of security of supply

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Yes, within the EU in the first instance

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Jacob Møller (jmoe@ens.dk), Danish Energy Agency
2. Are you responding to this questionnaire on behalf of /as:	Public Authority
3. Please indicate your country	Denmark
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	A mandatory target is an important tool for ensuring a sufficient deployment across Europe of renewable energy sources to achieve GHG savings and higher security of supply.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Better financing possibilities

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Phase out support schemes over time (please specify for which technologies if applicable)

Please specify how to make support schemes more market-oriented	By moving towards systems like “Feed-in premium” and “tendering RES-technologies (off shore and other large scale RES-technologies)” instead of “feed-in-tariffs” There’s no immediate need to make national support programs fully harmonised, as it will be very difficult to achieve taking national priorities and needs for flexibility into account.
Please specify for which technologies (if applicable) to phase out support schemes over time	There will be a need for continued support in general to achieve long term goals such as those related to 2050. However, the need for support is expected to decrease over time for the more “mature” RES-technologies. E.g. wind on land
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	N/A
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	All differences between support schemes (including indirect support to renewables and traditional technologies) will to some extend distort competition. However, differences in support level may be more important to address on the short term in order to avoid support competition between MS.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)

C.1.1. Please provide explanations and specific examples where available	An important issue for further growth of RE in Denmark is to gain more public acceptance of the renewable installations. Key issues are the direct involvement of the public in the ownership off wind turbines, RE-plants etc. Information about the long term energy costs if BaU continues. Information on possible effects on employment and growth connected to more RE.
C.2. Which policy response to the problems identified above do you consider appropriate?	The approach of the current Directive to lay down a general framework for Member State action is fine

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	Danish regulation contains already favorable conditions for RES-generation with regard to the above mentioned topics which are important for RES electricity integration.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	Priority dispatch conflicts with a market based regime. Priority or guaranteed access seems to be relevant also in a post 2020 perspective.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Other (please specify)
Please specify which other measures	Dedicated electricity storage technologies are with current costs not relevant. Most other measures are cheaper and more relevant.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)

Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	Electric cars, electric heat pumps should participate more in regulating intermittent renewable electricity (wind, wave, pv) and incentives for this could be enhanced.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	It is important that heating is produced efficiently that means CHP or heat pumps.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Lack of infrastructure
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)
Please specify which criteria	The criteria applying to biofuels today would be an appropriate starting point for an EU scheme for solid and gaseous biomass. The criteria should probably be adopted to entail higher GHG thresholds. There would furthermore be a need to adjust the criteria to minimize risk of reduced carbon pools through forest degradation and overharvesting.
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS

I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	N/A
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	NSCOGI is a Member State driven initiative. The EU may foster increased cooperation by adopting further EC ownership of the Initiative, as has been done in the offer to NSCOGI to act as a regional group in the identification of PCIs. Greater EU ownership, however, poses the risk of decreasing ownership in the Member States. At the end of 2012 the NSCOGI will present conclusions as to how a strategic approach could be beneficial. The conclusions have a specific focus on the North Seas context. These conclusions should not be pre-empted, and it is thus too early to say if the conclusions may be generalised. Member State driven approaches could be adopted in other fields. But such an approach is by definition a bottom up approach which limits the role of the EU.

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	There should be a closer link between regional, national and EU wide innovation. Today the energy technology innovation is hampered in the EU due to, for instance, the limitations in the structural/regional funds and the lack of coordnation between national and EU support schemes. Furthermore, there tends to be a focus on turn key products rather than coordinated innovation of the components in the products. That makes for a less competetive product than would otherwise be the case. The innovation that takes place in a rather limited number of regions needs to be coordinated in the entire union to ensure that the full innovation potential for each given product is utilised.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	The question is not so much about specific technologies but whether the prioritised technologies fit into the system from an holistic viewpoint. Materials and components will play a greater role in achieving better competetiveness for all RES technologies. Hence, an integrated and coordinated approach with technology and support flexibility for the member states, as mentioned in the 2050 roadmap , is probably the appropriate way. This will contribute to both PPP and large scale availability. Technologies that are competetive will become available at scale if flexibility for the member states to choose the optimum solutions for that specific market are kept in place.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)

Please specify which drawbacks	The main issues has been a percieved bureaucracy and difficulty for industry and technology developers to see the benefits of European cooperation. Many of the existing measures for RES technology development has been succesful based on what the objectives were in relation to their limited budgets at EU level. In general they have been effective but difficult to communicate, i.e. knowing where to go when the need for support has arisen. For instance in DG ENER alone there were some 15 measures at the same time and they were hard to distinguish between as a layman, not to mention DG RTD and DG ENV measures that were related. To be more effective simplification is needed, and Horizon2020 is a good start. The program that follows will probably be even more streamlined.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	When investing public money in industry projects, it can only be fair to expect a result in relation to the risk level and the projected output. The general 3 year project timeline could be more flexible, as time requirements are different from each project. It cannot be said with absolute certainty that the best possible result is achieved in 36 months.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Tina Benfield, Chartered Institution of Wastes Management (CIWM) tina.benfield@ciwm.co.uk
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Professional Institution
3. Please indicate your country	United Kingdom
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Being mandatory ensures that something will be done.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	For some of the more expensive technologies they are still likely to bte required, for more rural settings.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Some schemes distort the update of renewables dependent on the amount available for support. Care has to be taken to ensure that market research on how much a particular technology will be taken up by particpants. Over-subscription means that less money is potentially available for other technologies.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	The approach of the current Directive to lay down a general framework for Member State action is fine

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Accelerate infrastructure development and interconnection

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Producers of renewable energy should bear greater responsibility for system costs
E.2. How can it be ensured that market arrangements reward flexibility?	Current market arrangements are sufficient to reward flexibility
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)
Please specify which instruments incentivising investment	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Lack of awareness
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Energy efficiency have to go hand in hand with renewable energy for heating and cooling.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Lack of standards Lack of infrastructure
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Water Air
G.2.1. Please explain your answer	They all have potential.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)

Please specify which criteria	There are issues around environmental impact of biomass specifically for fuel, accurate data is important.
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS

I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Other (please specify)
Please specify which other key challenges	Negative visual impact.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Yes, this is a must.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Dr. Stefan Wöhrl, Verband d. Automobilindustrie e.V. / German Association of the Automotive Industry
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	German Association of the Automotive Industry
3. Please indicate your country	Germany
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	We stress the fact that the issue of mitigating against climate change & the reduction of GHG emissions must be addressed following an integrated approach balancing a reasonable & fair contribution from all sectors, w/ active involvement of policy makers to provide the right policies & legislative framework. It is premature to raise this subject before the EU Comm. has not concluded the public debate about sustainability & availability of increasing the biofuels content. The EU Comm. should also ensure a harmonized implementation of the 2020 targets first. The sequence should be: first implement 2020 targets in a harmonized & sustainable way, then analyze whether an increased availability & sustainability of renewable energy sources post-2020 can be assumed based on cost-effectiveness coupled w/ supporting measures to ensure that renewable energy can be delivered & consumed. Only after this analysis can the question be raised to stakeholders in a meaningful way. However, the issue to be dealt w/ first, before considering further targets post-2020, is whether existing RED targets will be achieved by 2020 & whether the technology will be capable of meeting more ambitious targets. On the transport side, the achievement of the 10% target by 2020 remains an open question while issues such as ILUC for biofuels remain unresolved. The EU must confirm now how ILUC will be properly addressed to stop the the continual output of ambiguous signals which does nothing to convince investors
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Better financing possibilities Other (please specify)
Please specify which other policy elements?	

B. FINANCIAL SUPPORT

B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	Electrification of the mobility and transport system can only be a part of a long lasting solution. There is no silver bullet. Electrically chargeable vehicles may promise many benefits for towns and cities, such as very low to zero tailpipe emissions and reduced noise. However the ability for the consumers to select any technology should be guaranteed. However, overly high expectations risk hampering the ongoing industry efforts for a successful introduction of this new technology, which would result in a delay of the exploration and deployment of the full CO2 reduction potential of this promising technology. New technologies generally come in low volume and at significant cost premiums first, which needs to be off-set by a positive policy framework. National governments need to come up with a balanced framework in order to contribute to a realistic market perception of electrically chargeable vehicles and internal combustion engines using conventional fuels. Electrically chargeable vehicles can only become a success if, ultimately, a broader market penetration of this power-train technology can take place without any financial incentives.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	Accelerate the introduction of electrically charged vehicles (ECV) – common schemes, common EU method to account for the value of renewable electricity consumed in ECVs. End support schemes for low-GHG reduction / low sustainability ranking biofuels. Direct the support at advanced and second generation biofuel production.
Please specify for which technologies (if applicable) to phase out support schemes over time	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	N/A

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	The transport sector represents a consumer of renewable energy. The automotive industry is ready to make available the appropriate high-technology products in a common timeframe with the EU-wide availability of renewable energy sources. There must be a common availability of renewable energy for the transport sector so that customers have access to the same energy sources and quality of energy sources across the EU without being confronted with any discrimination. For biofuels, this means that the customer must have access to the same quality of fuel across the EU. The source of electrons from renewable electricity generation is less sensitive but renewable electricity should aim to phase-out other more polluting electricity generation processes. Market acceptance of products are strongly linked to affordability and credibility (sustainability of solution).
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Other (please specify)
Please specify which other pathways	Many studies have indicated that the use of biomass for heating and energy are a preferable route compared to biofuel blending.
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of infrastructure Lack of awareness Lack of suitable information Limits of availability of sustainably produced biofuels Other (please specify)

Please specify which other barriers	Doubts about sustainability of renewable energy (e.g. long ILUC debate, claims about food vs fuel competition). A stable and long-term commitment to a common set of sustainable harmonised fuels across the EU market is needed, not just in individual member states. However, stakeholders do not have confidence that the European Commission and the member states will manage to develop such a harmonized approach. Past experience has frequently resulted in short term support which is withdrawn with very little notice which has negative impact on both the sales of the relevant automotive products and leads to withdrawal of the infrastructure for existing products.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Water Air
G.2.1. Please explain your answer	There is a role for all transport sectors to play in consumption of renewable energy, especially biofuels. The JEC study showed that the consumption of E10 and B7 in road transport combined with reasonable assumptions of the use of biofuels in other transport sectors can achieve the 10% renewable energy use in transport target by 2020. As part of an integrated approach, all sectors should take their responsibility to reducing their GHG emissions. Other renewable energy options such as renewable electricity appear (with todays technology knowledge) unsuitable to transport modes other than road and rail.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)
Please specify which criteria	

H.1.1. Please explain	The EU should complete the sustainability criteria for biomass etc. now instead of asking questions beyond 2020. Without completion of the whole scheme to account for biomass sustainability, the necessary production technologies will not be introduced and the competitiveness of the EU energy sector is being undermined. This is a major criticism of the EU biofuel policy. If this is addressed now in the proper way to promote only the best performing biomass sources, there appears no need for additional criteria post-2020.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	A stronger harmonization of national implementation plans with agreed blending levels would increase cost-effectiveness.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Nahwärme Schildorn reg. Gen.m.b.H. fam.feichtinger@aon.at
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Wärmelieferant
3. Please indicate your country	Austria
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Die Aufteilung der Zielwerte auf ein gesamthaftes EU-Ziel und darüberhinaus auf Sektorziele erscheint als die beste Möglichkeit, die in den MS unterschiedlichen Ausgangspositionen und Voraussetzungen zur Zielerreichung optimal ausnutzen zu können. Es sollten auch verpflichtende sektorale Ziele für die MS ausverhandelt werden. Ohne verpflichtende Zielvorgaben wird die derzeitige Politik geschwächt und der weitere Weg in Richtung Erneuerbare Energieträger wird nicht mehr ausreichend konsequent verfolgt.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Other (please specify)
Please specify which other policy elements?	Wirksamer Außenschutz für die innereuropäische Erzeugung nachwachsender Rohstoffe und biogener Energieträger, insbesondere für die innereuropäische Bioethanol- und Biodieselproduktion, durch Aufrechterhaltung der Außenschutzmechanismen wie Einfuhrzölle und einer Maximalimportquote (z.B. 7% des Marktvolumens). Keine weiteren bilateralen Zollabkommen zum Import von Biotreibstoffen und deren Rohstoffen sowie entsprechende genaue Prüfung der Einhaltung der Nachhaltigkeitskriterien aus RL 2009/28/EG Art. 17 bis 19 für außereuropäische Produktionsstätten sowie strenge Kontrolle der Berichtspflichten von Drittländern und deren Bedingungen der land- und forstwirtschaftlichen Produktion im Hinblick auf umweltschonende Wirtschaftsweise und Sozialstandards.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes

Please specify how to make support schemes more market-oriented	Fossile Energieformen werden derzeit rund sechs mal stärker gefördert als erneuerbare Energien - im Jahr 2010 wurden lt. IEA global 409 Mrd. Dollar staatliche Subventionen für fossile Energieträger eingesetzt und nur 66 Mrd. Dollar für erneuerbare Energien - dies bewirkt gemeinsam mit ungerechtfertigten Vorteilen bei der Emissionsberechnung (fragwürdiger fossiler Komparator in RL 2009/28/EG und 2009/30/EG) sowie bei Versicherungen (Haftungsbegrenzung bei Atomkraftwerken) eine starke Marktverzerrung zugunsten fossiler Energieträger! Eine umfassende Darstellung der Kostenwahrheit unter Einbeziehung aller externalisierten Kosten und negativer Umwelteffekte bei fossilen Energieträgern erhöht schlagartig die Marktfähigkeit erneuerbarer Energien! Entwicklung einer eigenen EU-Richtlinie zur verpflichtenden Darstellung der Kostenwahrheit bei fossilen Energieträgern! Erhaltung von Möglichkeiten steuerlicher Begünstigungen für erneuerbare Energieformen, insbesondere auch im Treibstoffbereich und in Hinblick auf Steuerfreiheit der Reinverwendung, keine CO2-Steuerkomponenten für biogene Treibstoffe bzw. sonstige biogene Energieträger! Sämtliche Vorteile auf monetärer und nicht monetärer Ebene für fossile und nukleare Energieträger müssen schnellstmöglich und umfassend beendet werden.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Da in jedem Mitgliedstaat spezifische Gegebenheiten und Entwicklungsstadien bei erneuerbaren Energien bestehen, müssen die Förderungsmechanismen für die unterschiedlichen Technologien in jedem Mitgliedstaat entsprechend individuell optimiert werden. Im Rahmen der Neufassung der Energiesteuerrichtlinie muss die Möglichkeit der steuerlichen Bevorteilung von erneuerbaren Energieträgern, allen voran auch Biotreibstoffen, angelehnt an den Artikel 16 der RL 2003/96/EG, erhalten bleiben. Die vollständige Steuerbefreiung von biogenen Treibstoffen ist ein wesentliches Element in der Marktdurchdringung und Steigerung des Einsatzes selbiger.

B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Wie bereits mehrfach erwähnt, besteht das größte Problem der Marktverzerrung durch fehlende Kostenwahrheit bei fossilen Energieträgern: Verdeckte Subventionen, Bevorzugung in verschiedensten Regelwerken, unfairer Wettbewerb durch überhöhte Marktmacht (zB. Gazprom) und unverhältnismäßig starke Konzentration von riesigen Finanzmitteln bei wenigen Unternehmen (Ölkonzerne) sind einige Beispiele für grobe Marktverzerrungen zu ungunsten erneuerbarer Energieträger.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Other (please specify)
C.1.1. Please provide explanations and specific examples where available	Ein klares Negativbeispiel für praxisuntaugliche und überbordend komplizierte administrative Prozesse sind die Vorgaben zu Nachhaltigkeitskriterien in der RL 2009/28 EG und die vielfältigen Zeitverzögerungen seitens der Kommission bei deren konkreten Umsetzung sowie die davon entkoppelten unüberschaubaren Prozesse zu Nachhaltigkeitsnormen. Auf der anderen Seite fehlen im Auftrag der Kommission zu erstellende Europäische Normen für die technischen Spezifikationen bei E10 und B10, die ehebaldigst erarbeitet und veröffentlicht werden müssten.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	Statt ständig neue und immer kompliziertere Nachhaltigkeitskriterien für nachwachsende Rohstoffe vorzugeben, muss die Kommission endlich effektive Ethikstandards und Nachhaltigkeitsvorgaben für die Bereitstellung fossiler Energieträger entwickeln. Statt ständig größere Barrieren für die Produktion erneuerbarer Energien zu entwerfen, müssen endlich die Rahmenbedingungen bei der Produktion umweltschädlicher fossiler Energieträger geregelt werden! Umgehende Verabschiedung einer Richtlinie zur Kostenwahrheit sowie zu Ethik-, Umwelt- und Nachhaltigkeitsvorgaben bei der Produktion und Bereitsstellung fossiler Energieträger!

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	Im Rahmen der Regelungen für die Kostenermittlung/-verteilung der Netzkosten von Elektrizität gibt es keine Ausnahmen von z.B. Netzverlustentgelten, Netzzutrittskosten für Ökostrom und die Kosten für allfällig notwendige Netzverstärkungen werden voll und ganz den Ökostromproduzenten angelastet.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	Ohne bevorzugten oder garantierten Netzzugang könnten unüberwindbare bzw. nur sehr schwer überwindbare bürokratische und finanzielle Hürden (Netzzutrittskosten) für kleinere dezentrale Stromerzeuger aufgebaut werden.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)

Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	Eine besondere Stärke biogener Energieträger ist die Möglichkeit zur bedarfsgerechten Bereitstellung. Die Photosynthese löst das Speicherproblem, Biomasse kann sowohl zur Grundlastabdeckung als auch bei Bedarfspitzen gezielt eingesetzt werden - im Gegensatz zu unkalkulierbaren Produktionsfluktuationen bei Windkraftwerken oder Photovoltaik-Anlagen.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of public support Lack of capacity (installers, other) Other (please specify)
Please specify which other barriers	Durch geringere Stückzahlen bei der Produktion und gleichzeitig aufwendigeren Anlagenteilen für die Brennstoffbeschickung haben vollautomatische Heizsysteme für biogene Energieträger in der Regel deutlich höhere Investitionskosten als Erdgas- oder Ölfeuerungsanlagen. Die Gewährung von Investitionszuschüssen der Mineralölindustrie zum Tausch von alten Ölkesseln durch neue Ölkessel und die dadurch entstehende Prolongierung der Abhängigkeit von fossilen Heizöl im Wärmesektor auf mehrere Jahrzehnte bei gleichzeitiger Unterversorgung des Treibstoffmarktes mit Dieselkraftstoffen ist höchst kontraproduktiv. De facto wird die Raumwärmeerzeugung mit Heizöl durch die dadurch bewirkten höheren Dieselpreise subventioniert. Die stationäre Verbrennung von fossilen Mitteldestillaten zur Raumwärmeerzeugung müsste daher (mit entsprechenden Übergangsregelungen) EU-weit verboten werden.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal Electrification together with higher share of renewables in electricity production

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Effizienzsteigerung durch zügige Erneuerung des Heizanlagenbestandes: Durch die Verwendung moderner Biomassekessel kann die Energieeffizienz im Vergleich zu veralteten Allesbrennern durch den optimierten Verbrennungsvorgang und dadurch gesteigerten Wirkungsgrad deutlich verbessert werden. Im Zusammenspiel mit Speichertechnologien (Pufferspeicher) sowie Kombinationen mehrerer Heizsysteme (Zentralheizung mit z.B. solarthermischer Anlage) können weitere Effizienzsteigerungen erreicht werden.

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of standards Lack of awareness Lack of suitable information Other (please specify)
Please specify which other barriers	Unseriöse und emotional gesteuerte Negativkampagnen aus unterschiedlichsten Interessenslagen durch NGOs und sonstige Gruppierungen mit teilweise gezielt falschen Argumenten gegen biogene Treibstoffe zur Generierung von öffentlicher Aufmerksamkeit und/oder Spenden anstelle konstruktiver und sachlicher Beiträge zur Information der Bevölkerung.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Air
G.2.1. Please explain your answer	Im Personenverkehr auf der Straße kann nach entsprechender Verabschiedung der E10 und B10 Normen durch Erhöhung der Beimischungsquoten eine entsprechende Mehrmenge an biogenen Treibstoffen über die bestehende Infrastruktur in Verkehr gebracht werden. Im Gütertransport wird die Abhängigkeit von flüssigen Treibstoffen aufgund der derzeit nicht praxistauglichen Konzepte zur Elektrifizierung des Antriebsstrangs bei Schwerfahrzeugen noch lange Zeit andauern. Daher wird der Einsatz von biogenen Treibstoffen im Gütertransport steigen. Der Flugsektor ist ebenfalls auf Treibstoffe mit relativ hoher Energiedichte (flüssige Treibstoffe)

H. SUSTAINABILITY

H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement No, the existing binding sustainability criteria are sufficient
H.1.1. Please explain	In den MS der EU gelten seit Jahrzehnten sehr klare Forstgesetze zur nachhaltigen Biomasseproduktion im Wald und gut eingeführte Nachhaltigkeitsregeln in der Landwirtschaft (Cross Compliance). Die Einführung neuer zusätzlicher Nachhaltigkeitskriterien bedingt zusätzliche Bürokratie und höhere Kosten für die biogenen Energieträger. Gleichzeitig werden fossile Energieträger massiv bevorteilt (Emissionsberechnung) und durch die Nichteinbeziehung von Externalitäten (Umweltkatastrophen, Beschaffungskosten, usw.) zusätzlich massiv finanziell gefördert. Durch die weitere Verschärfung der bestehenden Kriterien und oder zusätzliche Einführung von neuen Nachhaltigkeitsregelungen für nachwachsende Rohstoffe würde eine weitere Marktverzerrung zu Ungunsten der erneuerbaren Energieträger bewirkt werden - dies ist strikt abzulehnen. Statt ständig neue Kriterien und Barrieren für die Produktion nachwachsender Rohstoffe innerhalb der EU zu entwickeln, sollte die Kommission umgehend eine Richtlinie für Mindestvorgaben zur Kostenwahrheit und Ethik-, Umwelt- und Nachhaltigkeitsstandards bei der Produktion fossiler Energieträger entwickeln und in Kraft setzen!

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Kooperationen beim Technologietransfer in allen Bereichen der erneuerbaren Energien und auf allen Ebenen der Forschung und Entwicklung. In Teilbereichen der landwirtschaftlichen Produktion (beispielsweise Ölsaaten) können verstärkte Kooperationen (allen voran mit den angrenzenden Nachbarstaaten - Balkanländer, Ukraine, Weißrussland) zu einer effizienteren Nutzung der umfangreich verfügbaren Brachflächen und Ertragssteigerungspotentialen führen.

I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	Regionale Ver- und Entsorgungskonzepte für überschaubare Energieerzeugungs-Einheiten mit klaren Wertschöpfungseffekten in ländlichen Gebieten sind gegenüber Megaprojekten zur Stromerzeugung zu bevorzugen. Die Priorität sollte daher auf optimale Lösungen für dezentrale Energieversorgungskonzepte gelenkt werden. Versorgungssicherheit kann jedoch nur mit globalen Netzstrukturen gewährleistet werden, wobei das Hauptaugenmerk auf den Steuerungs und Synchronisationseffekt, und nicht auf die leistungsübertragung zu legen ist.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Vorrang muss jedenfalls die gesteigerte erneuerbare Energie-Produktion innerhalb der EU haben
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Die priorisierte Zielrichtung für bessere Versorgungssicherheit sollten dezentrale regionale Energie-Versorgungskonzepte sein Damit Energieerzeugung und Energieverbrauch räumlich intelligent organisiert und optimal integriert werden können; braucht es die globale vernetzung, und entsprechend intelligente Steuerungen.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Other (please specify)

Please specify which other key challenges	Der SET-Plan fokussiert auf Großanlagen - im Bereich der erneuerbaren Energien und insbesondere im Bereich der nachwachsenden Rohstoffe ist die Gesamteffizienz von Systemen mit überschaubaren Ver- und Entsorgungskonzepten bei kurzen Wegen wesentlich besser als bei Großanlagen. Der SET-Plan zielt daher an den Kernanforderungen für erfolgreiche Systeme mit klarem Regionsbezug vorbei.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Der Fokus muss auf die Optimierung kleiner und mittlerer Energieerzeugungs- und -versorgungssysteme mit globaler Vernetzung gelegt werden, wobwi auch im Biomassebereich eine höhere Energiedichte anzustreben ist.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Biomassegewinnung durch neue Produktionsbereiche, Optimierung kaskadischer Nutzungspfade in der Biomasseverwertung,
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Forschung und Entwicklung an Demonstrationsanlagen, häufig mit unrealistischen Kostenansätzen für "upscaling" bei Rohstoffkosten. Mehrere Beispiele für Konzepte bei biogener Treibstoffproduktion in 2. Generation mit völlig marktfremden Preiskalkulationen.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Ja. Anderenfalls gibt es seitens der Industrie zu geringe Anstrengungen zur Steigerung der Effizienz/Verbesserung der Technologie.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Massimo Merighi
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Italy
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Sectoral targets would assure the best transparency and balanced action.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Other (please specify)
Please specify which other policy elements?	R&D should be focused on true new technology, currently funds are too often channeled in same kind of technological path, innovative and game changer technology like cold fusion and so on sghould be explored. An attention is needed to whom is receiving th funds to avoid that EU tax payers are funding foreing entities that would export later on such technology.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Accelerate convergence of national support schemes Open up national support schemes to cross-border projects
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Again more than sectoral difference attention should be focused on kind of entities, usually large corporation have better economy if scale to leverage to this incventives, while the SME and even private entities are more unaware and therefore incentives may tent to reinforce monopolistic position.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	Again attention to SME and private citizens that are not aware nor able to use cross border schemes !
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of information on support schemes or other Lack of credible and certified training and qualification Other (please specify)
C.1.1. Please provide explanations and specific examples where available	More wide possibility to have access for individual citizens that do not have large organisation nor technical skills as large company.
C.2. Which policy response to the problems identified above do you consider appropriate?	The approach of the current Directive to lay down a general framework for Member State action is fine

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Balancing rules

D.1.1. Please specify which obstacles and the nature and degree of them for each	Possibility to have smart grid operated by small producers like individuals.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Current market arrangements are sufficient to reward flexibility
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	N/A

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Geothermal Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Industrial low temperature process represent a large part of heat needed in a lot of industry where RES can be properly used.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of standards
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Water Air

G.2.1. Please explain your answer	The transport sector did not evolve properly, after all the way how our motors engines and so on is made is the same of 100 yrs ago ! The sector is really technology path locked and need to be impoved in term of R&D but regulation now limit the changes.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	More restrictive rules for receling even plastic can be considered. Sustainability in case of biomass should consider even out of Union import.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	Macro regions may plan an important role.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Cooperation should be reinforced with neighbouring countries, but is mandatory that rules and standards are approximated to the one of the EU. Again is better involve regions than MS.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	Any connection with Africa or Nord Africa should be improved to bridge transport of energy leveraging on potential projects like Desertech.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Can be created a sort of fund IPA STYLE DEDICATED TO ENERGY IN ORDER TO HAVE AN APPROXIMATION OF EU ENERGY LAW IN THE SURROUNDING COUNTRIES, SUCH FUND MAY BE EVEN ROOTED AT REGIOANL LEVEL TO AVOID MORE POLITICAL PROBLEMS AS STATE LEVEL.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	YES CAN BE EXPANDED AND SUPPORTE BY TECHNICAL ASSISTANCE JASPERS STYLE IN OTHER REGIONS.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness Other (please specify)
Please specify which other key challenges	Loocked technology path, now mature industries in fossiles fuel will avoid game changer so R&D should be focused in very innovative technology and find the way how such technology can be used allowing proper legislative modification. The principle of precautionary is always mandatory.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Unsure that patent that may destabilise large interests are not lock by current monopolist.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Cold fusion but again attention to the role of private they may pose their interest in front of a collective one.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Very successful, no drawbacks

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Yes but again be careful to technology path that will determine the future to be lock in certain way to use energy. PEOPLE DO NOT NEED ENERGY ONLY HEAT, MOBILITY AND LIGHT WE SHOULD BE THINKING OUT OF THE BOX. THE POSSIBILTY TO HAVE SUCH SURVEY IN ENGLISH IS VERY LIMITATIVE TO THE ABILITY TO CONTRIBUTE TO THE PUBLIC CONSULTATION BY NON ENGLISH SPEAKERS AND THE COMMISSION IN RECALLED TO USE OTHER LANGUAGES OTHER THAN ENGLISH !

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Guido Ehrenfreund; Renouveau & Democratie Geel
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	European Trade Union
3. Please indicate your country	Belgium
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	So far all operational initiatives are left to the single state members, when it should be the EU that leads the research effort and creates an integrated project similar to the Manhattan project involving thousands of scientists and technicians in the creation of an integrated mix of technologies. The existing network of Agencies and Commission research centers could be used as the initial seed of this project.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Public procurement obligations in support of renewables Better financing possibilities Other (please specify)

Please specify which other policy elements?	The first element that emerge from the energy policy of the European Union is the disproportion between the goal to reach and the effort employed. The second element is the deep technological difference among the different members of the European Union. There is an integrated energy policy at the continental level that helps the less developed European countries.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Accelerate convergence of national support schemes Open up national support schemes to cross-border projects
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	Only with an integrated multi disciplinary approach can be reach the goal of the energetic independence of Europe. Biomass, solar, water, hydrogen, high efficiency network distribution, geothermal energy, building insulation, energy efficiency, ultra-capacitors, hybrid and electric cars and others techniques can't be technical solutions by themselves, a deep integration of all of them is needed.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States Member States should open their support schemes to renewable generation from third countries

Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	The energetic independence based on renewable energies, need a vast plan that integrates individual and collective knowledges, finances, european and national political powers. So far, Europe have not presented integrated plans with alternative scenarios, the feasibility study of Mark A.Delucchi and MarkZ.Jacobson shows that it is possible to power Europe with 100% renewable energy in less than 20 years: www.stanford.edu/group/efmh/jacobson/Articles/I/JDEnPolicyPt1.pdf www.stanford.edu/group/efmh/jacobson/Articles/I/DJEnPolicyPt2.pdf www.airclim.org/factsheets/Renewable_energy%20can%20power_the_world_by_2030.pdfto it is therefore possible to power the entire world with solar, wind water energy in 20 years showing that theoretically the challenge is feasible. This is the abstract of the publication Climate change, pollution, and energy insecurity are among the greatest problems of our time. Addressing them requires major changes in our energy infrastructure. Here, we analyze the feasibility of providing worldwide energy for all purposes (electric power, transportation, heating/cooling, etc.) from wind, water, and sunlight (WWS). In Part I, we discuss WWS energy system characteristics, current and future energy demand, availability of WWS resources, numbers of WWS devices, and area and material requirements. In Part II, we address variability, economics, and policy of WWS energy. We estimate that ï¿½ï¿½ï¿½ï¿½3,800,000 5 MW wind turbines,
Please explain how it could be achieved for third countries	Only if Europe could achieve an integrated plan for its own resources it would be able to integrate third countries
B.7. Do national support schemes and differences between such schemes distort competition?	N/A

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of information on support schemes or other
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	To enhance a more coordinated collaboration among national research centre, European Agencies and Commission Research Centre.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	The energetic independence of the Union is not a national problem but should be the task of the European Institutions.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Other (please specify)
Please specify which other rules	The network is implicit in an integrated european scheme.
D.2.1. Please explain why	Because no individual country is able to reach the energetic independence alone.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage Enable renewable generators to offer balancing services to TSOs Other (please specify)
Please specify which other measures	Wind and solar power are not the only renewable energy sources to be integrated but also tide hydro-electrical and wave power need to be taken into account.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of public support Other (please specify)
Please specify which other barriers	Lack of multidisciplinary approach to offer an integrated package.

F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Other (please specify)
Please specify which other pathways	Only with an integrated multi disciplinary approach can be reach the goal of the energetic independence of Europe. Biomass, solar, water, hydrogen, nuclear fusion, high efficiency network distribution, geothermal energy, building insulation, energy efficiency, ultra-capacitors, hybrid and electric cars and others techniques can't be technical solutions by themselves, a deep integration of all of them is needed.
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Lack of infrastructure Other (please specify)
Please specify which other barriers	The oil, gas, coal and nuclear power lobbies monopoly.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail Water
G.2.1. Please explain your answer	Road for passengers and for goods need to be replaced by alternatives means (i.e. efficient rail transport of goods and passengers).

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	None of these alternatives are sustainable. The present use of the biomass is mostly dangerous for the survival of poor populations. Only third generation biomass should answer to sustainability criteria as long as it does not employ the use of agricultural soil.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)

Please specify how they should be amended or which elements added	Agencies policy of the Commission is not responding to the needs, a much stronger and coordinated effort is necessary. European research needs to be enhance/supported creating a real European Research Centre for Energy covering all the State needs.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	The SolarTech example is a good starting point to help developing countries at the same time that Europe tries to solve its own problems. A better integrated cooperation with USA and China will help to overcome technical problems.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	High efficiency electrical network distributions could help to use solar power also for northern countries, at the same time tide energy could be transferred to southern countries. This approach will help the countries with economical difficulties to solve their problems. At the same time this approach will help southern countries to develop their technical capacities.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	The first priority is to reach energetic independence for all the countries in Europe. The second priority is to develop renewable energies also for african countries with the goal to develop their economies and at the same time to offer additional supplies in cases of need:
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Yes, but it should be enhance with similar solar power production in southern countries.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	System integration Industrial manufacturing and supply chain Other (please specify)
Please specify which other key challenges	Energy saving and building renewal should be part of the general plant.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	New and old technologies like ultra-capacitors, nano technologies, heat pumps, geo-thermal energy. Electrical cars that in case of need could be used as energy source.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	hydrogen, nuclear fusion
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Not successful
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION		
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Αντώνιος Κανδηράκης	adkanzar@gmail.com
2. Are you responding to this questionnaire on behalf of /as:	Individual	
3. Please indicate your country	Greece	
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)	

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Οι στόχοι για τις ανανεώσιμες τεχνολογίες είναι περιττοί και επιζήμιοι για τους πολίτες της Ευρωπαϊκής Ένωσης. Ανεβάζουν τις τιμές του ηλεκτρισμού σε περίοδο μεγάλης οικονομικής ύφεσης. Δεν επιβεβαιώνονται άξιες λόγου αποσοβήσεις εκπομπών καύσης άνθρακα λόγω της ανάγκης υποστήριξης των ΑΠΕ από τις συμβατικές τεχνολογίες. http://www.civitas.org.uk/press/prco21.htm, http://www.civitas.org.uk/press/prleaelectricityprices.htm, http://www.clepair.net/IerlandUdo.html, http://www.bentekenergy.com/documents/bentek_how_less_became_more_100420-319.pdf Κατά την γνώμη μου πρόκειται για οικονομική μόχλευση. Καίγονται κεφάλαια για να υποστηριχθεί η βιομηχανική παραγωγή σε δύο-τρεις χώρες υπό την υψηλή καθοδήγηση της Γερμανίας. Για κάθε θέση εργασίας στις ΑΠΕ σε αυτή τη χώρα κλείνουν θέσεις εργασίας στην Ελλάδα, Ισπανία και Πορτογαλία. Η υποστήριξη στην αιολική ενεργειακή πλατφόρμα ήδη κουρελιάζει όλες τις Ευρωπαϊκές αισθητικές-πολιτισμικές αξίες καθότι πρόκειται για μία χωροκατακτητική τεχνολογία με ασύμμετρο, για την ενεργειακή της αξία, αποτύπωμα που εξαπλώνεται σαν καρκίνος στις εναπομείνασες απρόσβλητες από τις ανθρώπινες δραστηριότητες περιοχές που τυχαίνει να αποτελούν εκτάσεις με σημαντική βιοποικιλότητα. Θα πρέπει να σημειωθεί δε ότι τα ισχύοντα κριτήρια-σταθμίσεις αειφορίας αυτής της τεχνολογίας στα πλαίσια του άρθρου 6 της οδηγίας 92/43, δεν είναι επαρκή.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	Οποιαδήποτε περαιτέρω στήριξη στην αιολική ενεργειακή πλατφόρμα πρέπει να εκλείψει. Προσφάτως, η Ελληνική κυβέρνηση ενέταξε στον αναπτυξιακό νόμο ν. 3299/2004 αιολικά και φωτοβολταϊκά της EEN HELLAS-EDF EN GREECE AE για την επιχορήγηση τους με 26.920.200 €. Θέσεις εργασίας ; Πέντε για τέσσερα έργα. Τα ντοκουμέντα εδώ : http://www.kandanos.eu/node/1725. Κάθε θέση εργασίας στην Ελλάδα μας κόστισε 5.384.040 €. Αποσόβηση εκπομπών ; Να μας πει η Κομισιόν, το βράδυ αλλά και άλλες ώρες, που πηγαίνει το ρεύμα από τα αιολικά. Πουθενά. Τα λιγνιτικά της ΔΕΗ δουλεύουν παράλληλα. Να που πηγαίνουν τα χρήματα με τον αναπτυξιακό νόμο ενώ οι Έλληνες είναι άνεργοι και πεινάνε : επιδοτούν θυγατρικές της EDF και θέσεις εργασίας στην Γερμανία και Δανία. Πρέπει να απεμπλακούν τα κράτη-μέλη της Ε.Ε. που έχουν κατ΄ουσίαν χρεωκοπήσει από τους δεσμευτικούς στόχους για τις ΑΠΕ της οδηγίας 2009/08/ΕΚ και περαιτέρω χρονικά. Πρέπει να υποστηριχθούν ενδεχομένως μόνο ενεργειακοί τομείς με πολλαπλασιαστικά αναπτυξιακά αποτελέσματα, σε άλλες τεχνολογίες όπως το φυσικό αέριο σε συνδυασμένο κύκλο . Τα κοιτάσματα της Μεσογείου μας αρκούν, προς τι να επιδοτούμε τα αιολικά ; Κύριοι τέλος δεν προκύπτει από κάποιο νομικό κείμενο ότι οι κρίσιμες διαβουλεύσεις βάσει της σύμβασης Arhus θα διεξάγονται στην Αγγλική γλώσσα κατά το μέρος του κειμένου διαβούλευσης. Η αρμόδια Υπηρεσία περιορίζει στον μέγιστο βαθμό την συμμετοχή των πολιτών και δεν είναι δυνατόν να θεωρηθεί ότι τα συμπεράσματα της είναι
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?
G.2.1. Please explain your answer

H. SUSTAINABILITY
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?
H.1.1. Please explain

I. REGIONAL AND INTERNATIONAL DIMENSIONS
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Ministerie van Economische zaken, Landbouw en Innovatie, F.H.deHaan@mineleni.nl (Foppe de Haan)
2. Are you responding to this questionnaire on behalf of /as:	Public Authority
3. Please indicate your country	Netherlands
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	• In de EU routekaart Energie 2050 wordt de mededeling inzake de strategie voor hernieuwbare energie na 2020 aangekondigd. Nederland is blij met de EU Routekaart Energie en de voortvarendheid van de discussie die daarover is gestart onder Deens vooorzitterschap. • De vragen in de consultatie vergen allereerst een samenhangend algemeen kader, dat nu nog ontbreekt. Nederland hecht er zeer sterk aan om het vervolgproces zorgvuldig te doorlopen. Besluitvorming over post 2020 beleid vergt een grondige analyse en (tussen)evaluatie op de meer integrale aspecten van het 2020-pakket. Ook moet de mondiale context nadrukkelijk worden meegenomen bij de ontwikkeling van het beleid. • In dit stadium van de discussie, mede met in achtneming van het Nederlandse standpunt inzake Routekaart Energie, gaat Nederland hieronder derhalve vooral in op de relevante hoofdpunten van het vereiste analytische kader voor de mededeling strategie hernieuwbare energie na 2020. • Nederland is voorstander van een vernieuwde Europese beleidsmix voor klimaat en energie richting 2030 waarbij vereenvoudiging, minder stapeling van doelen (kosteneffectiviteit) en het stimuleren van innovatie centraal staan. Voor Nederland staat een Europese reductiedoelstelling centraal en Nederland is daarom geen voorstander van afzonderlijke verplichte nationale doelstellingen voor hernieuwbare energie en energiebesparing.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)
Please specify which other policy elements?	• De vernieuwde en vereenvoudigde beleidsmix dient voldoende investeringszekerheid te geven aan marktpartijen om op effectieve en efficiënte wijze bij te dragen aan decarbonisatie, de economische doelen en een betrouwbare energievoorziening. Het EU beleid dient daarbij expliciete momenten en analyses inbouwen om rekening te houden met de grote onzekerheden over de lange termijnhorizon. Nederland onderschrijft de analyse van de Europese Commissie in de Routekaart Energie dat flexibiliteit nodig is. • Nederland kiest ervoor om in te zetten op een voorwaardelijke Europese doelstelling van 40% reductie(ten opzichte van 1990) in 2030. De uiteindelijke hoogte is afhankelijk van het niveau van adequate mondiale actie en adequate waarborging van de concurrentiepositie van het Europese bedrijfsleven.

B. FINANCIAL SUPPORT

B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	• Nederland steunt de Europese Commissie bij het ontwikkelen van een passende benadering voor hernieuwbare energie. • Nederland vraagt de Commissie om in het door haar aangekondigde raamwerk voor hernieuwbare energie als (tussen)evaluatie expliciet in te gaan op de meer integrale aandachtspunten van doelmatigheid en doeltreffendheid van de huidige 2020-aanpak. • Momenteel heeft elke lidstaat een eigen nationale doelstelling voor hernieuwbare energie met eigen en vaak verschillend nationaal stimuleringsbeleid. Dat zorgt voor marktverstoring, onder andere door “subsidieconcurrentie”. • Daarnaast leidt uitsluitend nationaal beleid ertoe dat er geen gebruik wordt gemaakt van de comparatieve voordelen van de interne markt en de lidstaten. Daarom pleit Nederland voor verdere integratie en harmonisatie van de Europese energiemarkt, inclusief de markt voor hernieuwbare energie. • De huidige inefficiënte interactie tussen de doelstellingen voor broeikasgasreductie, hernieuwbare energie en energiebesparing, soms zelfs gespecificeerd naar lidstaat-niveau, verdient verbetering en vereenvoudiging. • Een effectieve en efficientere aanpak kan een jaarlijkse kostenbesparing van ca. € 10 miljard in de EU opleveren. • De Commissie wil het raamwerk voor de Europese inspanningen voor Research & Development op energiegebied versterken. Nederland steunt dit gelet op het belang dat Nederland hecht aan het realistisch en economisch verantwoord implementeren van nieuwe EU energiesystemen
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	• Nederland wil dat de Commissie in de aangekondigde mededeling inzake hernieuwbare energie de punten van regeldruk, vernieuwing van verantwoordelijkheden en elkaar niet tegenwerkende instrumenten verder uitwerkt. • Nederland steunt de eerdere voorstellen van de Commissie gericht op het wegnemen van obstakels voor het investeringsklimaat door versnelling van vergunningverlening-procedures, het gebruik maken van regionale initiatieven en een verbeterde kostenallocatie. • Vernieuwing van verantwoordelijkheden tussen markt en overheden in de nieuwe fase van transformatie van energiesystemen verdient veel aandacht in de vernieuwde Europese beleidsmix. • De overheidsrol dient naar de mening van Nederland ten opzichte van het “2020 pakket” te veranderen van probleemeigenaar naar kadersteller (robuuste regelgeving) en facilitator (moderne energie-innovatie aanpak). • Bedrijven pleiten daarbij vanuit investeringszekerheid voor een adequaat regulerend kader (“statutory backing”)voor de noodzakelijke investeringen in decarbonisatie en “up to market”-nieuwe technologie en groene banen. • Nederland zal zich inzetten voor deze duidelijkheid, vereenvoudiging en robuustheid. Nederland zal met de Commissie en andere landen verkennen in hoeverre de instelling van een High Level groep Regeldruk 2030 hieraan kan bijdragen. • De grootste uitdagingen en kansen liggen in het rendabel krijgen van hernieuwbare energie in een meer geïntegreerde Europese markt.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	

D.1.1. Please specify which obstacles and the nature and degree of them for each	• Nederland steunt de observatie van de Europese Commissie dat nog de nodige obstakels weggewerkt moeten worden om in 2014 een volledige marktintegratie tot stand te kunnen brengen. Hier dient ook verdere vereenvoudiging en duidelijkheid voor de markt in betrokken te worden. • Een adequate energie-infrastructuur is nodig voor een schone, zekere en betaalbare energievoorziening. Nederland onderschrijft de noodzaak tot meer interconnectie tussen lidstaten. • Versterking en vernieuwing van de marktwerking voor energie kan bijdragen aan beperking van prijsschommelingen en kosteneffectiviteit. Een eenduidig regulerend raamwerk moet voldoende capaciteit en flexibiliteit bieden in de transformatie. • Nederland staat positief tegenover nadere analyse naar vraaggericht energiemanagement , onder andere met “regulators” en netwerkbedrijven. Wel acht Nederland het belangrijk dat de mogelijk te ontwikkelen capaciteitsmechanismen marktconform zijn en niet de werking van de interne markt beperken. • Nederland vindt dat de positie van gas een duidelijke plaats dient te krijgen in het Europese beleid. Gas is immers een buitengewoon flexibele, relatief goedkope en schone brandstof en is daarmee essentieel in het kader van de overgang naar een duurzame energie huishouding en de energiemix van de toekomst. Ook zal het vraagstuk van de vernieuwing van de gasinfrastructuur- op een marktconforme wijze - meer aandacht moeten krijgen.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING

F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	

F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	• De belangrijkste barrières zijn het algemeen gebrek aan urgentie voor energiebesparing in de gebouwde omgeving, het trage implementatietempo van investeringen doorr het wachten op natuurlijk moment en de concurrentie met andere bestedingen, de lage rentabiliteit in vergelijking met andere installatie- en isolatiemaatregelen en tenslotte gebrek aan kwaliteit van aanbod/kennis: met name bij warmtepompen, collectieve systemen. • Het wegnemen van deze barrières is kern van het beleid o.a. via certificering van installateurs en daarmee kwaliteitsverbetering en viade voorbeeldfunctie van de overheid en de kennisoverdracht voor kennisvermeerdering. • Innovatieprogramma is van belang waarbinnen concepten voor (bijna) energieneutraal worden ontwikkeld en getest. Hierin is duurzame energie een integraal onderdeel. Houding en gedrag inzake vraagbeperking zijn van belang. • De techniek die op de meest kostenefficiënte manier voor laagwaardige warmte-koude zorgt, zal de beste kans maken in de toekomst. NL voert nu zoveel mogelijk demoprojecten uit met goede monitoring om zicht te krijgen op energieprestaties van verschillende technieken en concepten.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	

G.2.1. Please explain your answer	• Een belangrijke oplossingsrichting in de vervoerssector ligt in vermindering van het energiegebruik door efficiëntere transportmiddelen en veranderingen in mobiliteitspatronen. Daarnaast levert substitutie van fossiele brandstoffen door hernieuwbare energie, waaronder biobrandstoffen, een bijdrage. • Een belangrijke barrière voor de verdere ontwikkeling van hernieuwbare energie in de vervoerssector is de beschikbaarheid van betrouwbare (wetenschappelijke) informatie. Dit betreft gegevens buiten wat al in de Richtlijn hernieuwbare energie is geregeld over de duurzaamheid van biobrandstoffen, met name de indirecte effecten van landgebruik door de productie van biobrandstoffen en de concurrentie met voedsel. • Verwacht wordt dat biobrandstoffen in 2050 met name worden ingezet in zwaar wegvervoer en lucht- en scheepvaart, omdat daar relatief weinig alternatieven zijn. Inzet van elektrische voertuigen (inclusief waterstof geproduceerd met hernieuwbare elektriciteit) is met name in personenvervoer een kansrijke optie.

H. SUSTAINABILITY

H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?

H.1.1. Please explain	• In de huidige duurzaamheidscriteria voor biobrandstoffen en vloeibare biomassa dienen de effecten van indirect landgebruik verdisconteerd te worden . • Elke twee jaar zal de Commissie rapporteren over de ecologische gevolgen (de gesteldheid van de bodem, het water en de lucht) en de sociale gevolgen (welvaart en welzijn) van de productie en het gebruik van biobrandstoffen. De Commissie zal waar nodig corrigerende maatregelen voorstellen. • Nederland is van mening op basis van de afgesproken tweejaarlijkse rapportages bezien dient te worden op welke wijze de hierboven genoemde ecologische en sociale gevolgen verder aan de duurzaamheidscriteria gekoppeld kunnen worden. • Biomassa en bioraffinage zullen een belangrijke plaats innemen in de transformatie van economie en energievoorziening in de EU en in de lidstaten. Nederland vraagt bij de uitwerking van de rol van biomassa nadrukkelijk aandacht te besteden aan en rekening te houden met mogelijke beperkte beschikbaarheid van duurzame biomassa in de toekomst. • Nederland wil de duurzaamheidscriteria ook naar andere toepassingen dan de duurzaamheidscriteria voor biobrandstoffen en vloeibare biomassa verbreden. Dit betekent de komende jaren de duurzaamheidscriteria voor vaste en gasvormige biomassa voor energie verankeren in Europese regelgeving analoog aan de biobrandstoffen . Vervolgens dienen deze criteria verder verbreed te worden naar alle biobased- en voedseltoepassingen.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	• Investeerders verdienen in een onzekere mondiale context adequate houvast vanuit het Europese beleidskader bij de ontwikkeling en uitrol van schone energietechnologieën. De uiteindelijke hoogte van het voorwaardelijke EU CO-2 doel 2030 is afhankelijk van het niveau van adequate mondiale actie en adequate waarborging van de concurrentiepositie van het Europese bedrijfsleven. • Een verder geharmoniseerde Europese markt voor duurzame energie dient te faciliteren dat energieproductie daar plaatsvindt waar dat het meest voordelig is. Ook de betrouwbaarheid van de Europese energievoorziening zal zodoende verder worden versterkt. • De impact van de grote technologische en geopolitieke onzekerheden over deze tijdhorizon moeten periodiek nader worden onderzocht en moeten integraal onderdeel uitmaken van de EU agenda. • Gezien het feit dat de EU op het terrein van energiemarkten tevens een sterk regionaal karakter kent, met een andere brandstofmix en sectorale en industriële samenstelling, bepleit Nederland het realistisch inbouwen van regionale aanpakken. Een dergelijke benadering ondersteunt tevens de positie van Nederland als gasland in een Noordwest Europees perspectief
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	• Nederland steunt het sterker en effectiever maken van het raamwerk voor de Europese inspanningen voor Research & Development op energiegebied. • Bezien zal moeten worden hoe deze versterkte aandacht voor innovatie ten behoeve van economische en technologische ontwikkeling en kostprijsreductie in mondiaal perspectief precies vorm dient te krijgen. Nederland steunt de Commissie daarvoor te komen met nadere voorstellen. • Nederland hecht aan het realistisch en economisch verantwoord implementeren van nieuwe energiesystemen in de EU. De grootste uitdagingen en kansen liggen in het rendabel krijgen van hernieuwbare energie in een meer geïntegreerde Europese markt, met als success criterium hiervoor vooral de kostenreducties van nieuwe technologietoepassingen. • Lidstaten zullen zich onder invloed van een goed werkende markt meer gaan specialiseren op energietoepassingen wanneer zij daarbij uitgaan van aanwezige comparatieve voordelen. • Energie-innovatie dient dit te faciliteren en niet tegen te werken zodat nieuwe hoogwaardige groene banen daar ontstaan waar ze in de EU de meeste productiviteit opleveren. Nederland heeft binnen de EU sterke industriële uitgangsposities in bijvoorbeeld gas, wind op zee, zon-pv en de bio-keten. • Het uitgangspunt is dat financiering voor nieuwe opwekcapaciteit en infrastructuur zoveel mogelijk van marktpartijen en private financiers afkomstig is.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	• Modern energie-innovatie beleid van de EU faciliteert de initiatieven van marktpartijen en kennisinstellingen(o.a. een samenhangende inzet van Strategic Energy Technology Plan (SET Plan), Horizon 2020 en EIB/EIF).
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Patricia Sharkey, Gweebarra Conservation Group, Transparency Register ID : 19212807991-59
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	environment group gweebarraconservation@gmail.com
3. Please indicate your country	Ireland
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	The Principle of Proportionality is binding in both the development of EU legislation and State Aid for environmental protection. To comply it has to be demonstrated (a) what greenhouse gas tonnages are to be reduced; (b) the cost basis for implementation and the alternative implementation strategies considered and (c) the environmental objectives involved, namely the environmental degradation which is to be avoided. Neither the NREAPs nor the EU's documentation for Directive 2009/28/EC demonstrate (a) or (b). Directive 2001/77/EC required by the end of 2005 a report which should: "Consider the progress made in reflecting the external costs of electricity produced from non-renewable energy sources and the impact of public support granted to electricity production". This cannot be found. In DG Clima's analysis in March 2010 of a possible initiative to step up beyond 20% greenhouse gas savings: "Explain how the options respect the proportionality principle? Climate change is a transboundary environmental problem. Achieving GHG reductions targets in the EU requires a balanced distribution of efforts between countries and sectors in order to ensure that the environmental objectives are met, but also the common market is not unduly hampered". Neither is there an answer to (C). Furthermore, the Commission has failed to comply with the decision of the EU Ombudsman in Complaint 2587/2009/JF. The renewable programme is a breach of the most fundamental principle of EU law.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)

Please specify which other policy elements?	"The long-term perspective of investors" and the EU's ambition to move towards a reduction of 80-95% of GHG emissions in a 2050 perspective is the focus of this consultation and resulting measures. The Lisbon Treaty is clear in that the "Union shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance. Each institution shall act within the limits of the powers conferred on it in the Treaties. The institutions of the Union shall apply the principle of proportionality". Massive costs and environmental impacts are occurring and the Commission and the Member States have failed to demonstrate, how the renewable energy programme and the focus of this consultation, are in compliance with the terms of the Lisbon Treaty above. The citizen's interest does not lie with a 95% reduction in GHG emissions and establishing a long term perspective for investors in technology sectors. Furthermore, there has been a complete failure to verify the emission savings and environmental performance of renewable installations installed to date and engineering analysis is clearly showing how ineffective intermittent generators, such as wind and solar, are in delivering reliable energy and effective environmental protection.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	No
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Phase out support schemes over time (please specify for which technologies if applicable)

Please specify for which technologies (if applicable) to phase out support schemes over time	ECJ judgement in case C-379/98 in relation to justifying state aid for wind generated renewable electricity was on the basis that it was "useful for protecting the environment in so far as it contributes to the reduction in emissions of greenhouse gases". "It should be noted that that policy is also designed to protect the health and life of humans, animals and plants". The Commission is aware it is subject to a Communication ACCC/C/2010/54 at the UNECE Aarhus Convention Compliance Committee in relation to the renewable energy programme in Ireland. This has demonstrated that the funding mechanisms are to ensure delivery of an EU obligation in relation to renewable energy and not part of a commitment, to contribute to any quantifiable environmental target related to quantified carbon dioxide savings. In approving this funding the EU failed to evaluate the environmental effectiveness of the programme or if the citizen's rights with regard to public participation in decision making had been complied with. The inefficiencies on the grid induced by wind energy were known in advance, but ignored. Emission savings claimed for in the funding application have not occurred. Any further installation of wind energy will not lead to emissions savings, yet a quadrupling is required by the NREAP. A similar situation has occurred in other Member States. Aid schemes approved by the EU for renewable energy are not protecting the environment and saving fossil energy resources.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	The most pressing problem in Ireland is the wanton destruction of habitats by wind and electrcity companies. The grid sold be undergrounded alongside exiting roads and not acros country and the whole wind energy industry must be reassessed and subsidies stopped. Local and domestic generation shoud be encouraged.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)
C.1.1. Please provide explanations and specific examples where available	The Lisbon Treaty requires that: “Decisions shall be taken as openly and as closely as possible to the citizen. The Commission shall carry out broad consultations with parties concerned in order to ensure that the Union's actions are coherent and transparent”. The EU has ratified the United Nations Economic Commission for Europe’s (UNECE) Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. A Strategic Environmental Assessment (SEA) is mandatory under Directive 2001/42/EC for all programmes leading to future development consent of wind farms and other renewable infrastructure. Communication ACCC/C/2010/54 at the Aarhus Convention Compliance Committee has shown that the Units Heads of DG Environment and DG Energy in June 2010 directed the Member States that no SEA was required for the NREAP if it did not include specific mandatory measures. Note: The renewable targets and the NREAPs are mandatory. The Compliance Committee have concluded that public participation was required for the NREAP and have formally requested: “Could you please explain why the Commission says that it is not responsible for the actions of the Member State in this case?” The Commission is acting without ‘proper authority’ in the manner in which it is implementing this programme, in that it has deliberately bypassed legally binding procedures related to environmental assessment and democratic accountability.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	The Commission has failed to comply with both the terms of the Lisbon Treaty above and its obligations under the Aarhus Convention with both the structure and the implementation of Directive 2009/28/EC. With regard to implementing a programme of this nature, Article 7 of the Convention is clear: it requires that the public affected be provided with the necessary information, so that they can participate effectively during the preparation of the plan or programme within a transparent and fair framework, when all options are open and effective public participation can take place. EU legislation implements this through the more detailed process of Strategic Environmental Assessment. Furthermore the Commission's legal team in their opening statement to the Aarhus Convention Compliance Committee meeting on Communication ACCC/C/2010/54, stated that in terms of the National Renewable Energy Action Plan, the Irish public were only entitled under the terms of the Convention to information on threats to the environment. They were not entitled to information on comparative costs or effectiveness of the renewable technologies. Under the Treaty of Lisbon, the citizen has a Right to good administration, a Right to effective remedy and to a fair trial and a Right to have damages made good. The Right to have damages made good applies to institutions and bodies of the EU and Member States when they are implementing Union law.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above

D.1.1. Please specify which obstacles and the nature and degree of them for each	Europe's population has stabilised, while Europe's industry is more efficient, so electrical power consumption figures are stabilising. Yet to support a renewable programme with unknown figures related to environmental performance, impacts and financial costs, an enormous network development is to be initiated to facilitate unreliable and intermittent renewable generation, e.g. as regards the Republic of Ireland, a doubling of the high voltage grid by an extra 5,000 km. The EU Commission's 'Priority Interconnection Plan' COM (2006) 846 is very critical of 'time consuming public consultation procedures'. Yet this plan has an investment of €30 billion in infrastructure by the EU by 2013, with an estimated €700 – €800 million annually to be spent on connecting more renewable sources. In Com (2011) 658 on a proposal for regulation of a pan-European energy infrastructure, this states in relation to proportionality that the proposal does not go beyond what is necessary to achieve the objectives perused. This is not correct, the renewable programme has by-passed both proper environmental, technical and financial assessment and legally binding measures related to public participation. It is certainly not proportionate in terms of achieving demonstrated environmental protection objectives. Now the citizen is expected to carry the burden of this grid expansion, with massive and unnecessary financial and environmental impacts.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Other (please specify)

Please specify which other rules	Both the internal and external costs associated with any grid expansion to facilitate renewable energy need to be assessed and compared with the 'do nothing scenario', given that the existing grid functions without any of this development. With regards to the EU's binding climate change and renewable energy targets, it is necessary to point out Principle 10 of the United Nation's Rio Declaration, namely; "Environmental issues are best handled with participation of all concerned citizens, at the relevant level". These binding targets were decided solely on political considerations, in which there was neither any environmental assessment nor public participation with concerned citizens. These massive grid expansions to facilitate intermittent renewable generation are being forced upon a population, who have neither been informed nor provided with an opportunity to participate in these key decisions. Clearly renewable energy should only be provided with access to the grid, when it demonstrates that it is superior and more effective than current generation capacity. At no stage have the necessary assessments in this regard been completed to justify the preferential treatment provided to such generation. Indeed, ever indication is that the renewable energy being promoted solely for political reasons is not providing any significant environmental benefits, which anyhow could have been achieved with far lower cost and environmental impacts by other means.

D.2.1. Please explain why	As regards grid related rules there is already a huge backlash developing from the general public as more and more grid expansions are developed to facilitate intermittent and ineffective renewable generation, such as wind energy. As the Commission is aware from Communication ACCC/C/2010/54 it approved €110 million in funding for the Ireland-to UK electrical connector, even though the sole purpose of this project was to facilitate more wind energy on the Irish grid, a policy, which had by-passed the legally required public participation. The EU's European Investment Bank has supplied €300 million in loans to the interconnector project and a further €235 million to the State-owned ESB to develop further networks to facilitate wind energy in Ireland. These loans are related to a programme which has by-passed legally required public participation procedures. Now the citizen is expected to pay back this money for infrastructure that is not needed, and for which he was provided with no proper environmental information nor the opportunity to participate in the decision-making. Given that Europe is already heavily indebt it is simply unacceptable that such practices should be occurring, driven by EU Institutions which have deliberately by-passed the legally binding rules which are applicable to them. Proper accountability and adherence to democratic procedures is not optional with regard to grid development.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Other (please specify)

Please specify which other measures	The integration of wind power in Ireland has caused a huge financial burden to be placed on the citizen for no real environmental benefit. In 2012 subvention cost only helps delivers 2% of Ireland's electricity supply, in an irregular and ineffective manner. Indeed the development of renewable electricity in Ireland has essentially doubled generation costs. All other countries that have expanded renewable energy are seeing massive price hikes for the consumer, coupled with a failure to demonstrate any significant decrease in fuel usage or emissions. The burden on the environment is a disgrace. The landscape and important habitats are being destroyed so that developers can profit at rural dwellers' expense. Once again this demonstrates the failure to properly assess policy before implementation. Input from engineers not in the pay of the wind industry has been deliberately ignored. Europe's industry cannot remain competitive given these massive costs, which are bound to be raised even further due to dysfunctional and ineffective system integration costs for renewable power, which has neither rational nor legal reason to be there in the first place. The blatant ignoring of public opinion is immoral and must stop. NO MORE WIND FARMS! The Irish landscape cannot sustain any more of these monstors.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk – producers of renewable energy should operate without any aid
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	N/A

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Other (please specify)

Please specify which other barriers	The uptake of renewables in heating and cooling is being driven, both at EU and Member State level, by polices which have not been properly assessed and whose implementation is related to political expediency and not environmental protection. Indeed the promotion of wood biomass for domestic heating is not only leading to the destruction of natural wood resources, but as the moisture content of such fuel, particular in Northern Europe, is high; it is leading to increased particulate emissions and urban pollution. As regards the renewable Directive, the external costs of existing heating and cooling arrangements are unknown, yet we are to subsidise renewables for which no external cost assessment is available. This type of policy will only lead to unsustainable businesses, which are totally dependent on subsidy bubbles to survive and have little or no viable long term future. The Common Agriculture Policy had its inception in such rash politically-based decision making, in which market-based economics was replaced by a political structure. This agricultural policy resulted in an enormous cost burden for the European citizen, and lead to practices which were unsustainable from both financial and environmental perspectives. It is clear that the EU has not learnt anything from this debacle: it is now rapidly implementing other politically-agreed targets, by-passing legally-required assessment and public participation requirements.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Other (please specify)

Please specify which other pathways	The counter-productive nature of the EU's energy policies is also evident in the promotion of biomass for domestic heating, with all its associated environmental impacts, plus a significant impact on human health. Yet the most environmentally-effective form of renewable heat, that of electrically-driven heat pumps, is being put out of business by soaring electricity costs caused by the renewables' bubble. Yet at no stage was this considered in a proper assessment as part of policy development. As Der Spiegel reported in March, 2011 in relation to Germany: "Not everything that looks green serves the environment. The ecological principle of proceeding with care doesn't seem to apply to environmental policy. The more, the better, seems to be the principle. No one is calculating whether all the billions being invested in protecting the environment are actually being spent wisely. Ordinary citizens can't judge it and many experts have no interest in shedding any light on this aspect because their livelihoods are at stake…. In many cases, a closer look at environmental measures reveals that they're expensive and don't have much effect".
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	It is likely that global energy prices will rise in line with both population increase and a general improvement in living standards. Market forces will then dictate that consumers must use energy more efficiently. However, what the EU is proposing instead is a massive intrusion on the Citizen's rights, in that he should be denied access to certain energy sources and forced to use other highly ineffective ones, based on political decisions which have by-passed proper assessment and legally binding public participation procedures. In particular, given that the EU has completely failed to assess and quantify the external costs of carbon dioxide emissions, it has no legal right to restrict the citizen's access to such fuels and introduce massive financial support programmes for those, which may well carry the tag renewable, but in reality do not deliver any environmental benefits which could not have been achieved at a fraction of the cost by a rational and science-based evaluation. While energy efficiency and environmental protection in the heating and cooling sector should be promoted, this should be based strictly on the principles of the Lisbon treaty, namely a highly competitive social market economy and a high level of protection/improvement in the quality of the environment. The current promotion of renewable energy does not fulfil those requirements.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Other (please specify)
Please specify which other barriers	With regard to the 10% target for transport fuel, this was an essentially political target, bereft of any environmental assessment. The April 2007 consultation by the Commission was simply a 'Vox Pop' based on four questions: "How should a biofuel sustainability system be designed? How should overall effects on land use be monitored? How should the use of second-generation biofuels be encouraged? What further action is needed to make it possible to achieve a 10% biofuel share?" These questions fail to qualify as public participation in decision making, since the target is already established. The current situation is that the introduction of E10 biofuel into Germany has been a disaster. The Commission is also well aware that it has been sued, accused of violating European transparency laws. Client Earth, Friends of the Earth Europe, Fern and Corporate Europe Observatory filed the lawsuit following the Commission's refusal to provide access to information in decisions related to the sustainability of Europe's Biofuels policy. The 10% target should therefore be reviewed and subject to the proper technical, environmental and financial assessment, in conjunction with proper public participation, which was mandatory for such a biofuel programme in the first place.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail
G.2.1. Please explain your answer	Many European rail networks are electrified and in Ireland rail costs are soaring as electrical generation costs have effectively doubled due to renewable energy inputs, which are massively ineffective in terms of environmental protection. This is, in effect, rendering uncompetitive what is an extremely effective form of transportation, particularly for social groups who would not have ready access to a car. Yet clearly this impact has never been assessed and quantified in the development of these policies. One can only wonder if people who have been placed in positions of responsibility for developing EU energy policy did even attempt to understand the impacts of these policies, as certainly there is no documented evidence to demonstrate that they did.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement
H.1.1. Please explain	The sums of money which have been made available for Europe's biofuel policies are colossal, and are only matched by the potential for environmental devastation. Given the rising global population, which in many cases can't feed itself, to divert food products into fuel tanks is simply obscene. Furthermore, Biofuels have not provided the environmental benefits that were claimed. And of course there was no proper environmental assessment of the policy made before it was introduced. This policy should be stopped before it does more damage both in Europe and in poor countries of the South.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	As already answered in Section D, existing grid networks are perfectly adequate for now and future needs. They may need replacement in relation to the age of the components, but they do not need to be expanded. Indeed if people used solar/small domestic turbines whole areas of rural Ireland could come off the grid entirely.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	As already answered in Section D, existing grid networks are perfectly adequate for now and future needs. They may need replacement in relation to the age of the components, but they do not need to be expanded. Indeed if people used solar/small domestic turbines whole areas of rural Ireland could come off the grid entirely.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	N/A

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	In relation to COM (2011) 539 on "The EU Energy Policy: engaging with partners beyond our borders" and the Mediterranean Solar Plan, we comment that this plan is widely speculative, particularly given the complete failure of solar power to deliver either cost effective or reliable electricity. Europe is already collapsing under a burden of financial debt and it is appalling to see that the EU Commission wants to increase this burden based on speculative and ill-conceived projects in neighbouring countries. Spain has already had to slash its solar subsidies and Germany cannot continue to support solar development any more, not to mention the fact that neither the citizens nor the environment benefited from these colossal expenditures. Again the Commission is creating a 'bubble economy' for equipment suppliers, while destroying jobs in other sectors with rising electricity prices and unsustainable sovereign debt levels.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	In a similar manner offshore wind is a technology sector associated with massive costs (€4.3 million per MW installed) for an unreliable electricity supply, which in turn has massive environmental impacts, in particular associated with grid expansions. It is distressing that the EU Commission cannot produce any objective documentation to support this technology sector. With regard to the Communication ACCC/C/2010/54 and Ombudsman Complaint 2587/2009/JF of 3rd Feb 2011 on the Irish State Broadcaster, the EU Commissioner for Climate Action Connie Hedegaard stated in relation to offshore wind: "It actually pays off, it is sound economics". When a formal reply was received concerning a request for supporting technical information, no such documentation was provided. The reply said: "…as the Commissioner's statement did not refer to any particular project or development, nor was it based on any one or particular piece of documentation but on publicly available information and her general experience, knowledge and political views". The only document available, from the European Environment Agency on "Europe's onshore and offshore wind energy potential", quotes the European Wind Energy Association as its technical source. How objective can that be?

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Other (please specify)
Please specify which other key challenges	Some very serious questions have to be answered concerning the Irish taxpayers' money being diverted into renewable energy research, in particular as there has been a complete lack of data made available as to the environmental effectiveness of this sector, despite it being a legal obligation to possess and to update such environmental data. With regard to the Intelligent Energy Europe programme, both projects funded by the EU Commission in relation to wind energy, "Wind Energy - The Facts" and "GP Wind" contain blatantly incorrect claims about the emissions and fuel savings from this intermittent source, in which the inefficiencies induced on the grid are ignored. Under Regulation 1367/2000, which imposes the requirements of the Aarhus Convention on Institutions of the EU, the EU Commission is refusing to confirm how it complies with its legal requirements in relation to the two programmes, i.e. that it shall, insofar as is within its power, ensure that any information that is compiled by it, or on its behalf, is up-to-date, accurate and comparable. In particular with regard to "Wind Energy – The Facts", the EU contributed 50% of the €773,662 used by the European Wind Energy Association to run a "dissemination" campaign. Yet at no stage has an independent and transparent technical analysis ever been completed of the EU's colossal support for wind energy and its effectiveness.

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	The Treaty of Lisbon is clear, in that the Union "shall promote scientific and technological advance". Wind, solar photovoltaic and biofuels, which are cornerstones of the mission of the SET plan, have not to date, and there are absolutely no indicators that they will in the future, provided a reliable, cost effective and environmentally-effective source of energy. They are not therefore connected with any scientific and technological advance. Neither is there transparency in the manner in which the SET plan is being implemented. Not only is there a complete failure to assess the environmental effectiveness of the above technologies, which are the only justification for their financial support framework, but as regards wind energy the output is dominated by the European Wind Energy Association, instead of the required independent and transparent technical analysis of this sector, which is being provided with colossal support at the citizen's expense. There is every indication that the EU Commission is providing funding for industrial sectors in a manner which is opaque, and detrimental to the requirements of the Lisbon Treaty to promote "a highly competitive social market economy, aiming at full employment and social progress".

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	The EU Commission needs to comply with its legal requirements under the Aarhus Convention, to possess and update environmental information which is relevant to its function. Note: environmental information includes not only information on emissions and impacts, but also cost benefit and other economic analysis. To date the Commission has failed, despite a legal requirement to do so, to assess the renewable energy it so actively supports and to determine the external impacts of non-renewable sources. As it wrote in reply to UNECE in Communication ACCC/C/2010/54, "it is generally recognised that renewable energy, and wind energy in particular, is preferential from an environmental point of view to non-renewable energy". Its position is therefore based on 'public opinion', not on technical expertise, while failing legal compliance. If the "polluter pays" principle allows external costs to be internalised, this must be based on a transparent and factual analysis, which to date has been bypassed. Energy policy going forward must be supported by evidence-based assessments rather than soundbites, e.g. "In the opening months of 2007, the European Union stepped up its energy and climate change ambitions to new levels. The Commission put forward an integrated package of proposals calling for a quantum leap in the EU's commitment to change. A political consensus grew up in support of this approach" - SEC(2008) 85/3 of January 2008.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Not successful

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	The answer to this question has been amply covered in the replies above. The EU has implemented a massive renewable energy programme, putting mandatory targets on Member States, plus a colossal financial burden on the citizen, adverse health effects, and huge unwarranted environmental impacts on Europe's landscape and biodiversity. At every stage of the process, legally binding procedures related to assessment and public participation were bypassed or ignored entirely. The European Commission must recognise the complete ineffectiveness of its energy policy and bring it to a halt, or inevitably the European Courts will do it for them, and ensure damages are made good. "Saving the planet" is but a fantasy in a context where the remedy is worse than the illness - Its a 'Con with the Wind' and immoral to allow corporations to profit at the citizens' expense. Biofuels cause deforestation, use as much oil as they save, and increase the price of food. Wind farms are a blight on the landscape, a health hazard and devalue the land and property of adjoining landowners. Indeed they are turning neighbour against neighbour and attacking the fabric of rural Irish society. They actually cause the extinction of bird and bat species while pretending to save them. Wind and solar energies are a bottomless pit threatening the stability of the euro and the future of the EU. These destructive policies must stop before important habitats are lost.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Name: Maarten Sessink. Company: Eneco. E-mail: Maarten.Sessink@Eneco.com
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Energy Company
3. Please indicate your country	Netherlands
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Renewable energy is necessary for several reasons: - To avoind lock-in effects of planned fossile energy plants; - To counter the ever growing scarcety of fossile resources; - To ensure security of energy supply As long as CO2 emission prices do not fully reflect the external costs of emission, separate targets for renewable energy are necessary. These targets should lead to a stable investment climate for investors in renewable energy production. A mandatory target for renewable energy sources post-2020 is therefore essential, together with mandatory targets for CO2 reduction and energy efficiency. Following the First 'Climate and Energy Package' (adopted in 2009) and the forthcoming EU Energy Roadmap 2050, it is essential to bridge the policy gap between 2020 and 2050, in order to allow the industry to create a sustainable and affordable pathway to reach the EU's objective of 80-95% carbon emissions reduction by 2050.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Better financing possibilities Other (please specify)
Please specify which other policy elements?	1. Measures like state guarantees can create leverage effects and increase the investment capacity for the renewable energy sector. 2. Strenghtening / recalibrating the ETS by setting aside allowences because: - The economic crisis has significantly impacted the effectiveness of the EU ETS as seen by today's low level of trading and carbon price; - Energy savings resulting from the implementation of the measures proposed in the Energy Efficiency Directive will have the unintended consequence of causing the collapse of or tremendous decline in the carbon price; A well functioning ETS is essential in order to spur innovation and to drive invest in renewable energy.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	Financial support will continue to be necessary to support most renewable technologies post 2020. We think that more technologies than at present will have reached complete grid parity, as a result of (1) greater scale, and (2) the learning curve. However at 2020 we do not expect that CO2 prices fully reflect (3) external cost. Therefore support schemes for renewable energy are necessary post 2020. Support schemes should in principle not make choices for certain technologies. At the same time, the level of support should be dependent on the level of grid parity of the technology. In order to come to cost effectiveness Research, Development & Deployment fundsplay an important role. Temporary fiscal exemptions can also play an important role. The last years this has been the case in The Netherlands.

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes Open up national support schemes to cross-border projects Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	The Dutch system for the support of renewable energy (SDE+) has elements to stimulate cost-effectiveness. The limited annual budget of the SDE+ is divided in such a way that the lowest cost technologies have priority. Higher cost technologies can only apply for support if the annual budget is not already depleted. This has the effect that technologies have incentives to be more cost effective. Furthermore,when awarded support, an investor gets an individual decree for 12 or 15 years. Future policy changes (regulatory risk) is minimized this way. The UK government has recognized the benefits of this system and will introduce Contracts for Difference(SDE+ lookalike) instead of ROCs.
Please specify for which technologies (if applicable) to phase out support schemes over time	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	Financial support schemes in the EU should follow converging paths . But not necessarily entirely. Within a common framework there must be room for national governments to set support tariffs suitable for national or regional enhancement.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	These three sectors are internationally or regionally/locally oriented in the order: Transport, Electricity, Heating and cooling. This should be taken into account when designing a common approach.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States

Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	Feed-in systems like in The Netherlands and Germany, where compensation is financed by national taxes, are not suitable to open for generation from other Member States. Support schemes that are based on Euopean taxes or European renewable obligation ("green") certificates are more suitable for a common approach. A European market of green certificates would enable energy companies to fulfill their renewable obligations regardless of national frontiers. It would lead to the effect that renewable energy generation plants are located in the most cost effective areas. A bottom-up convergence on the basis of the Norway-Sweden joint certificate scheme is a good example.
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Renewable obligation schemes can distort competition when they lead to "wind fall profits" of the lowest cost technologies. The scheme should therefore be carefully designed to prevent this impact. This is an important issue on a national level and will be if a European system would be introduced. Feed -in systems have in principle the same problem and are also dependent on a careful design. Feed-in schemes based on a premium/ difference with market prices, like the SDE+ in The Netherlands, are preferable because they prevent excessive profits.

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	The long procedures for licenses for wind and biomass plants restrict the development of renewable energy.
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	Network operators can misuse the grid connection rules on detailed technical issues as reactive power or fault ride through capacity. This delays or blocks new connections for renewables. The real problem is their reluctance to develop and extend their grids.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Other (please specify)
Please specify which other measures	Capacity payments can increase flexibility. However, it should not favour old inefficient power plants to stay on-line, but instead stimulate (new) efficient power plants like CCGT. Market based solution like trading closer to real time are also OK.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk – producers of renewable energy should operate without any aid Producers of renewable energy should bear greater responsibility for system costs Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	Renewables should ultimately operate without any aid and be treated like other production. That is including bearing balancing responsibility and the same balancing rules.
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Favourable regulatory treatment of storage operators
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Building regulations etc. Lack of awareness Lack of suitable information Lack of public support Other (please specify)
Please specify which other barriers	Lack of supportive tax policy – e.g. carbon taxes on heating fuels. Lack of incentives for RES Heat commensurate with those for RES electricity. Proper definitions and accounting rules when it comes to proving that certain solutions (in-building or rather on a wider scale including heat transport) fulfil the legal quality requirements. Adaptation to climate change
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal Electrification together with higher share of renewables in electricity production Other (please specify)
Please specify which other pathways	Heat pumps (not direct electrical heating). Preferably in combination with Heat & Cold Accumulation (underground). It is the most efficient solution outside of distribution heat networks. The fuel mix setting should however be left to market dynamics.
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	(1) Proper regulation of the monopoly aspects: tariff cap that leaves room for project development; (2) Consistency between buiding regulation and heat supply enhancement; (3) Setting targets in line with those for electricity and transport; (4) Turning ETS & non-ETS regulation into a stimulus rather than an obstacle for heat supply.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels

H.1.1. Please explain	Yes, In order to meet the mandatory targets on renewable energy Eneco thinks there will be huge volumes of import of biomass streams from third countries towards EU. This development will only be sustainable when the same level of sustainability criteria are imposed on all market actors and member states. So this has to be arranged on EU level. At this moment sustainability criteria are only imposed on biofuels for transportation. This should be extended to solid and gaseous biomass for energy and also to the exploration and production of fossil fuels. The present sustainability criteria are limited to Greenhouse gas reductions savings, biodiversity and carbonstocks. No criteria are available with regard to social sustainability (wellbeing, welfare and safety). There are also no criteria formulated on indirect land use change (ILUC). Environmental criteria, when producing biomass/biofuels in third countries are not taken into account either. Eneco thinks these issues should be addressed when additional requirements will be introduced. There are no sustainability criteria applicable to solid biomass and gaseous biomass at this moment. Eneco thinks sustainability criteria for all biomass, biofuels and gaseous biomass should be made mandatory on European level. To create a more level playing field between renewable and fossil fuels (and thereby internalizing environmental costs) it is needed to impose the same sustainability criteria to fossil fuels.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Austrian Chamber of Labour; Reg. Nr. 23869471911-54 dorothea.herzele@akwien.at
2. Are you responding to this questionnaire on behalf of /as:	Public Authority
3. Please indicate your country	Austria
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Mandatory targets are appropriate at EU-level and also sectoral level (electricity, heating and cooling, transport), but only in combination with mandatory targets for a reduction of green house gases (GHG) and the increase of energy efficiency post 2020. The measures have to be consistent with a view to the overall economy, as well as their ecologic and distributive effects. At the same time particular attention must be paid to social acceptability and competitiveness. The Member States should pinpoint in a comprehensive way within a long-term energy-policy master plan the pre-conditions for the above mentioned principles – also with a view to guarantee security in supply (grids, provision of base load energy etc)
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Abolition of support mechanism or subsidies to other energy sources Continue to ensure sustainability and scalability Other (please specify)

Please specify which other policy elements?	Safeguarding a reliable and predictable political framework for investments into renewables; reduction of volatility of prices for fossil fuels and for ETS certificates by reducing speculation; internalisation of costs of nuclear power generation, i.a. by enhanced demands on liability and an enforcement of the "polluter pays" principle.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	Better targeted subsidies are necessary in order to avoid investments in energy production sites based on food and feed stuff. The further enhancement of this form of energy generation is fatal for the commodities exchange markets and its influence highly negative. Financial support schemes should focus on emerging technologies which promise to become financially viable in the medium term. From the beginning it should be clear that financial support schemes will be phased out according to a predetermined schedule.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	Priority must be given to investment aid, operating aid should be abolished as far as possible. The applicant for subsidies has to present comprehensively in which time span the envisaged technology will be developed to market maturity. The funding period must be clearly limited, operating aid may be granted only on a diminishing scale and continuous monitoring must be ensured. Promotion of investment has to be given priority to operating aid especially as the finance volume can be better targeted and the State aid recipient has more incentives to realize efficiency potentials. Continuous operating aid has to be granted on diminishing scale in order to avoid excess subsidization. The use of food or feed stuff for energy generation may not be subsidized. Biomass has to be mainly used in highly efficient combined heat and power generation plants, primarily for heat production.
Please specify for which technologies (if applicable) to phase out support schemes over time	N/A

B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	As a pre-condition, the guiding principle of subsidisation must be obligatory monitoring of cost-efficiency. Moreover, operating aid should be as far as possible abolished. Minimum conditions for any operating aid must be the granting on a diminishing scale and limited in time.Therefore comparable benchmarks make sense in order to offer the possibility of evaluation of steering effects of subsidies for the achievement of market maturity, for innovation incentives etc. This would allow for better identification of over-funding. However it must be clear that an EU-wide alignment of benchmarks for support levels precludes member state specific renewable targets set at EU level. When considering benchmark values for support levels by technology, a too fine-grained sub-division of technologies has to be avoided in order to maintain the intended incentives for cost-effectiveness .These benchmarks have to serve as a basis for EU-wide harmonised mandatory measures. The target of a gradually aligned EU-wide support structure could be achieved by a EU-directive, allowing for detailed transformation into national law. The main corner stones to be regulated should be: obligatory monitoring and reporting, as well as disclosure about the business-like conduct. Efficient subsidy rules with a view to the rapid achievement of market maturity, enhanced innovation incentives and positive effects on employment.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	EU wide alignment of support schemes seems to be most suitable in the electricity sector as this is the market with the highest degree of integration; in the heating and cooling sector it seems the least necessary.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)
C.1.1. Please provide explanations and specific examples where available	Especially plant operators of small bio-gas plants (< 250 kW) often do not dispose of sufficient qualifications, particularly when operating them as subsidiary enterprise of their agricultural activities. As to the plants, they often do not comply with the best available technology. In many cases the main motivation for farmers to be active in the sector of generation electricity on the basis of biogas is to be ascribed to subsidization . The lack of sector specific qualification and technical equipment leads to the result that many small plants are inefficient but kept alive by permanent and rising subsidies. Innovation incentives are lost.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	As a pre-condition for the authorization of the plant, the plant operator has to prove his technical qualification. Moreover, the generation plant and process has to comply with the best available technology.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	No further exemptions for renewables concerning grid connection, balancing or curtailment regimes should be allowed, as the main cost burden hast to be borne by the end-users, notably the household- consumers.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	None of the above Other (please specify)

Please specify which other rules	Due to the constantly rising part of electricity deriving from fluctuating renewable energy sources, the requirements for power grids as to supply voltage and frequency (equation between supply and demand divergences) are increasing permanently. Therefore, also renewable energy producers have to make their contribution to network stability and reduction of cost of network (balancing energy). In the case of congestion electricity deriving from renewable energy sources should be treated in the same way as energy deriving from conventional power generation plants.
D.2.1. Please explain why	N/A
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Accelerate infrastructure development and interconnection Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Producers of renewable energy should bear greater responsibility for system costs Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	Same balancing rules for all operators
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	N/A

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Other (please specify)

Please specify which other barriers	Where unused waste heat (from industrial processes or from cogeneration) is available, additional heat from renewable sources cannot penetrate the market due to cost; in rural areas with no existing potential of waste heat, newly installed heat networks typically are based on renewables already today (situation in Austria)
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	A stagnant demand of low temperature heat and a simultaneously rising demand of electricity makes transformation processes not based on incineration processes ever more important if energy efficiency should be promoted. Therefore emphasis shall be put on an increasing development of fuel-independent transformation processes for renewables (hydropower, wind, solar).

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Limits of availability of sustainably produced biofuels Other (please specify)
Please specify which other barriers	The costs of production of certain renewable energies (notably biofuels) constitute a barrier to market penetration. However, we consider a medium term commercial viability of renewables to be an important goal. Therefore renewable energy sources which do not fulfil this criterium should not receive continuous support.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail
G.2.1. Please explain your answer	Due to the already comparatively high share of renewable energy in rail transport, the modal shift from road transport to rail transport (passengers as well as goods) reduces the share of fossil fuels in the transport system considerably and therefore contributes to a higher share of renewables in transport. Apart from this effect, a higher share of renewable energy in rail transport can be achieved more easily compared to an increased share of biofuels in road transport which is hampered by issues of sustainability and competition with food and feed production.

H. SUSTAINABILITY

H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)
Please specify which criteria	We are of the opinion that there are no sustainability criteria which can guarantee that biofuels produced from food and feed raw materials are produced sustainably. Therefore only biofuels produced from other biomass, especially from waste biomass (second and third generation biofuels) should be regarded as sustainably produced in the future. This will require new sustainability criteria.
H.1.1. Please explain	N/A

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	To realise incentives for cost-effictveness EU-wide benchmark values for support level per technology should be established - as mentionded in B.3. In order to maintain the intended incentives a too fine-grained sub-division of technologies has to be avoided. In order to provide to the costumers a reliable information about the share of energy deriving from renewable sources in an energy supplier's energy mix (according to Articel 15 of the Direktive 2009/28/EC), but also the share of energy derviing from the other energy sources (i.e. fossil or nuclear), a system of guarantees of origin of electricity from each energy sources should be established. This system should be EU-wide harmonised and mandatory.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	N/A
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	N/A

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	N/A
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	N/A
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	N/A

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Jean Kowal - Medgrid
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	MEDGRID is a Consortium of Energy companies,
3. Please indicate your country	France
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment Other (please specify)

Please specify which other rules	Directive 2009/28, in its article 16, prescribes either priority access or guaranteed access to the grid for renewable electricity. In this regard, renewable electricity imported from third countries should have priority on the allocation of available transfer capacity of interconnections between Member States and third countries, provided that reliability and safety of the system must be maintained at both sides of the interconnection. In the case of interconnections between two Member states, the potential need of a priority access for renewable electricity imported from a third country should be further analyzed on the basis of the implementation of the pan-European Target Model for the Internal Electricity Market.
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Accelerate infrastructure development and interconnection Increased availability of storage Enable renewable generators to offer balancing services to TSOs Other (please specify)
Please specify which other measures	The efficient and secure system integration of RES resources needs both a robust, flexible and meshed transmission grid (bottlenecks both within national systems and between them must be released) as well as the use of efficient tools for the operation of power systems (e.g. real time observability of RES production by the TSOs, proper forecasting tools and adequate communication systems between TSOs and RES producers). Moreover, contribution of RES units to system reserves would also allow a higher integration of renewable energies, as it would reduce the need for conventional generators providing this service. RES units should be incentivized to provide system reserves and minimize deviations over their expected productions as long as it is technically feasible for each technology. All the above applies not only to the integration of RES into the EU power systems but also to the potential imports of RES from third countries according to the cooperation mechanisms foreseen in Directive 2009/28/EC.

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	

E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	MEDGRID suggests that the EU should further facilitate cooperation with third countries, in particular Mediterranean countries, for a wider exploitation of Renewable Energy Sources (RES) available on both sides: economically available resources will be better used for the benefit of both north and south. Furthermore, intermittency inherent to RES will be better managed on a wider international scale.

I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	MEDGRID considers that investments in electricity networks in Member States in Southern Europe, and across the Mediterranean sea, should be prioritized for the purpose of importing in the EU electricity from RES in the south, but only to the extent that these investments are decided based on a cost-benefit analysis. Particular attention should be given to interconnections between Spain, France, Italy, Greece and third countries to the south, and also internal network reinforcements in Spain and Italy. Such projects should be eligible to the mechanism "Projects of Common Interest" presently under consideration by the Commission with the draft Regulation on guidelines for trans-European energy infrastructure. This would allow the above projects to take advantage of more efficient permitting procedures, and less expensive sources of funding. In this regard, Medgrid suggests amending Art. 4, section 1 (c) of the aforementioned draft Regulation as follows: "(c) the project involves at least two Member States, either by directly crossing the border of one or more Member States or by being located on the territory of one Member State and having a significant cross-border impact as set out in point 1 of Annex IV; or by interconnecting a Member State with a third country and having a significant cross-border impact as set out in point 1 of Annex IV"
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Other measures (please specify)
Please specify which other measures	MEDGRID considers that the mechanism defined in articles 9 and 10 of the Directive 2009/28 is appropriate: it allows cooperation at the project level, which seems the most efficient. However, it is necessary that each concerned Member state define the financial support conditions applicable to renewable electricity imported from a third country. After 2020, if new targets for RES are decided in the EU, a contribution from third countries across the Mediterranean Sea could be forecasted. In the case of a transit Member state between the third country of origin and the destination Member state, the question of cost allocation (including the cost of new infrastructure in the transit Member state) should be dealt with carefully.

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	MEDGRID recommends that the EU should facilitate large-scale electricity transmission projects between both sides of the Mediterranean. Electricity (generation and transmission) is a mature technology, for which cooperation can already be effective. The benefits of such a priority will be very significant: - Access of European electricity consumers to competitive renewable energy sources from the south, - Industrial cooperation between Europe and its southern neighbors for new RES and related transmission facilities (construction, installation, operation), - More generally, strengthening of economic and political relationships between north and south of the Mediterranean Sea.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	MEDGRID (and the Mediterranean Solar Plan), is very interested in following the NSCOGI approach for grid connection of wind generation in the North Sea region, and in particular the regulatory issues for new investments. The cooperation in this region should be fostered, to reach the most effective solutions for regulation of the very big transmission investments involved and for the regulation of Supergrids management. MEDGRID will learn from the NSCOGI experience, and would support another initiative around the Mediterranean Sea, taking into account the specificities of the Mediterranean context, with regulators, transmission system operators, public authorities and investors in new projects.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	RICS International, Thomas Jezequel, tjezequel@rics.org
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Public Interest Professional Body.
3. Please indicate your country	United Kingdom
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	There is a definite need for post-2020 targets, not least because the operating life of projects currently in preparation, or even already commissioned, extends well beyond 2020, and the lack of post 2020-targets and a framework for achieving them causes uncertainty and means that there is no firm basis for the necessary long-term investment decisions. As the potential for renewable energy supply varies between different sectors, it makes sense to consider sectoral targets. Furthermore there will be a need, if not immediate then in the foreseeable future, to set firm targets within individual member states, and this should be within the framework of a firm mandatory target at EU level. If the aims are not clear at EU level, it will be even more difficult to ensure that individual states set clear and binding targets. In addition the measures which should be promoted and adopted to achieve targets in different sectors, for example support for technological development, will themselves be different, as will be environmental or security of supply implications of under or over-achievement relative to targets in specific sectors. In summary, RICS believes that there is a case for a combination of EU and sectoral level targets.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Better financing possibilities Other (please specify)

Please specify which other policy elements?	Other policy elements have a significant role to play, but some of the suggested elements are only loosely defined, and are in any case hardly matters which the EU can influence directly, for example concerning availability of more sites for renewables or better financing possibilities. In the absence of greater tax harmonisation within the EU, it will be difficult to take effective action to improve the financing framework. There may be scope to improve financial support for technological development, e.g through pilot projects, but initiatives to encourage wider private initiatives are likely to be more productive, and to be capable of implementation at state level. Whether enhanced focus on R &D would be effective in bringing down costs depends on the technology and its stage of maturity. Costs of mature technologies are more likely to be reduced by larger scale production methods, competitive pressures or efficiency improvements. Concerning the abolition of support mechanism or subsidies to other energy sources, there is little merit in the EU reducing subsidies for coal production if the effect is not to encourage renewable energy production, but increased import of coal from non-EU sources. Public procurement of renewable energy equipment is not necessarily helpful. Due to small variations in tower height, blade length, competition between wind turbines from different suppliers may be ineffective. Public procurement rules may hinder entry of small suppliers.

B. FINANCIAL SUPPORT

B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	The need for financial support for renewables post-2020 will depend not only on the extent of their market penetration but on whether there is a level playing field by then which renders support unnecessary; if not it may be necessary to correct market distortions, but the aim should be to avoid such a situation. At the present time there is evidence of continuing policies at a national level, for example coal production subsidies or the sheltering of nuclear from decommissioning or insurance costs, which are not compatible with a level playing field approach. It may still be necessary depending on the stage of maturity of newer technologies, not yet applied on a large, commercial scale, for example marine current generators, they may still require support to ensure their full application and their contribution to meeting post-2020 targets.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)
Please specify how to make support schemes more market-oriented	MaMaking support mechanisms more market oriented should mean that they are used to enhance the operating income, for example in the form of payments per MWh, rather than in the form of grants during the R&D phase, when they are likely to benefit the recipient alone, or during the implementation phase, to benefit only the specific project. Their coverage should be as wide as possible, not favouring individual projects or recipients, but being available in respect of all renewable energy generated according to the applicable criteria. At such time as support is to be withdrawn, this should certainly be on phased basis, over a long-enough period to avoid penalising projects subject to short-term delays, for example due to bad weather during offshore installation, and to avoid unduly rapid changes in the investment framework.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)

Please explain how this could be achieved and which support structure you consider most suitable	An alignment should be seen as a more long-term aim, the achievement of which is subject to factors mentioned in B3 above. In principle there may be similar considerations in relation to the sectors mentioned, electricity, heating, etc, although heating and cooling may be subject to more localised factors, whereas transport – by definition not bound so much by location – may be more open to a wider EU policy, given that the cost of energy for transport, much of it currently in the form of oil, is already determined in a much wider market.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Whilst the principle of EU-wide benchmarking in setting support levels has an attraction, as already commented it is difficult to apply a harmonious approach against a background of significant variations in wider fiscal policy and practice within the EU, even with the narrower Euro zone. Even more significant, the factors which determine renewable energy generation costs, such a wind or current speed, local availability of biomass, etc, vary so widely even within individual states, and certainly across the EU, that a benchmarking mechanism would need to be extremely complicated. The question of setting an appropriate level for green certificate entitlement (for example see the current debate on future ROC levels in UK) shows the difficulty of achieving a basis which does not under or over-reward.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States Member States should open their support schemes to renewable generation from third countries
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	Given the significant potential for renewable energy transfers between EU states, and adjacent states, the 2nd and 3rd options are appropriate. This could accelerate the process of harmonisation of support systems, as well as promoting market and system optimisation across national and even EU boundaries to the mutual benefit of all involved parties. The possibility of converging schemes, even across EU boundaries is demonstrated by the (proposed?) Swedish and Norwegian cooperation over a green certificate mechanism. Whilst we have no detailed proposal to offer, in principle a degree of convergence is unavoidable, and is already taking place indirectly, for example through the import/export of biomass or waste for waste to energy plants.

Please explain how it could be achieved for third countries	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	The effects of support mechanisms on competition should not be overestimated. Mechanisms such as the ETS and other international certificate markets, the international trade in renewable feedstocks (biomass or waste), as mentioned above, are already tending to reduce market distortions, although their removal will be a much longer-term exercise. In any case support mechanisms are by no means the only or major form of market distortion. The operating regimes for different types of plant, for example the operational inflexibility (and potentially even incompatibility) of nuclear, wind, tidal and other technologies may lead to operators of such plants enjoying advantages or suffering disadvantages compared with other technologies and their operators, on a scale potentially greater than the distortion due to financial support mechanisms, simply by them having a right (or need) to generate. However this is a necessary price of promoting low carbon generation. As far as a comparison of financial support mechanisms is concerned, one-off capital grants are likely to be more distorting, and less related to actual long-term generating costs, than mechanisms related to MWh produced, either on the cost or revenue side.

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing

C.1.1. Please provide explanations and specific examples where available	RICS considers the most serious impediment to further growth to be administrative procedures associated with certification and licensing, particularly for small scale producers and consumers. Throughout Europe, domestic energy consumption accounts for over 50% of all energy consumed, if heat, electricity and transport are considered. Recognition that small scale systems do not require the same level of administrative procedure , as large scale, is important. This is especially true for the producers of sustainable biomass. The EU system of Technical Standards is a useful, comprehensive and effective way of specification for Renewable Energy fuels and equipment. Training and qualifications are necessarily more country specific, dependent upon the education system, state of development in the country and natural resource.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	We consider the current policy response to be adequate and effective. While there is a considerable variation across member states, in the interpretation and implementation of Directives, we do not believe that an attempt to impose those regulations in a more draconian way would improve the uptake of Renewable Energy. It is inevitable that different countries with diverse and dissimilar conditions will seek to develop policy initiatives in a way that suits their situation. In some countries carbon taxation has been effective in ensuring that the uptake of Renewable Energy has been in line with targets. In other countries this has been achieved using Obligations or Incentives. In many instances the stimulus for RE deployment has been fiscal and further intrusion into a Country's policy framework is unlikely to be successful.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Curtailment regime

D.1.1. Please specify which obstacles and the nature and degree of them for each	The first issue concerns the fact that each country may have separate emission reductions mechanisms and obligations under European and international agreements. If the European Emissions Trading scheme is operational in all countries by 2020, then the value of CO2 reductions will be recognised in a uniform way. The second issue is associated with voltage security. A significant number of conventional units providing reactive power, and located close to the load centres will be replaced with renewable generation which is far from the load centre and which, in the case of wind will have limited capacity to provide reactive power. Where these issues are cross border there will be a need to establish a transparent cost sharing mechanism. The third issue is the curtailment regime. It can be considered both an alternative to the extension or reinforcement of the grid and also to enable system balancing. The economic risks associated with curtailment and its yield losses will be an important factor influencing investment. Dedicated policy instruments will be required to make the risks manageable.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority dispatch and obligation on TSO to counteract curtailment
D.2.1. Please explain why	Market mechanisms must facilitate the installation of complementary, flexible dispatchable, plant, so as to maintain adequate levels of system security. This can be difficult to ensure on an international basis. Generators provide spinning or replacement reserve to enable the Transmission System Operator to provide short term balancing actions to adjust supply with demand. Generators will therefore need to earn additional revenues in different markets The capacity factor (which describes the fraction of available time that the plant is generating electricity, weighted against its full capacity) for different types of generation affects dispatch. Combined Cycle Gas based Generation, CCGG, has a capacity factor of 70-80%, while conventional gas turbines can be as low as 10%. This is particularly difficult to manage where producers seek remuneration for providing reserve capacity outside their jurisdiction.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Other (please specify)

Please specify which other measures	There are several issues to consider with system integration. They include the ratio of predictability of different technologies, the flexibility of backup demand, the availability of demand response and the refinement of relatively new technologies such as ADGT to cope with production that is highly intermittent, e.g. wind. A balanced renewable energy production portfolio, with biomass reserve, and schedulable tidal and solar is preferable to a predominance of wind. The greater the size of the geographical area in which production takes place, the greater is the reliability of wind generation at any one time.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	If society wishes to decarbonise the electricity market, wind power must form a major part of the EU energy mix, and this will enviably increases the level of reserve margin required to ensure security of supply. This is likely to require a market intervention to secure the margin needed. Improved interconnectivity between member states could help create more efficient pan European levels of reserve margin. However it is difficult to envisage any solution which does not involve some form of long term capacity reserve arrangement to deliver societies wishes. This could be achieved through an auction process to ensure the most efficient reserve margin is provided, although this must be delivered on the back of long term contracts.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)

Please specify which instruments incentivising investment	Market mechanism where traditional and new R.E generation compete fairly needs to be in place, and a level playing field needs to be in place. The difficulty with pan E.U approach to the R.E market support could result in national differences creating market and investment distortions, e.g. difficulty in consenting and planning unfairly disadvantaging one country over another. Countries should aim to deliver a mix of generating capacity of both new R.E (supported by level of subsidy) and traditional generating capacity with market driven elements, including a capacity mechanism for reserve generation. On this basis it could be that the level of subsidy for R.E should be set at the marginal cost for offshore wind, and that subsidy applies to all R.E types. A EU energy policy based on market integration approach should include : Basing efficient energy production in the best place across EU, subject to each country having to provide for diverse energy mix, security of supply and maximise member states natural resources Interconnectivity – development of a pan E.U smart grid Similar trading arrangements across Europe Degree of subsidy for R.E generation – with a pan E.U approach. Market arrangements need to give investor confidence for installing new R.E capacity Capacity mechanism to allow reserve generation capacity when R.E are unable to operate

F. RENEWABLES IN HEATING AND COOLING

F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Other (please specify)

Please specify which other barriers	At present, the amount of energy associated with heating, from renewable sources, is considerably greater than the energy associated with cooling. This is because biomass is the largest source of renewable heat and traditionally biomass has not been used extensively for cooling. This situation is changing slightly, as biomass is now being used for cooling, through heat absorption. Traditionally cooling has been largely driven by electricity, so it is reasonable to assume that the percentage of renewable energy going into cooling will increase as the levels of renewable electricity rise across Europe. Energy prices for fossil fuels will continue to rise. It is likely that renewable energy will therefore continue to be more competitive, as renewable energy costs are predicted to rise at a slower rate. The main barrier is likely to be the availability of fuel and the increasing amount of biomass that many countries will have to import. This is especially true of "middle Europe" where countries such as Belgium, UK, Netherlands, Ireland, and France, which have low levels of natural biomass resource, and access to port facilities, will continue to import biomass at an increasing rate
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Other (please specify)
Please specify which other pathways	The pathways for the increased uptake of renewable energy are dependent upon the circumstances prevalent in each country. UK and Ireland will have a substantially larger proportion of renewable electricity coming from wind, tidal and wave energy. Spain, Italy, and Greece will derive increased amounts of heat from solar thermal and increase amounts of electricity from solar P.V. Geothermal heat is related to the geological conditions and is not country specific. We consider that it is likely that there will be an increase in renewable energy production from all of the technologies and that no one technology will exert market dominance. It is therefore necessary to ensure that the policy development across the EU is flexible enough to recognise this and not to incentivise some technologies in a way that will distort the market development of others.

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Increase use of renewable energy does not guarantee greater energy efficiency. It is important to recognise that energy efficiency should be the starting point and renewable energy solutions should follow. However, enhanced energy efficiency is not necessarily embedded within renewable energy solutions. Sustainability requirements will be built in to renewable energy proposals, particularly for biomass fuels. It is reasonable to assume that an energy efficiency requirement should also be included as a criterion in the development of heating and cooling.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of awareness Lack of suitable information Other (please specify)
Please specify which other barriers	At present, most of the development in the increased adoption of renewable fuels, in transport, is associated with electric passenger vehicles. The limitation in the capacity of batteries has restricted the distance that can be travelled between charges. Drivers are unwilling to change their driving behaviour to accommodate stops, en route, to facilitate charging, and are also reluctant to have to charge vehicles at night. The capacity of batteries is unlikely to improve significantly for at least another 5 years, so for drivers, outside urban environments there will have to be a significant change in driving behaviour if electric cars are to widely adopted. The second barrier is uncertainty. Renewable transport fuels include bioethanol, biodiesel, hydrogen, biogas and electric. While the motor industry can already supply domestic vehicles, for all of these fuels, into the market now, many countries do not have clear policy on which fuels will be promoted within their jurisdiction. For instance, bioethanol and biodiesel are readily available in Sweden, but are not available in the UK. It is uncertain which fuels will be adopted in different regions of Europe and until that is resolved many drivers will not commit to buying what is perceived to be a vehicle running on an innovative fuel. In the long term the availability of liquid biofuels is likely to be a barrier to further development of renewable transport, but this is not a major constraint now.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail

G.2.1. Please explain your answer	The sectors with the most promise for increasing the share of renewable fuels are road and rail. Road vehicles, both for goods and for passengers are renewed more frequently than in the marine and aviation sectors. Therefore there is an opportunity to introduce new technologies in an incremental way more readily. There are also issues associated with identifying the ownership of carbon emissions, and in carbon taxation, for modes of transport which operate internationally. If a Chinese owned ship, flying under a Liberian flag, leaves a European port, bound for Africa, what is the procedure for accounting for the carbon emissions? Renewables are driven primarily by emissions trading or by carbon taxation and it is difficult to see how this situation can be resolved, without an all-embracing, international agreement. The issues are administrative and legal, not technical.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)
Please specify which criteria	RICS facilitated for the UN FAO in London a private sector consultation in January 2010 to review FAO's draft global voluntary guidelines on responsible governance of land tenure Increased competition occurs as new lands are placed under cultivation to meet the demands for expanded supplies of agricultural products, including biofuels, and increased food production in response to high food prices. Such competition may foster social exclusion with potentially destabilizing consequences when the rich are able to acquire land and other natural resources at the expense of the poor. RICS generally favours criteria as tight as possible. The level of fuel consumption in the EU can not be maintained at the expense of the developing world, where effectively rain-rich areas are being given over to bio-fuel crops thus further, undermining food security and reducing the scope of countries supporting themselves in terms of home-grown food supplies, increasing the need for further imports and by doing so adding to overall debts. Furthermore, studies show that Biofuels have the capacity to pollute more than crude oil when the impact on Indirect Land Use is taken into account.
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	Most recent studies found that 10 out of 27 EU Member States are likely to exceed their national targets for renewable energy, with a further 12 set to meet their goals domestically. Only five Member States are currently expected not to meet their target with domestic sources only. The net result of Member States' forecasts for 2020 renewable energy consumption is that the EU should exceed its 20% target by over 0.3 percentage points. The uptake of Cooperation Mechanisms has been slow, due to the time needed to understand the functioning of these schemes and to determine the simplest administrative and legal instruments for statistical transfers. Given the short time period of availability for these mechanisms, only small quantities could be covered by agreements between Member States. Solutions should be kept as simple as possible. Two years after the enactment of the directive, it is still difficult to assess how much interest there will be in employing the cooperation mechanisms.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	It needs to be recognised that cost reductions may come through sourcing from suppliers outside the EU, with lower cost structures, but to encourage this would have adverse effects on EU-based suppliers. RICS would recommend focusing on two geographical clusters: northern Europe (cooperation with Norway) and Southern Mediterranean.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	There are two major initiatives under way at the moment which relate to renewable energy from North Africa. One is Dertecii and the other Medgrid. Desertec Industry Initiative is a German led private consortium proposing to generate up to 15% of Europes electricity from both PV and Wind arrays situated in North Africa. Medgrid is a French initiative to extend the European super grid to all Mediterranean countries. Both have the support of the EU and seem to be complimentary to Europe's renewable energy strategy. RICS supports these initiatives, but generally fears that relying too much on generation coming from outside the EU may not provide energy security.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	In RICS opinion, Cooperation Mechanisms and joint projects are most likely to happen in the Offshore Wind Sector. Initiatives such as the North Sea Countries Offshore Grid initiative ((which consists of 9 EU Member States and Norway and sets out a programme of work to facilitate the development of offshore wind resources in the region) prove that interest exists and the future offshore grid cooperation between Scotland, Northern Ireland and Ireland is a positive step. Wave energy systems, especially in Ireland of Scotland have an amazing potential within 8 to 10 years. The sole potential of the West coast of Ireland represents 20 times the total energy requirements of the country. Cooperation Mechanisms to transfer the energy surplus would be especially relevant, should this type of energy be developed to provide cost- effective electricity. RICS members have for example been involved with the grid study for the "All Island" project between the British Isles, the Channel Island and Ireland. A single electricity market was created between the republic of Ireland and Northern-Ireland, and the mechanism proved very successful: only minor infrastructure issues (reinforcing of the grid) were registered. RICS is very supportive of reinforcing the European Grid and of creating a Pan European Smart Grid.

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Other (please specify)
Please specify which other key challenges	In general, to ensure a cost-competitive market roll out of renewable energy, it is important to continue the development of a thriving green technology industry building upon the advances that have been achieved over the last ten to fifteen years. Incentives should remain in place to encourage new entrants. It will then be desirable for companies in the market to make further advances in technology to maintain their competiveness. The key challenge to be addressed by research and innovation within the current suite of renewable technologies will be to continue promoting an environment whereupon sustained investment is made to achieve the full potential for each technology. In particular:- o Financial incentives should be considered to encourage further innovation and increased technology efficiencies. o Sharing of information and technological advances should be encouraged o Direct research should be encouraged into areas where there are negative public perceptions, for instance, look at turbine blade and generator design to reduce noise impact for on-shore wind farms. o System integration – development of facilities should be encouraged where the Grid system can easily accommodate new supplies. o In case of bio-energy, seek to promote maximum efficiencies of technology aligned with long term feedstock development.

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	o Financial incentives should be maintained, to justify the use of unfamiliar new technologies. This should encourage capital investment to convert new ideas into final products and take them to a commercial scale. o Investment in education and research. Channel funding via government programmes for research, development and demonstration into commercialization. Specific engineering courses directed towards green energy technology, sponsored by the industry, should be introduced. This will ensure that the UK becomes a leader in research and innovation. o Demand policies are needed to encourage renewable innovation. It is important to provide a consistent and long term market. Government preferred technology choice would provide more certainty. o Investors perceive that FIT is the most effective renewable energy policy which promotes private investment
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	It is considered that Tidal and Wave technologies should be given priority bearing in mind the significant resources that can be tapped around UK shores. In addition ACT technologies which maximize the conversion of energy from waste and biomass should be encouraged. For instance, it is possible that small scale (80k – 150k tpa) pyrolysis facilities could be introduced to the market which could be installed within the major conurbations. This will encourage renewable energy production at point of demand, meeting the proximity principle.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	In general existing fiscal measures have been successful in bringing forward renewable energy technology advancement. However a high potential Member State such as the UK has fallen behind other Countries and more needs to be done to bring investment. Future financial incentives must be transparent and fixed for the long term to allow continued investment in technology development.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	It is considered that results and deadlines, or targets by certain dates are of some assistance. This can be demonstrated by those results and deadlines imposed by the Landfill Directive which, together with fiscal incentives (landfill tax) brought about a dramatic shift within the waste management industry. Any assistance, as mentioned in 4 above, should be transparent and long term, to match timescales for introducing new technologies and bringing them to commercial scale.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Wirtschaftskammer Österreich (Austrian Federal Economic Chamber), 10405322962-08, eli.widecki@wko.at
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Austrian Federal Economic Chamber
3. Please indicate your country	Austria
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, an indicative and non-legally binding target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Public procurement obligations in support of renewables Better financing possibilities Continue to ensure sustainability and scalability Other (please specify)

Please specify which other policy elements?	Stronger impact/view of EU policies in member states needed. Commission view of impacts is found to be realistic and some Member States local authorities often delude measures. But like all other forms of energy, renewable energies must also develop according to the mechanism of supply and demand and should not only rely only on financial support.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	Compensation for 1st movers (in particular a scale up for 2nd generation bio fuels) Additional request: financial aid for renewable energy in high temperature processes is necessary
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)
Please specify how to make support schemes more market-oriented	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of information on support schemes or other Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment Other (please specify)
Please specify which other rules	The existing infrastructure is not ready yet for the use of renewable energies, which should be realized in the year 2020 and subsequently. We emphasize that both the electricity grid and the gas infrastructure are affected equally. Natural gas – as the cleanest fossil fuel with the lowest CO2 emissions – can fulfil its role only if the gas infrastructure is expanded substantially.
D.2.1. Please explain why	

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Enable renewable generators to offer balancing services to TSOs Other (please specify)
Please specify which other measures	The role of heat pumps with respect to reducing peak loads must be much higher than is currently estimated/considered. Heat pump technology should be widely available, existing stock, while electric cars still would have to be introduced with substantial subsidies and much less effect (see studies of BWP on www.bwp.at).

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Price risk – producers of renewable energy should operate without any aid Producers of renewable energy should bear greater responsibility for system costs
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	For various technolgies, etc.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING

F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness Lack of suitable information Lack of public support Lack of capacity (installers, other) Other (please specify)
Please specify which other barriers	Other barrier: local/national disobedience of EU directives, for instance for ambient heat as use of renewable energy. E.g. heat pumps: national regulations devalue heat pumps in rules and directions and promote other technologies. Lack of resources, lack of technical development, lack of competitiveness are other barriers in this area.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Geothermal Solar thermal Other (please specify)
Please specify which other pathways	BTL 2nd generation
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	This is difficult due to the lack of energy efficiency criteria for renewables within the heating sector. Financial support for renewables has to be linked with efficiency criteria.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of infrastructure Lack of awareness Lack of suitable information Limits of availability of sustainably produced biofuels
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Water
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement
H.1.1. Please explain	-Lack of harmonization on EU-wide database for compliance of products with sustainability criteria

I. REGIONAL AND INTERNATIONAL DIMENSIONS

I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	It can only be an add-on/addition and the EU has to focus on RES development for national and regional deployment in the Third countries.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	This is in line with established cooperation between the EU and its neighbours, as is already happening in road and rail links where it is part of the national policies. This is important to have, but does not need any specific attention since it is based on established cooperation mechanisms.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Industrial manufacturing and supply chain

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	EU-wide harmonized support schemes; Support for first movers and energy efficiency criteria. LCA analysis incl. infrastructure build-up and econimical feasibility have to be included in obligations. Industrial development cycles have to be considered. The EU already has a shortage of biomass supply, also for 2nd generation biomass. There should be incentives for planting short rotations forestry as well as energy crops in regions which only have limited use for food production (e.g areas with a low soil value, e.g. of 50 or lower). And there should be clear rules for importing biomass from tropical regions to avoid the risk of stranded investment in these countries.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Technology: Geothermal; Public acceptance and political support are vital as a precondition for developement, as they are important to support industry's general willlingness. Waste recovery and recyling as materials, also valid and accepted for fuels. Second generation biomass, such as wood chips, is now used rather unspecificly (e.g. in a gasification); the yields therefore are low. It would be better to separate the biomass into its main components including cellulose, hemi cellulose and lignin, and to use these fractions according to their chemical nature. This would help to increase substantially the total yield of fuels from biomass, which is now only in the range of typically about 16%wt (of feed) for FT fuels. Such concepts, however, are still mainly at an academic level only.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	There is a high financial burden due to increased complexity, non-transparency and overlapping of support schemes. Lack of public acceptance (consumers, communities and public) is also a problem. Discrepancies in sustainability criteria and their certrification, especially between different Member States (missing EU sustainability certification standards). Due to the political landscape of Europe, the financial support has been divided into many projects, many of which are very similar. For gasification for example, there have been countless parallel developments. We would like to see expert workshops organized on the results of all projects which have already been done. This should set the rules for further development: which technologies should be favoured and financed and which ones stopped.

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Yes, results need to be delivered according to an appropriate timeline. Funding should minimise the evident risk in technology developments. Funding should be combined with project target achievements, but more care in accuracy in the beginning of project needs to be taken. This should be the prerequisite for funding and assistance.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Climate Alliance
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	European network of local authorities
3. Please indicate your country	Belgium
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	An analysis of the impacts of current EU energy policy shows clearly, that the only objective that is not compulsory – the 20 % energy efficiency target – is seriously lacking behind. Therefore legally binding targets are necessary. Such targets need to be ambitious but achievable. Sectoral targets are difficult, mainly due to the close interlinks between heating & electricity as well as transport & electricity.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities Other (please specify)

Please specify which other policy elements?	Most emphasis has to be put on developing a more decentralised energy system, especially with R&D on storage systems and smart grids on district and city level. Financial support and adaptation of legal framework conditions for cities, municipalities and regions to promote the creation of decentral infrastructure for renewable energies and energy efficiency. An adequate European legislative framework is needed in support of the transition towards renewable energy sources, such as phasing out subsidies for fossil and nuclear energy and implementing an EU-wide energy tax.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	For electricity, the instrument having proven to be most successful is a Feed-in Tariff. Experience in many countries shows that technology-specific Feed-in Laws have supported the massive expansion of renewable energies. Their special quaility is that they enable homeowners, farmers, cooperatives etc. to participate on an equal footing with large commercial developers of renewable energy. They foster citizens' engagement (and acceptance) as well as investments (!) and are fundamental for building-up a decentralized energy system. At the same time, the massive expansion of RES reduces the price for the corresponding technologies and pushes competitiveness of the EU.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	The first step is the creation of a fair market and therefore to set the frame right. This means: no subsidies to fossil fuels or nuclear power and RES support schemes.
Please specify for which technologies (if applicable) to phase out support schemes over time	In principle for any technology, the remuneration having to be adapted according to technology development. Pre-condition is the above-mentioned (fair conditions for all energy sources).
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State

B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	As mentioned above, we consider a feed-in tariff the most promising support structure. The national laws will have to be specified according to regional potentials, technology as well as type and size of the plant.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	For the electricity sector, we count on the above-mentioned Feed-In Tariff. In addition, regulations should be put in place which make the utilisation of waste heat compulsory. For heating/cooling good regulations still need to be developed. In the transport sector, tax reliefs for using electricity generated by RES could be given, railways should follow a quota system.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Currently the most distorting „support scheme" is the absence of any internalisation of external costs in the energy price! For support schemes to boost RES, it will very much depend on the concrete design. As an example, the apportionment of the Feed-In Tariff in Germany is mainly beared by private households while industry is mostly exempted. In general, emphasis should be put on mobilising investments from citizens. Fundamental success criterion for any support scheme is its reliability in terms of continuity to ease investment decisions

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of credible and certified training and qualification Other (please specify)

C.1.1. Please provide explanations and specific examples where available	Concrete examples are the high obstacles for instance in Italy in relation to building permits and (according to our information) in many EU countries the lack of regulations in land use planning related to renewable power plants. The large implementation deficits of the Directive in the Member States call for a stricter controlling instrument.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	The model of quotas should be phased out, as setting fixed quotas prevents the interest in a dynamic or self-sustaining development of capacities, as any investment above the quota targets would result in declining prices for certificates. Often quotas remain too moderate, and, in addition, do not offer any guarantee for the development of RES. Concentrate on taking use of the regional potential for renewable energies and creating responsabilities at regional level to plan and build new capacity for renewable energy production. Encourage local authorities to introduce different schemes for refurbishment the whole building envelope including introduction of renewables. Additional efforts are also still needed on awareness raising (everybody can design the energy future by becoming an energy producer), targeted information (choices, costs, support schemes), trainings, setting-up pools of renewable energy experts at local/regional level.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access Other (please specify)
Please specify which other rules	Amendment to obligation for network operator to develop network: This should be applied mainly on the REGIONAL level.
D.2.1. Please explain why	

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	It is necessary to tackle the challange of integrating much more variable energy generated by RES to the system. Priority should be to balance energy generation and demand at the most local level possible (regional/local/district/building level) and not only at the level of national grids. Gas could be used as bridging technology (special instruments are needed).
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	Rules of the liberalised energy market have to be revised to allow the creation of energy service markets. For instance, least-cost-planning is not applicable under current conditions (energy efficiency measures vs. building new capacity). The distribution system operators should be allowed to run own storage systems and to cover these costs via user fees
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness Lack of suitable information Lack of public support Lack of capacity (installers, other)

F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal Electrification together with higher share of renewables in electricity production Other (please specify)
Please specify which other pathways	Wind gas has a clear perspective (even with its low power efficiency) due to the coupling of the electricity and heat market. At least in some countries, there are also sufficient grid and storage capacities.
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Combined promotional instruments will have to be developed: with both efficiency standards for newly constructed and retrofitted buildings and covering the remaining heating/cooling demand (at least to a certain percentage) with renewables. Apart from pure regulations this could be implemented via low interest rates and tax reliefs.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of infrastructure Lack of suitable information Limits of availability of sustainably produced biofuels Other (please specify)
Please specify which other barriers	The priority should not only be in increasing renewables in the transport sector, but in reducing need for travel and a shift to soft transport modes.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Rail
G.2.1. Please explain your answer	A quota for RES in railways seems to be most easy to implement, also as infrastructure already exists. Electric mobility will be a key issue for private passenger transport and a new system will need to be developed to organise this. For example, electricity used by the electric vehicles should originate from renewable energy sources and the power supply should be provided via smart grid. Municipal roof space could be used to produce renewable electricity to supply electric mobility. Further details: Electric mobility - Framework conditions: Climate Alliance's perspective http://www.klimabuendnis.org/fileadmin/inhalte/dokumente/2011/Resolution_ElectricMobility_en.pdf

H. SUSTAINABILITY

H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	Climate Alliance members have adopted a resolution on agrofuels. Biomass is the most critical option as its efficiency per acreage is the lowest compared to other RES. Also, even with a strong certification system, competition to other land uses and deforestation cannot be prevented. Further details: Fuels from Biomass – Resolution of the General Assembly of the Climate Alliance 2008 http://www.klimabuendnis.org/fileadmin/inhalte/dokumente/resolution-agrofuels-en_01.pdf

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	Cost-efficiency is only one issue: Higher energy prices are an important (if not the only) signal to promote energy efficiency. We also consider rules between MS as less important, as the energy should be produced as near to the consumer as possible.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	Regional potentials should be realised, production and storage should happen as near to the consumer as possible.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	N/A
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Absolute priority should be given to realising the domestic potentials.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Due to limited financial resources, priority should be given to energy production near the consumer, storage systems and peak demand management.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Other (please specify)
Please specify which other key challenges	As a more decentralised energy system with different infrastructure needs to be developed, also a change in perception is needed: energy consumers can become energy producers (e.g. energy positive buildings, PV plants etc.)
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	As a more decentralised energy system with different infrastructure needs to be developed, also a change in perception is needed: energy consumers can become energy producers (e.g. energy positive buildings, PV plants etc.).
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	The Smart Cities Initiative's results should be made widely accessible and applicable to all local authorities. Additional technologies to be covered: electricity storage and using an existing gas network to transfer large scale wind electricity.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	In order to demonstrate RES as a real solution considerably more financial resources should be given into RES development and in particular RES application (instead of conventional energy). As EU has set a target to reduce CO2 emissions by 80-90 % by 2050 it is necessary to take further steps now e.g. via new binding targets set for 2030. In general, pathways should be defined with intermediate steps which have to be adapted according to the learning curve of the technology developed.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Sanni Roinevirta, European Geothermal Energy Council (s.roinevirta@egec.org)
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	European Geothermal Energy Council
3. Please indicate your country	Finland
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	A combination of EU and sectoral level targets is appropriate, but only if targets are mandatory. Renewable energy is crucial to achieve the EU's objective of reducing GHG emissions by 80-95% by 2050. It is also key to re-launch job growth and local competitiveness, with geothermal requiring local labour force (more than 80% of the value chain is European), with no risk of relocation.The 20% target set in the RES Directive is paving the way for new investments in green technologies, including innovative geothermal systems. Binding targets for 2030, however, are of utmost importance to give more certainty to investors and to ensure a level-playing field with other, highly-subsidised, energy sources, e.g. nuclear, fossil fuels. A combination of EU and sectoral targets in a post-2020 framework should be mandatory and complemented by GHG emission reduction targets as they are interlinked and mutually reinforcing. Furthermore, they should not be limited to a 30% share, as envisaged in the Commission's Energy Roadmap 2050. Such a 30% would actually correspond to business as usual. All sectors are critical to achieve the EU's energy and climate goals. Nevertheless, it is clear that the potential contribution of renewable heating and cooling has been underestimated in the NREAPs. This is also reflected in the poor financial incentives put in place at national and local level. Sectoral targets would be intended to improve the climate for investments for renewable H&C technolo
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities Continue to ensure sustainability and scalability Other (please specify)
Please specify which other policy elements?	● Building obligation ● Energy Efficiency Targets ● A strengthened EU Emission Trading Scheme ● Increasing the renovation rate in the EU

B. FINANCIAL SUPPORT

B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	Financial support for geothermal will still be needed in order to reduce costs of innovative technologies such as EGS and low temperature power plants. In addition, a support for Geothermal heating will be needed as long as external costs of fossil fuels are not internalised and other market distortions are not removed. It is also worth noting that the financial support to geothermal energy is currently very low, with the exception of Germany and France. Moreover, such a support is in place in only eleven EU member states. NB: EGS (Enhanced Geothermal Systems), uses the high temperature of rocks with artificial water injection and, generally, with enhancement of permeability of the hot reservoir. An Enhanced Geothermal System is an underground reservoir that has been created or improved artificially.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	If full market distortions are removed, it is appropriate a switch from feed-in tariffs to feed-in premiums as the specific technology progresses down the learning curve and increases its share on the market. This should be followed by a gradual phase-out of financial support schemes over time but only on a voluntary base and for those technologies achieving grid parity and a larger market share.
Please specify for which technologies (if applicable) to phase out support schemes over time	If full market distortions are removed, it is appropriate a switch from feed-in tariffs to feed-in premiums as the specific technology progresses down the learning curve and increases its share on the market. This should be followed by a gradual phase-out of financial support schemes over time but only on a voluntary base and for those technologies achieving grid parity and a larger market share.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State
B.4. Should the structure of financial support be gradually aligned EU-wide?	No

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	There is a great difference between electricity and heating and cooling. Electricity may have a wider European market. In this regard, geothermal electricity should be supported by all EU member states whereas today only 11 EU countries have support schemes (e.g. feed-in tariffs or green certificates) in place for this technology. Similarly, an EU geothermal risk insurance scheme should be developed in order to minimise the geological risk. On the other hand, the market for heating is based on local markets and supply. Even though an EU heating and cooling policy is necessary to provide a consistent framework, the development of renewable heating and cooling should be driven by stable national or local incentives. This is also to create a level-playing field with fossil fuels, still receiving considerable government subsidies. In this regard, the UK "Renewable Heat Incentive" is an interesting example, but only to a certain extent. It has actually reproduced the same delay and gap typical of feed-in tariff schemes in the electricity sector. In addition, it is not independent from the state's budget. Hence, it is not providing much more investor certainty.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	This is the case when only certain technologies (e.g. Nuclear, Gas, PV, Wind, etc.) are highly supported in nearly all member states and, for instance, geothermal support schemes are in place in just a few countries, with a lower level of support. The slow development of some RES in certain areas with good resources is mainly due to the complete absence of support schemes. For instance, feed-in tariffs for geothermal are in place in only eleven EU member states. Feed-in tariff systems in all member states would contribute to a more balanced development of renewable energy in Europe and to the further development of new geothermal technologies, primarily EGS, as it is happening in Germany where such a support mechanism is in place and where 41 new geothermal power plants are currently being developed (Source: EGEC Deep Market Report 2011).

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of information on support schemes or other Lack of credible and certified training and qualification Other (please specify)
C.1.1. Please provide explanations and specific examples where available	• Lack of regulatory framework for shallow and deep geothermal, drilling and ownership of resources (see GTRH (www.gtrh.eu) and Geoelec (www.geoelec.eu) projects) • length and complexity of administrative procedures: simplification is key in order to speed-up the timing. The "One stop-shop principle" should be applied everywhere. Furthermore, public authorities should be trained on geothermal as to have some technical background; • lack of information on support schemes: Geothermal is not supported everywhere so that stakeholders continually investigate for alternative sources of funding; transparency should be applied over support schemes for both conventional and non-conventional sources of energy in order to contribute to create the already mentioned fair level-laying field. For the heating sector the problem is that often only stop & go measures are put in place. The diversity of the support schemes in place represents an additional problem; • Lack of credible and certified training and qualification: Few training courses and certifications are available for geothermal (see Geotrainet project for further information) in order to have a quality and sustainable market
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	The integration of external costs such as those for gas and electricity infrastructures and new electricity generation, into the overall energy cost would remove many of the obstacles and contribute to create a level-playing field.

D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment
D.2.1. Please explain why	Priority or guaranteed access and priority dispatch are sufficient renewables-specific grid related rules if a better management and balance of flexible and variable renewable energy sources will be undertaken.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Other (please specify)
Please specify which other measures	None of the above as the least costly option is to increase the share of flexible renewable sources. Providing renewable base load, flexible renewable energy sources do not have external costs associated with traditional fossil fuels such as storage, grid and supply infrastructures or waste management (CO2, nuclear). In this regard, geothermal is a renewable electricity source providing flexible and renewable baseload that can operate around the clock, anywhere in Europe, with the best load factor of all energy technologies (more than 80%). Geothermal can therefore ensure system stability while reducing grid management costs.

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	Geothermal, being renewable baseload, is a flexible renewable energy source running around the clock, and available anywhere in Europe. Geothermal is providing electricity to the grid according to the demand. Hence, it should be rewarded for its features.
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING

F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness Lack of suitable information Lack of public support Lack of capacity (installers, other) Other (please specify)
Please specify which other barriers	• Lack of fair competition with conventional sources of energy in heating and cooling. The internalization of external costs is of utmost importance in this regard.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Geothermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Meeting Europe's 20% energy saving target is an extraordinary opportunity to re-launch sustainable growth in a time of economic crisis. In the long-term period, more and more energy efficiency improvements are needed. To this end, geothermal and other renewable heating and cooling technologies will be contributing to dramatic reductions in primary energy consumption. Renewable heating technologies provide market ready, efficient and completely carbon-free energy. Electrification of the heating sector should not be encouraged when other truly renewable heat technologies are available and deliver better and more efficient solutions, notably deep and shallow geothermal. Thermal needs should be primarily supplied by thermal sources and decentralised energy demand should also primarily supplied by decentralized energy supply. As a result lower costs and better efficiency will be achieved. Therefore, reducing the electrification of heating and cooling will relieve the stress on the power system and shave peak loads.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	

H.1.1. Please explain

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	Geothermal can be developed anywhere in the EU. For its development two additional cooperation mechanisms are needed: ● The cooperation mechanism should include a mechanism to develop a European geothermal risk insurance scheme. ● More cooperation in increasing awareness about geothermal and its potential as well as for R&D should be promoted.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	Investments in electricity network in some member states in order to facilitate imports of electricity from third countries should not be encouraged and eventually the costs should be taken into account. What should be prioritised is the development of local flexible renewable energy sources, notably geothermal which is a baseload renewable energy source that can operate around the clock, anywhere in Europe, therefore ensuring system stability.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	It can only be an add-on and it has to focus on RES development for national and regional deployment in third countries. Such a partnership could make sense for developing renewables in that area for use in that area, not for export to the EU. When the EU undertakes joint projects and cooperation with a third country regarding the generation of electricity or heat from renewable sources, the EU should facilitate the concerned country or countries' domestic use of part of the production from the installations covered by the joint project. Furthermore, the third countries involved in joint projects should be encouraged by the EU to develop a renewable energy policy including ambitious targets.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	No, the EU should focus its efforts in developing RES technologies that do not need large infrastructure costs.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Other (please specify)
Please specify which other key challenges	Although geothermal is included in the SET plan, it is not fully integrated and a propoer Indusyry initiative for geothermal must be developed for ● Deploying EGS all over Europe ● Developing smart cities initiative towards a 100% share of renewables in heating and cooling, by also promoting smart electricity and thermal grids
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	The challenge is to have a renewable energy mix in the future combining both variable and flexible RES. The objective should be to establish instruments and to adopt measures going into this direction by supporting more R&D for geothermal
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	▫ Geothermal electricity, notably for the development of EGS (Geothermal Enhanced Systems). This technology is not only available in all EU member states, but it also produces electricity 24 hours a day. The first research projects have to be replicated. Moreover, as it is a capital intensive technology PPPs represent a viable option. ▫ Geothermal heating and cooling, in order to promote smart cities, including smart thermal grids
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)

Please specify which drawbacks	Successful results: ● EERA - European Energy Research Alliance - Joint Programme on geothermal energy is rather successful as it is mobilizing large resources for R&D in geothermal. it now starts also to cooperate with the industry, which is a great signal ● The European Technology Platform on renewable heating and cooling (RHC TP) which brings together stakeholders from the biomass, geothermal and solar thermal sector - including the related industries - to define a common strategy for the use of renewable energy technologies for heating and cooling and achieving a 100% share in 2050. The work of the platform is successful, but needs implementation as well Industry Initiatives.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	EGEC believes that this is a pre-requisite in order to stimulate innovation. This is the reason why energy technologies not fulfilling these two criteria (i.e. tangible results such as new tools and technologies and within consistent timeframes) should not be prioritised.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Daniel Duggan. Ireland
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Ireland
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Energy useage efficiency, emissions, sustainability, and reduced dependence on fossil imports are the important issues. The type of fuel to be used should not be specified.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Better financing possibilities Continue to ensure sustainability and scalability Other (please specify)
Please specify which other policy elements?	The EU target is a reduction of 80-95% of GHG emissions in a 2050 perspective, this can be acheived with or without more renewable energy. It is just a question of policy on Nuclear, etc.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	I suspect that in the majority of circumstances renewable energy will need permanent subsidies through CO2 tax on gas fires power generation, a ban on nuclear, ban on fracking, grids forced to accept wind, etc.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)
Please specify how to make support schemes more market-oriented	Be technology neutral, if the target is low CO2, then pay a fixed price for electricity calculated by the formula; kWh x unit price/CO2 intensity
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	N/A
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	As explained in B2
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Remain technology neutral, let the market decide.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	There should be a clear difference between internal EU business agreements and subsides and those with 3rd parties. 3rd agreements should on a willing seller/willing buyer basis without EU taxpayer subsidies.
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Different feed-in tariffs in Northern Ireland and the Republic of Ireland distort the market

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications
C.1.1. Please provide explanations and specific examples where available	Differing grid codes Any involvement of EU financing can add years to the time to realise a project and millions to the cost.

C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Cost-sharing rules Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	None of the above
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increased availability of storage Other (please specify)
Please specify which other measures	A 3 to 10 fold increase in PHES is a vital element. New PHES ought to be encouraged.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Lack of awareness
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Heating with expensive renewably generated electricity enormously wasteful; use CHP biomass power plants to satisfy large heat demands. Gas heating is more suitable for smaller applications such as home heating.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Other (please specify)

Please specify which other barriers	e-car is a financial and practical disaster, huge costs, limited performance and very limited range mean the current e-cars are suitable for city driving and are never the least expensive option. Ethanol production has doubled the cost of the carbohydrates that form the basic diet of billions of the world's poor, another disastrous policy.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail
G.2.1. Please explain your answer	Electric trains powered by electricity from renewable sources.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	EU cash stays in the EU where possible
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Padraig Muldoon private resident padraig.muldoon@gmail.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Ireland
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	My father Mike Muldoon is joint user of my e mail address above. He made a submission, but put the wrong spelling of the e mail address. He put pauric.muldoon@gmail .com instead of thye correct one padraig.muldoon@gmail.com. Please amend his submission. ---------- This is my own submission. The legally binding EU targets for renesable energy used finally by consumers ws set without regard to the scientific fact about the integration of renewable energy on National electricity grids. While the targets can be achieved by installing vast amounts of wind farms, this will not result in a a saving of conventional fossil fuel consumption used to generate electricity. There is no saving with coal plant and only a small saving with gas plant. There fore the targets should be suspended until a proper investigation is made. These targets are in conflict with the Aarhus convention laws. These UNECE rules are legally binding of the EU (including Ireland). They require that Irelands projected plans for renewable energy and assoiciated cabling be processed under the convention rules on proportionality, public participation and study of alternatives. I believe that Irish planning authorities do not have any regard to the convention.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Other (please specify)
Please specify which other policy elements?	We need a worls wide financed study on energy. Deter Helm, consultant on energy at Cambridge University England described Europes energy policy as "CRAZY". Why are such people being ignored? Ireland's existing wind farms and planned future ones are unlawful, because they do not conply with the convention. It is unacceptable that there is no question on this form on the environmental impact of wind farms. Power charges have increased in Ireland when I would expect wind farms to result in a decrease. Power bills are being used to collect taxes and charges in Greece and other parts of Europe which are not connected to electricity generation. This will result in poor people doing without power and will return Europe to the dark ages before electric power became available. Power bills shoudl be only for power generated at the lowest cost.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Phase out support schemes over time (please specify for which technologies if applicable)
Please specify for which technologies (if applicable) to phase out support schemes over time	No amount of subsidizing wind power will desguise the fact that it does not contribute to the security of Ireland's power suplply when counted accurately. There is a mistaken belief that wind and other rfenewables can off - set conventional power, This is incorrect.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	N/A
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Spain has already suspended subsidies to solar and wind power, so what is the point in a common appraoch with other EU countries. Denmark has not made a success of with power.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)
C.1.1. Please provide explanations and specific examples where available	Any saving in co2 from renewables is more than off set by the administration cost of managing it on the grid. See book " the wind farm Scam" by John Ethering and Power hungry by Robert Pryce. Also consider the Brandenburg report on the inmpact of wind farms oin bird life. Irelands remaining bird life is being destroyed by wind farms. Ireland planning guidelines do not take account of the increasing size of wind turbines which are being placed withing 500 meters of dwelling.
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY

H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Please halt this waste ,

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Confindustria - Massimo Beccarello
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Confindustria - Confederation of Italian Industry
3. Please indicate your country	Italy
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, an indicative and non-legally binding target at EU level is appropriate

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	L'Europa persegue la lotta ai cambiamenti climatici attraverso la definizione di target vincolanti di riduzione dei gas serra. In tale contesto ciascun paese, sulla base dei propri consumi di energia e considerando i propri potenziali tecnologici, dovrà valorizzare gli strumenti delle RES e dell'Efficienza Energetica per raggiungere gli obiettivi secondo una tempistica efficace ed una ottimizzazione economica ed industriale. La definizione di obiettivi indicativi non vincolanti per il periodo successivo al 2020 appare il sistema migliore per promuovere le energie rinnovabili senza il pericolo di danneggiare la competitività del sistema manifatturiero nazionale. Infatti come già accaduto in Italia l'applicazione del target obbligatorio al 2020 da raggiungere in pochi anni ha determinato una corsa allo sviluppo delle RES irrazionale che ha puntato sulle tecnologie più costose creando inefficienze di sistema ed extra costi. Al contrario obiettivi indicativi non vincolanti permetterebbero di individuare una strategia di politica industriale in grado di premiare le tecnologie più efficienti ed i comparti con il maggiore potenziale di sviluppo industriale ma soprattutto permetterebbero di correggere quelle strategie di policy che nel tempo risultano inefficaci.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc)

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	Confindustria ritiene che sia importante porre particolare attenzione al criterio dell'efficienza economica e tecnica prevedendo incentivi alle fonti rinnovabili differenziati in relazione alla maturità tecnologica ed economica e alla distanza dalla cosiddetta "grid parity". Per questo motivo per il periodo successivo al 2020 non dovrebbe essere previsto alcun supporto finanziario per le tecnologie oggi disponibili che abbiano raggiunto la grid parity. Eventuali sostegni dovrebbero essere circoscritti solo alle future tecnologie promettenti e per periodi di tempo limitati, in aggiunta ad incentivi in R&S.

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	
Please specify for which technologies (if applicable) to phase out support schemes over time	Gli incentivi alle fonti rinnovabili per il periodo successivo al 2020 dovrebbero essere riconosciuti solo alle nuove tecnologie che non abbiano ancora raggiunto la grid parity e che quindi non abbiano ancora la maturità tecnologica per competere sul mercato. Inoltre gli incentivi dovrebbero essere maggiormente orientati al mercato e limitati nel tempo, prevedendo un decalage progressivo fino al raggiungimento della grid parity. Con riferimento al settore elettrico gli incentivi per la produzione di elettricità dovrebbero essere commisurati alla effettiva capacità della rete di recepire il loro contributo.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	Appare opportuno armonizzare gli incentivi a livello europeo considerando i criteri costi/benefici, affidando per esempio ad una Autorità europea la responsabilità di implementare e supervisionare questo processo di armonizzazione.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Ogni settore è caratterizzato da elementi specifici quali la domanda di energia, le tecnologie ad esso afferenti, il mix energetico che ne soddisfa il fabbisogno. Pertanto ciascun settore dovrebbe essere analizzato separatamente e dovrebbe essere oggetto di misure specifiche. Appare opportuno non discriminare nessun settore nel riconoscimento degli incentivi alle nuove tecnologie promettenti che possono avere buoni margini di miglioramento se opportunamente sorrette nello sviluppo del mercato.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	I regimi di sostegno devono essere in linea con le norme UE e devono essere applicati a specifici progetti pilota nei paesi terzi interessati

B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Al fine di evitare che gli schemi incentivanti possano tradursi in una distorsione di mercato è necessario prima di tutto che siano applicati nel rispetto delle norme europee. Inoltre bisogna considerare che i regimi di sostegno determinano una distorsione della competizione nella misura in cui siano trasferiti sul consumatore finale, poiché si traducono in una perdita di competitività a livello internazionale delle aziende energy intensive. Al fine di limitare gli effetti distorsivi è necessario limitare nel tempo l'applicazione degli incentivi prevedendo un decalage progressivo fino al raggiungimento della grid parity.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	Gli schemi di qualificazione e certificazione delle competenze possono aiutare tutta la filiera ad avere maggiore competenza, necessaria per affrontare e penetrare un mercato sempre più esigente, informato e sensibile non solo alle tematiche ambientali ma anche al costo totale dell'investimento e non solo al costo iniziale. Di fatto alcuni prodotti di indubbie potenzialità non hanno trovato la corretta diffusione perché è mancata una corretta attività di informazione e formazione.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	1) The approach of the current Directive to lay down a general framework for Member State action is fine 2) Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other 3) Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules

D.1.1. Please specify which obstacles and the nature and degree of them for each	Dovranno essere ridotte o eliminate completamente le limitazioni alla producibilità delle FER determinate dalla mancata applicazione dell'autorizzazione unica dell'impianto e delle opere di rete connesse. A tal fine occorre che i gestori di rete siano messi in condizione di impegnare le risorse per lo sviluppo di adeguate infrastrutture idonee a sostenere l'ingresso delle fonti rinnovabili, anche prevedendo sistemi per la prevedibilità della produzione delle fonti intermittenti e di sistemi di flessibilità che consentano di assorbire maggior quantità di energia prodotta da fonti rinnovabili, aiutando la rete ad assolvere al compito di bilanciamento dei carichi.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Enable renewable generators to offer balancing services to TSOs

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Price risk – producers of renewable energy should operate without any aid Producers of renewable energy should bear greater responsibility for system costs Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)

Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	Premessa la necessità di promuovere lo sviluppo delle infrastrutture di rete e di prevedere la compartecipazione dei produttori di rinnovabili intermittenti ai costi di sistema, al fine di rendere l'energia rinnovabile maggiormente sensibile ai segnali di mercato è necessario limitare nel tempo i sistemi di incentivazione fino al raggiungimento della grid parity. Inoltre occorre prevedere: A) la dotazione, da parte delle centrali fotovoltaiche, di sistemi di protezione a variazioni di frequenza sulla rete di distribuzione: è possibile assicurare un funzionamento continuativo degli impianti fotovoltaici allacciati a questa rete solo prevedendo che tali impianti siano dotati delle protezioni necessarie; B) che gli impianti fotovoltaici siano direttamente controllabili dal distributore di riferimento in tutte le situazioni di potenziale criticità identificate dal gestore della rete di trasmissione.
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)

Please specify which instruments incentivising investment	Abbiamo un mercato all'ingrosso che deve gestire all'interno meccanismi di procurement delle fonti rinnovabili, su cui emergono due ordini di difficoltà. La prima riguarda la corretta allocazione dei costi di produzione rispetto alle tecnologie che producono energia. La seconda è riferibile al fatto che lo sviluppo delle RES non programmabili richiede sistemi di bilanciamento forniti da tecnologie tradizionali. I due tipi di esternalità economica possono essere gestiti anche sul piano regolatorio 1) con una regolazione che consenta la piena internalizzazione dei costi e dei benefici rispetto ad ogni tecnologia, 2) attraverso lo sviluppo di mercati secondari efficaci di bilanciamento e di capacità in grado di esprimere una corretta valutazione degli oneri di sistema. Inoltre lo sviluppo dei sistemi flessibilità e delle smart grid consentiranno il miglioramento della sicurezza del sistema elettrico ed una gestione più efficiente dell'energia prodotta da fonti intermittenti, contribuendo a risolvere le suddette criticità. Contestualmente è necessario garantire il funzionamento di centrali termiche di back up per garantire la copertura del carico anche in assenza di produzione rinnovabile.

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness Lack of suitable information Lack of public support Lack of capacity (installers, other)
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal Electrification together with higher share of renewables in electricity production Other (please specify)
Please specify which other pathways	Waste to energy plants and heat pump
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Il settore residenziale è cruciale per la stabilità dell'intero comparto dell'energia: per questo motivo, l'introduzione di nuove misure a riguardo dovrebbe essere attentamente valutato. Occorre fare in modo che il costo dell'energia elettrica per l'utilizzatore residenziale che intende installare sistemi di cooling-heating sia favorevole per chi impiega le pompe di calore elettriche che utilizzano le RES.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of infrastructure Lack of awareness Lack of suitable information Limits of availability of sustainably produced biofuels Other (please specify)
Please specify which other barriers	L'ostacolo principale alla diffusione dei biocarburanti è la scarsa competitività di prezzo di questi prodotti rispetto alle alternative fossili. I costi delle materie prime, del processo produttivo e della filiera di distribuzione condizionano negativamente il prezzo finale dell'etanolo e del biodiesel. Il confronto di prezzo con i carburanti tradizionali è ancora più penalizzante se condotto in termini energetici. Sulla commercializzazione di massa di prodotti eco-sostenibili pesa inoltre la mancata disponibilità di biofuel di seconda generazione, le cui tecnologie produttive risentono degli alti costi di processo e sono ancora in una fase dimostrativa pre-commerciale. Infine, i limiti di blending dei biocarburanti (e la trascurabile presenza di veicoli flexifuel) sono un ulteriore ostacolo per il raggiungimento di economie di scala.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Water

G.2.1. Please explain your answer	Si ritiene che una diffusione più massiccia dei biocarburanti nel settore trasporti su strada (passeggeri e merci) dipenderà principalmente dallo sviluppo commerciale di prodotti di nuova generazione competitivi da un punto di vista economico con i carburanti fossili tradizionali e non vincolati da limiti di blending (es. biodiesel idrogenati). Appare opportuno puntare sull'efficienza piuttosto che sull'incremento della quota di RES, in tal senso potrebbe essere utile un maggiore sviluppo del trasporto su acqua. Riteniamo che l'aviazione presenti un elevato potenziale di penetrazione dei biocarburanti. La produzione di biojet ha raggiunto la fase di commercializzazione e, allo stesso tempo, l'industria aeronautica europea è obbligata a ridurre le emissioni di gas serra del 46% nell'ambito dell'ETS a partire dal 2013. Il biojet è generalmente miscelato al 50% con il kerosene tradizionale e può assicurare un risparmio di emissioni di CO2 fino all'85% (a seconda del feedstock impiegato) secondo gli attuali criteri UE.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)
Please specify which criteria	È fondamentale che a livello europeo siano adottate misure stringenti al fine di escludere l'incremento del costo delle materie prime usate in altri processi industriali mettendo in serio pericolo la sussistenza di interi comparti manifatturieri. Inoltre riteniamo che i criteri di sostenibilità UE debbano promuovere soltanto le biomasse più efficienti in termini di abbattimento del biossido di carbonio, prendendo in considerazione anche l'impatto dell' indirect land-use change sul saldo di emissioni.
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	Dovrebbero essere applicati a livello europeo i progetti pilota caratterizzati da rilevanti Key Performance Indicators.

I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Dovrebbe essere promossa la cooperazione con paesi terzi, specialmente con quelli vicini che abbiano elevate risorse solari, eoliche ed idriche.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	Riteniamo che la realizzazione di investimenti sulle dorsali della rete di trasmissione e sulle interconnessioni con l'estero consenta l'immissione sul sistema elettrico europeo e lo sfruttamento delle fonti rinnovabili dei Balcani, dell'Africa settentrionale e del Mediterraneo. Inoltre è necessario prevedere sistemi di miglioramento delle reti elettriche di alta, media e bassa tensione, prevedendo smart metering e smart grids in linea con i target UE di efficienza. Ciò dovrebbe essere previsto anche nel regolamento edilizio per favorire l'efficienza energetica nella domotica ed elettrodomestici.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Le potenzialità di sfruttamento dell'energia solare nel Nord Africa, con la prospettiva di coprire il 15% del consumi di energia dell'Europa entro il 2050 e i benefici ambientali connessi, rendono prioritarie le iniziative di cooperazione internazionale in materia di energia tra i paesi coinvolti. Perciò la promozione e cooperazione dei progetti di sviluppo delle fonti rinnovabili con i paesi del sud del mediterraneo è una priorità e dovrebbe essere inserito nelle scelte di politica interna europea sulle fonti rinnovabili anche in funzione della maggiore sostenibilità economica di questi progetti rispetto alle possibili iniziative adottate all'interno della UE.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	NSCOGI è una iniziativa molto positiva e sarebbe utile che sia applicata ed usata come esempio e benchmarck in altre aree con strutture simili e simili approcci costi/benefici

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness Industrial manufacturing and supply chain
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Appare necessario incentivare gli investimenti privati di nuove tecnologie attraverso l'introduzione di strumenti finanziari atti anche a promuovere/facilitare la collaborazione tra aziende manifatturiere. Inoltre sarebbe necessario avviare immediatamente lo sviluppo dei progetti pilota e delle TEN-E.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Lo sviluppo dei sistemi flessibilità e delle smart grid consentirà il miglioramento della sicurezza del sistema elettrico ed una gestione più efficiente dell'energia prodotta da fonti intermittenti. Inoltre è necessario puntare sulla integrazione delle grid technologies e grid users.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Le misure esistenti hanno avuto lo svantaggio di favorire solo alcuni settori tecnologie a scapito di altri e di non risolvere i problemi burocratici legati a tempistiche eccessivamente lunghe per le procedure amministrative per la implementazione dei progetti.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Sì, per quanto concerne lo sviluppo industriale

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	CFE CGC IEG (Confédération Francaise de l'Encadrement CGC Energies)- contact@cfe-energies.com
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Syndicat de salariés de l'encadrement - (REGRIN)
3. Please indicate your country	France
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	1-Les objectifs de réduction d'émission de GES peuvent être atteints, au moins en partie, par le développement du gaz naturel ou du nucléaire. 2-L'efficacité energétique n'est pas liée au mode de production
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Abolition of support mechanism or subsidies to other energy sources Continue to ensure sustainability and scalability Other (please specify)
Please specify which other policy elements?	Favoriser l'investissement industriel de long terme et le développement des emplois

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	No
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	

B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Les mécanismes de soutien risqueraient de générer une bulle spéculative et d'empêcher les énergies renouvelables de devenir rentables Modifié avec la version de démonstration de PDF Editor, un logiciel CAD-KAS (http://www.cadkas.com). Modifié
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)
C.1.1. Please provide explanations and specific examples where available	Il n'est pas certain qu'il y ait aujourd'hui de grands freins au développement des énergies renouvelables
C.2. Which policy response to the problems identified above do you consider appropriate?	N/A

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	Les contraintes liées aux réseaux de distribution sont compatibles avec un développement harmonieux des énergies renouvelables.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Increased availability of storage Enable renewable generators to offer balancing services to TSOs

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should bear greater responsibility for system costs
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Lack of awareness Lack of public support
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	L'utilisation des énergies renouvelables pour le chauffage et la climatisation s'accompagne d'une disponibilité limitée. Dès lors, l'efficacité énergétique devient une composante incontournable du procédé. La R&D en matière de développement des usages décentralisés conduiront à améliorer la performance énergétique des bâtiments et à développer l'emploi

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Pace of technology development Lack of infrastructure Limits of availability of sustainably produced biofuels
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Coopération accrue avec les pays de la Méditerranée
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	De telles coopérations doivent être encouragées.

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Industrial manufacturing and supply chain
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Le développement d'une filière industrielle européenne doit être une priorité. Les emplois ainsi créés contribueront à compenser le coût des énergies renouvelables. Mise en place d'une politique industrielle spécifique et volontariste
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Stockage de l'électricité Capture et stockage du carbone Production décentralisée
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Coût élevé Spéculation
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Non, la R&D doit s'inscrire dans la durée, dans l'optique de favoriser la croissance et l'emploi

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Kuratorium für Waldarbeit und Forsttechnik e. V., bernd.heinrich@kwf-online.de
2. Are you responding to this questionnaire on behalf of /as:	Public Authority
3. Please indicate your country	Germany
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Such a target must be ambitious enough and following the systematic approach of the Renewables Directive (2009/28/EC) it needs to be underpinned with binding targets for all Member States. A share of 30% - as envisaged by the Commission in the Energy 2050 Roadmap – definitely is not ambitious. In contrast, the proposal of the European Renewable Energy Associations should be adopted to agree on a legally binding minimum target of 45% for 2030. In this context, the Member States' choice of support mechanisms must not be affected. Such an approach would be in line with the Commissions position in the Energy Roadmap that it is primarily the Member States' responsibility to develop and implement strategies for achieving their renewable energy targets for 2020 and beyond. And most importantly, a coordinated approach to energy policies in full compliance with the subsidiarity principle could thus be further maintained after 2020. Like this, the different potentials of various renewable energy technologies could be used and exchanged efficiently among the Member States. At the same time, supply security could be granted through regional deployment of renewable energy.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)
Please specify how to make support schemes more market-oriented	There is no “one size fits all” solution to support schemes because of differences between Member States (e.g. markets, political conditions, consumer acceptance) and technologies. An EU-wide support scheme would in this context not make any sense, neither would blind convergence. In contrast, a closer voluntary cooperation could make sense for some issues (e.g. exchange of best practice among Member States, learning from each other and from various studies/ project evaluating national support schemes) but such decisions have to be left to the Member States. What does make sense is the application of common rules where the conditions are similar, e.g. the much referred to point of grid access. Having guaranteed access to the grid – like in Germany – would allow renewables to participate in the market and to compete on it – directly or indirectly. Together with a well-tailored, technology-specific support, which can be gradually adapted to the respective learning curve of the technology in question, renewables would steadily become more competitive with conventional power production all over Europe. Thus, renewables - “integrated” into properly functioning energy markets - could compete without financial support in the future (time will vary depending on technology). However, an indispensable precondition for such “integration” would be successful adjustment of the design of existing energy/electricity markets, in a way that is appropriate for dealing with the specific chara

B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	There are differences between the electricity and heating/ cooling sector on the one side and the transport sector on the other. For the first sectors the support levels and structures of financial support should be completely up to the Member States. As far as the transport sector is concerned, a harmonized implementation of the RED (in particular regarding the sustainability regime) would be necessary to avoid severe distortions of the internal fuel market in the EU. Especially the double-counting mechanism for biofuels made from residues and wastes should be implemented in the same way in all member states. Because of the already effective implementation of double-counting schemes in some member states, a change in trade flows and prices for such biofuels can be noticed. So in the fuel sector the implementation of EU-targets and support mechanisms, especially the transposition of the RED in the EU member states, should be carried out in a coordinated way.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of information on support schemes or other Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	Grid connection rules: Above all, priority access to the grid for renewable energy sources should be maintained until renewables have become the clearly dominant source of electricity. Therefore the priority access needs to be maintained after 2020. Grid connection rules also need to be made more transparent for renewables, especially regarding the procedure to determine the grid capacity for variable renewables and the system flexibility. Additionally, there is an urgent need for additional countries/regions interconnection capacity. - Balancing rules. Centralized dispatches are key to ensure a smooth renewable energy production and to maximize the integration of renewable into the grid. - Curtailment regime. Although it is necessary to optimize the grid, it is in parallel necessary to approve a roadmap introducing flexibility into the electricity system (and therefore reducing the curtailment of renewables). Flexibility measures for base-load facilities (coal and nuclear power plants) have to be implemented.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment
D.2.1. Please explain why	In addition to priority or guaranteed dispatch, the German “hardship clause” is recommended: the grid operator has to pay damages (income-losses) to the renewable energy plant owner, for the time and in case of the curtailment. As the grid operator is responsible for the balancing in the grid, as well as for sufficiently strong and stable grid infrastructure, he is also held liable. As mentioned above, the priority grid access for renewables is one of the key elements of the recent development of RES in most Member States. Therefore the priority access needs to be maintained.

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Enable renewable generators to offer balancing services to TSOs Other (please specify)
Please specify which other measures	There is no general need for an increase of flexible back-up capacities, and furthermore, for an increase of flexible back-up capacities capacity payments do not seem to be the appropriate instrument.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should bear greater responsibility for system costs Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	Producers of renewables have started to bear responsibility for system costs by providing ancillary and other system services. As a consequence and further development of this, renewable energy producers should have accesses to balancing energy markets, which would further increase their responsibility for the system as a whole.
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	markets (with special market signals for shifting the demand) there could be penalties for inflexible power generation which caused further RES curtailment or higher negative prices at the power exchange.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING

F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness Lack of suitable information Lack of public support Lack of capacity (installers, other)
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	We need more action in the heating and cooling sector to reach our 2020-targets. Not only in Germany but all over Europe, this sector has huge but widely untapped potentials. In order to tackle the increasing energy demand, energy efficiency needs to be also in focus, e.g. heat pumps provide both: they make use of considerable share of RES and at the same time use the still necessary auxiliary energy most efficiently. They serve as amplifiers in case electricity is coming from green sources. In general, necessary allies with both – renewables and energy efficiency – needing to be fostered, jointly as well as independently.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of standards Lack of infrastructure Lack of awareness Lack of suitable information Limits of availability of sustainably produced biofuels Other (please specify)
Please specify which other barriers	Regarding the main barriers one has to differentiate between biofuels and electric mobility. In the biofuels sector costs of the fuels are a main barrier. Fossil fuels are still so that biofuels cannot compete without a support scheme. The price for biofuels feedstock is also coupled to the oil price which leads to the fact that with rising oil prices also biofuels prices may start to rise. In e-mobility also the lack of standards and infrastructure are still main barriers. The development to change the system to renewable energies always needs the awareness and acceptance of the general public, especially in the transport sector. Therefore suitable information is needed.

G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Water Air
G.2.1. Please explain your answer	To change the transport sector completely towards renewable energies all sectors have to contribute. Again on the long run differentiation is needed. Because of the limited availability of biofuels, especially sectors depending on liquid fuels will have to be their main area of application. That includes road transport for goods and also transport in water and air. In road transport the use of higher biodiesel blends like B30 gives the opportunity to increase in the short and medium term renewable energy sources in the main demand sector without technical barriers. In passenger transport also electric cars combined with high shares of renewable electricity are an additional opportunity.

H. SUSTAINABILITY

H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	Sustainability criteria need to apply to all types of biomass use (energy, food, feed, material use), not only for biofuels in transport. It is necessary to include all biomass production and uses to avoid leakage effects. The compulsory sustainability requirements can only be the starting point to earn experience. To have a real impact on agricultural production and the use of biomass the main demand sectors have to be included in sustainability certification. Generally it is also important to strengthen the implementation and enforcement of laws for the protection of the environment in biomass producing countries (e.g. forest protection). Furthermore it is essential to define environment-associated criteria for the production of fossil fuels to have a level-playing field between fossil and renewable fuels and to tackle the growing negative impacts of – among others - greenhouse gas emissions of fossil sources like tar sands, deep sea or arctic oils.

I. REGIONAL AND INTERNATIONAL DIMENSIONS

I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	New or additional grid infrastructure is needed all over Europe, not only in the South. The priority of investments in infrastructure only by regions would follow the approach on “best sites”. Hugh potentials of other sites are not taken into account, nor are the economic, social and political advantages of predominately decentralized structures. Decentralized structures mobilize higher cost savings (from 2001 to 2030, up to 238 billion Euros can be saved in Europe with decentralized deployment in comparison to centralized structures) and reduce the need for transmission grid extension (cf. BEE´s position to “Best sites” for Renewable Deployment, June 2011).
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Other measures (please specify)
Please specify which other measures	The Renewables Directive (2009/28/EC) foresees “Joint projects” also for Member States and Third Countries to cooperate on a voluntary basis. These projects have to apply the limitation of the Directive in order to be counted towards their target. There is no need for additional measures to increase these projects. The main focus of the cooperation mechanisms should remain within the EU.
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	It can only be an add-on and it has to focus on RES development for national and regional deployment in these countries. Cost of grid infrastructure from there to the EU makes it highly unattractive against national increase of distributed RES. Such a partnership could make sense for developing renewables in that area for use in that area, not for export to the EU.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	-

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Other (please specify)
Please specify which other key challenges	There has been only very little positive outcome from the SET Plan for renewable energy. The Commission has first to give a comprehensive and detailed report on the outcome reflected in concrete quantity of SET-Plan support. All in all there is a need for facilitating system transformation from current system to a renewable energy based system (paradigm shift). When moving to a future with renewable energy as the main source of supply, it can no longer be called a question of integration – this will have to be a transformation of the energy system towards the logic of a flexible and renewables based system. Around this paradigm shift, research and innovation could be a great contribution (especially in the context of smart grids and demand side management). In addition, it would make sense to mobilize spinning effects of ancillary technology, such as power inverters for multiple use. Furthermore, newly arising questions, such as the availability and potential replacement of specific resources ("rare earth" issue) could be included in the SET-Plan, focussing on the needs of Renewable Energies.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	A dedicated budget line (within or outside Horizon 2020) for each of the SET-Plan renewable technologies would in addition give much more visibility to the sector.

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	From our point of view, it is necessary to get a broad energy mix of all renewable energy sources (wind energy, solar energy, bioenergy, hydropower, geothermal and environmental thermal energy). With this energy mix in combination with a predominantly decentralized development, a sustainable, cost-effective and secure energy supply can be achieved.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	One particular drawback – if to be called so – would be continued significant support for fossil and nuclear energy. They are not only environmentally harmful, but they are major obstacles for smooth and cost effective development of renewables. Such support is reinforcing existing structural deficits of the energy system, which are counterproductive and undermining the necessary system changes.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	It is problematic to simply link results to a deadline, so the general answer is no. More important than a specific deadline is a stable and reliable (financial and political) framework. This will provide for investment and planning security and contribute significantly to the further development of renewable energy. This development should be monitored regularly (as would be provided e.g. in the Renewables Directive). In this context a binding renewables target for 2030 is indispensable for further investment security. However, such a target must be ambitious enough and following the systematic approach of the renewables Directive (2009/28/EC), i.e. it needs to be underpinned with binding targets for all Member States.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Eileen O'Connor - gazzer29@gmail.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Ireland
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	I am a mother and a grand mother, I value the heritage and history of Ireland. I am shocked that giant wind turbines are to be installed in Ireland's most beautiful locations. Planning guidelines have not kept up with the ever increasing size of turbines. They are to be installed within 500 meters of peoples family homes. Ireland's renewable energy project is completely in breach of the Aarhus Convention done in Denmark in 2005. The public and those affected by wind turbine noise and visual impact and property devaluation are not being given a fair hearing as demanded by the convention. The provisions on proportionallity in which the benefits of wind power are evaluated against the environmental impact are being ignored. The provision on public participation are ignored, as is the provision of access to chaep law. The convention is binding on Ireland through the EU.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)

Please specify which other policy elements?	Stop the state supports for wind farming and let market conditions dectate the value of wind energy. Carry out a technical analyses of the effect of wind of the power grid. Look at the experience of Denmark where wind has failed to cut co2 emissions. They have cripled spain, there is a 24 billion euro deficit between spains imcome on electricity and the cost of renewable energy.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	No
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Phase out support schemes over time (please specify for which technologies if applicable)
Please specify for which technologies (if applicable) to phase out support schemes over time	Wind energy cannot replace fossil fuel. See the Bentek Report and gthe report of Stuart and young. The erratic nature of the wind means that wind cannot replace convention generation. We need more researcg and development based of proper science not political opinion.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	N/A
B.4. Should the structure of financial support be gradually aligned EU-wide?	N/A
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	In regard to electric cars, a proper scientific study into the actual saving of fuel should be carried out. How much fossil fuel does a electric car actuzaly consume compared to a standard car.?
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Renewable energy schemes are so weighed in favour of renewables that they make a profit irrespective of whether real usable power is provided or not. Payment s are made for constrained energy never actually produced.

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)
C.1.1. Please provide explanations and specific examples where available	Huge resourses are wasted in administration of renewables. Auditors are used to calculate payments to wind farm. This increases the cost to consummers.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	I run my household on a tight budget, As I live on low income. I am afraid that I will not be able to afford the cost of my electricity bill when Ireland's wind turbines are installed. Prices will almost double, This cost is so great that I will be cut off in winter. This is to pay wind farm owners and share holders based over seas with no advantage to the Irish ecomony. The stated economic benefits of wind energy are not supported by the real experience. With 1,450 mega watts of wind , Ireland is still as dependent on fossil fuel as ever. This will not change.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	Up to 5,000 kilometers of cabling is due to be installed in Ireland. This would stretch from the Northern tip of Donegal to the southern tip of county Cork 15 times. This will turn Ireland into a giant industrial generation zone. This huge cost must be placed on an already over burdened consumer. See report from Irish Academy of engineers (February 2011) in which they beg the Irish Government to halt this maddness.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority dispatch and obligation on TSO to counteract curtailment
D.2.1. Please explain why	Priority dispatch is just another subsidy.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	Is Biomass depriving the world of food. How much fossil fuel is used to grow and harvest it.?

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	

I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	The result of wind farming is that their is no saving on co2 for coal generation (Bentek study) . The savings of Gas plant is very small, when the fact that turbines are supplied with free grid power (fossil fuel) which is not even metered. In calm conditions Irealnd's wind turbines must be supplied with grid power before any other customer.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Luis Cuena / lcuena@gmail.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Spain
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	geotermic / waves / minieolic
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Accelerate convergence of national support schemes Open up national support schemes to cross-border projects
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States Member States should open their support schemes to renewable generation from third countries
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	
Please explain how it could be achieved for third countries	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Increased availability of storage Enable renewable generators to offer balancing services to TSOs

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk – producers of renewable energy should operate without any aid Producers of renewable energy should bear greater responsibility for system costs Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Building regulations etc. Lack of suitable information Lack of public support
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Geothermal Solar thermal Electrification together with higher share of renewables in electricity production

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Pace of technology development Lack of infrastructure Lack of awareness Lack of suitable information
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)
Please specify which criteria	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	A Sustainable Mobilty Directive will be compulsory on short-term
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	System integration Industrial manufacturing and supply chain
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Vulla Parasote, TRION-Network for energy and climate. E-mail: vulla.parasote@rpf.bwl.de
2. Are you responding to this questionnaire on behalf of /as:	Public Authority
3. Please indicate your country	Germany
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Um den Einsatz von Erneuerbaren Energien in allen Mitgliedsstaaten zu fördern, sind europaweite Mindestanforderungen notwendig. Die Mitgliedstaaten sollten jedoch genug Freiraum haben, um nach Ihren Bedürfnissen und Potentialen sektorielle Ziele und deren Umsetzung zu definieren. In den Grenzgebieten, ist eine grenzübergreifende Abstimmung wünschenswert, zu Themen die mehrere Länder betreffen, wie Transport oder nukleare Sicherheit. Um den Vorbildcharakter der EU zu stärken, sollte nicht nur der reglementäre Weg gegangen werden, sondern auch der wirtschaftliche, indem innovative Technologien für Erneuerbare Energien effizient und wirksam auf den EU- und Weltmarkt gebracht werden. Der Einsatz von Erneuerbaren Energien kann über zwei Wege gefördert werden: - Entwicklung von innovativen Technologien, die die Produktivität (z.B. von Photovoltaik oder Windanlagen) steigern und deren massive Vermarktung zu Preisen, die eine hohe Rentabilität garantieren. - Finanzielle Unterstützung beim Einsatz von Erneuerbaren Energien bzw. hohe Versteuerung von traditionneller Energie. Die Energieproduktion aus erneuerbaren Quellen wird im Gegensatz zur nuklearen oder fossilen Energie dezentral entschieden. Die Bereitschaft zur Energiewende bei Kommunen (Stadtwerke, etc.) und Bürgern (Energiegenossenschaften, private Initiativen etc.) kann über finanzielle Anreize erhöht werden.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Better financing possibilities

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	Die finanzielle Unterstützung wird vom Erreichen der sektorspezifischen Ziele abhängen. Die bis dahin errungenen Erfahrungen werden zeigen welcher Sektor (Transport, Wohnungsbau, Industrie, etc.) Unterstützung braucht.

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Open up national support schemes to cross-border projects
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	B1 Die finanzielle Unterstützung wird vom Erreichen der sektorspezifischen Ziele abhängen. Die bis dahin errungenen Erfahrungen werden zeigen welcher Sektor (Transport, Wohnungsbau, Industrie, etc.) Unterstützung braucht. B3 Die EU-Energiestrategie soll die Bedingungen für einen klaren europäischen Rahmen für einzelstaatliche Entscheidungen hinsichtlich des Einsatzes von Erneuerbaren Energien schaffen. Die Art der Energiequelle, die am förderfähigsten wäre, sollte den Mitgliedsstaaten überlassen werden, da die geologischen und klimatischen Anforderungen von einem Land zum anderen variieren.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes Member States need to open their support schemes to renewable generation from other Member States

Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	EU-Richtlinie: Unbeschadet der Artikel 87 und 88 des Vertrags haben die Mitgliedstaaten das Recht, gemäß den Artikeln 5 bis 11 dieser Richtlinie zu entscheiden, in welchem Umfang sie die in einem anderen Mitgliedstaat erzeugte Energie aus erneuerbaren Quellen fördern wollen. Diese Richtlinie zielt darauf ab, die grenzüberschreitende Förderung von Energie aus erneuerbaren Quellen zu erleichtern, ohne die nationalen Förderregelungen zu beeinträchtigen. Sie führt wahlweise Mechanismen der Zusammenarbeit zwischen Mitgliedstaaten ein, in deren Rahmen die Mitgliedstaaten vereinbaren können, in welchem Maße ein Mitgliedstaat die Energieerzeugung in einem anderen Mitgliedstaat fördert und in welchem Umfang die Erzeugung von Energie aus erneuerbaren Quellen auf die nationalen Gesamtziele des einen oder des anderen Mitgliedstaats angerechnet wird. Um die Wirksamkeit der beiden Maßnahmen zur Zielerfüllung, also der nationalen Förderregelungen und der Mechanismen der Zusammenarbeit, zu gewährleisten, ist es unbedingt notwendig, dass die Mitgliedstaaten die Möglichkeit haben, darüber zu entscheiden, ob und in welchem Umfang ihre nationalen Förderregelungen für in anderen Mitgliedstaaten erzeugte Energie aus erneuerbaren Quellen gelten, und sich durch die Anwendung der in der vorliegenden Richtlinie vorgesehenen Mechanismen der Zusammenarbeit darüber zu einigen.
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	Die Entscheidung über den Einsatz von Erneuerbaren Energien spielt sich operativ auf kommunaler Ebene ab. Die langen administrativen Wege von der Idee bis zur Umsetzung können ein Hindernis darstellen.
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access
D.2.1. Please explain why	Die Netzeinspeisung der Eneuerbaren Energien soll sichergestellt werden. Die vorhandenen Netze sollen (falls notwendig auch grenzübergreifend) den veränderten Gegebenheiten angepasst werden.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should bear greater responsibility for system costs Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Lack of awareness Lack of public support
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Solar thermal Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	In der Klimaschutzstrategie am Oberrhein sind Energiesparsamkeit und Energieeffizienz vorrangig. Der Einsatz von Erneuerbaren Energien wird als drittes Ziel genannt. Der Anteil von Erneuerbaren Energien am Gesamtverbrauch kann nur steigen, wenn parallel dazu Maßnahmen ergriffen werden, die den Energieverbrauch für das Heizen und Kühlen von Gebäuden drastisch senken (Passivhäuser).

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of infrastructure
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Water
G.2.1. Please explain your answer	Passengers: Höhere Preiselastizität. Schifffahrt: Flexiblere Infrastrukturen.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	Um die Markteinführung von innovativen Technologien zu fördern sind gemeinsame Standards und Normen notwendig. Das Angleichen der nationalen Normen muss noch optimiert werden.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	- Enge Koordination zu Energiefragen mit dem Nicht-EU-Land Schweiz (z.B. Stromabkommen). - Union für das Mittelmeer.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	Gebieten mit geringerer Bevölkerungsdichte, die das Potential von Energie aus erneuerbaren Quellen nutzen möchten, sollten angemessene Anschlusskosten gewährt werden, um sicherzustellen, dass sie im Vergleich zu Produzenten, die in zentraler gelegenen, stärker industrialisierten Gebieten mit höherer Bevölkerungsdichte angesiedelt sind, nicht benachteiligt werden. I.4 Einigkeit hinsichtlich der grundlegenden Bedeutung eines wirklichen Binnenmarkts zur Unterstützung einer gemeinsamen europäischen Energiestrategie.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Diese Projekte können notwendig sein, um Kernziele der EU zu erreichen, z. B. um große Infrastrukturprojekte zu erleichtern. Drei Maßnahmen: - Abschluss der Verhandlungen mit der Schweiz bezüglich der vollständigen Integration der Strommärkte - Intensivierung der Zusammenarbeit im Energiebereich mit den neuen EU-Beitritts-Ländern. - Regionale Energiepartnerschaft EU/ Mittelmeerraum gründen, die zunächst auf den Ausbau des Strommarkts und des Markts für erneuerbare Energien in diesen Ländern bis 2020 ausgerichtet ist: - Verbesserung des Zugangs von Entwicklungsländern zu nachhaltiger Energie und - Verbesserung der Förderung der EU-Politiken über die EU-Grenzen hinaus.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Für Offshore Windanlagen kann der Regionalmaßstab relevanter sein als der Nationale (Klimatische Einheiten). In diesem Sinne sollten grenzüberschreitende Projekte gefördert werden. Die Förderung von grenzübergreifenden Projekten zu spezifischen Energiequellen kann zu Vorbildregionen für eine bestimmte Energiequelle führen.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	System integration Other (please specify)
Please specify which other key challenges	Dauerhaftigkeit/Wiederverwendung des Materials und der Ausrüstung.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Clusters: Kooperation zwischen Wissenschaft und Industrie.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Energielagerung und Transport. Der Einsatz von Erneuerbaren Energien soll optimiert werden, indem die Energie dort hergestellt werden kann, wo es Sinn macht (Photovoltaik auf sonnigen großen Freiflächen, Off-shore-Wind, etc.), aber ohne großen Verlust dorthin transportiert werden kann, wo sie gebraucht wird (dicht besiedelten Agglomerationen).

J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Die Schwierigkeit, die Produktionskosten von innovativen Technologien so zu senken, dass sie in größeren Umfang vermarktet werden können.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Die Zusammenarbeit von Wissenschaft und Wirtschaft im Rahmen von Clustern, bringt Akteure eines Wirtschaftsraums und einer Branche näher. Die Erwartungen der Wirtschaft können dort an die Wissenschaft gerichtet werden. Die in Laboren entwickelte Innovation kann wiederum so orientiert werden, dass sie zu konkreten von der Wirtschaft geforderten Produkten führt.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	José Mª Ortiz, AFEC (spanish air conditioning equipment manufacturers assosiation) afec@afec.es
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Assosiation
3. Please indicate your country	Spain
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Generally the heat pump industry is convinced that it is an ideal solution to set general targets and to let the market develop the most cost efficient solution to achieve it. The past EU energy and Member State policy has sometimes deviated from this principle by giving subsidies in varying height and duration based on different sets of requirements for different technologies. In a situation, where the reduction of GHG emission is wanted and a larger use of RES is aimed for, both targets should be the measurement points for any set of targets to be set. As the contribution potential of the "sleeping giant" renewable heating and cooling has been stressed repeatedly, it might proof worthwhile to put more focus on this segment. - More focus should be put on efficient technologies using RES. ESpecially heat pump technology has been overlooked in this regard in the past. - No subsides should be paid in the future to technologies using predominantly (< 50%) fossil fuels. This should explicitly not apply to hybrid systems. - - Thorough analysis of todays subsidy schemes in many countries reveals that subsidies - if paid - are often much greater for small scale electricity technologies than for small scale renewable heating and cooling applications (most often, subsidies do not even exist for the heating sector). It is not clear, why one kilowatthour of electricity is deemed more valuable than one kilowatthour of heat. Both should be treated similarly in the future.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities

B. FINANCIAL SUPPORT

B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	It may be possible that for some sectors/circumstances and markets support is still necessary. Assuming however, that the current set of legislative measures (RES, EPBD, ErP Lots 1,2,10,11, EED) is properly and swiftly implemented in member states and that by and far a level playing field for subsidies is achieved, RES technologies, also for heating and cooling should see strong growth in the next six years leading to markets that will mature quickly and are becoming cost competitive with traditional technologies. Many studies reveal, that the cost of a future energy system are rather similar with a big difference in the timing of necessary support. Impact on the use of RES is biggest if action (and financing) is immediate! Instead of considering future support, a strong focus and measures to jump-start efficient, currently available technologies are necessary.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Phase out support schemes over time (please specify for which technologies if applicable)
Please specify for which technologies (if applicable) to phase out support schemes over time	Successful support schemes follow a set target, are transparent, easy to administer, long term and budget independent. They need to be adjustable to changing circumstances. If the target ie cost competitiveness, a certain efficiency etc. is reached, it must be possible to stop them - until then, a gradual phase out should be foreseen to guide the markets into independence.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	An important tool to align support schemes is to base them on a common methodology and on a common benchmark, including the respective markets cost structure. One option could be the calculation of the CO2-savings per Euro invested per technology and region. The obvious difficulty will be to decide on the methodology to use.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	It would actually be helpful to aim for an assessment of all sectors based on a common denominator. Enabling at least a basic comparison of the sectors would make it possible to see where to best invest/provide support in order to channel available funds most efficiently.

B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Lack of commonly agreed technical specifications Lack of information on support schemes or other Lack of credible and certified training and qualification Other (please specify)
C.1.1. Please provide explanations and specific examples where available	- Administrative procedures In the ideal case, administrative procedures are swift and timely. In the case of heat pumps , in particular administrative procedures to obtain a drilling permit is often less dependent on scientific knowledge but depends on local and regional traditions. This makes planning complicated, planning success uncertain and the whole procedure costly. Procedures should be aligned. - Lack of commonly agreed technical specifications Contrary to the aim of the different pieces of legislation being applicable in one European market, Member States are starting to set up additional requirements, often on efficiency and quality. Examples are France and the UK: NF PAC (France) and MCS (UK) are by and large not compatible and require additional testing and administrative steps from manufactures to become eligible for support. The industry strongly supports a drive for better quality, but beliefs that idential requirements would not harm installation quality while at the same time making it easier to sell the same type of products across Europe. - Lack of information on support schemes or other - Lack of credible and certified training and qualification Training and certification is available for heat pumps in most EU countries. The biggest obstacle is, that these systems are often not used by the installers, as the consumer is not asking for quality labels/certificates.
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Other (please specify)
Please specify which other barriers	Many studies reveal, that the total cost of the transition to a future energy system are very comparable with a big difference in the timing of necessary support. Impact on the use of RES is biggest if action (and financing) is immediate! Instead of considering future support, a strong focus and measures to jump-start efficient, currently available technologies are necessary. If immediate action is taken now, most likely the barriers mentioned above will be overcome by 2020.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Other (please specify)

Please specify which other pathways	We beliefe the question should include all renewable energy sources as defined in the 2009/28/EC, thus hydrothermal and aerothermal energy needs to be added. In general, heat pump technology is not getting sufficient recognition on the policy level. Heat pumps are using a huge share of renewable energy, thus replacing fossil fuels and consequently reducing emissions (in general, but in particular at the point of operation). The technology serves as load balancing thus stabilising grids. With respect to cooling - the use of electric heat pumps increases the similarity between electricity supply and demand. Necessary measures are: - integrate all types of ambient heat that can be made useful by heat pumps (air, water and ground) - alignment of policy measures: requirements from building legislation, eco-design, energy efficiency and use of renewables legislation should be based on the same method. Direct comparison should always be possible to guide consumer-decisions, possibly based on CO2-emission reduction per euro invested.
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	In order to tackle the increasing energy demand, energy efficiency needs to be in focus. Heat pumps provide both: they make use of considerable share of RES and at the same time use the still necessary auxiliary energy most efficiently. They serve as multiplicators in case electricity is coming from green sources.

G. RENEWABLES IN TRANSPORT
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?
G.2.1. Please explain your answer

H. SUSTAINABILITY
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?
H.1.1. Please explain

I. REGIONAL AND INTERNATIONAL DIMENSIONS
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?

I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Small scale RES based heating and cooling should be given specific and continuous support. While the technologies are largely available and developed, still many obstacles exist towards their wide spread dissemination in the market place. RES heating and cooling will be a successful augmentation of RES electricity. While it will be covered partly by the smart cities initiative, it is a building block that requires individual support. Heat pumps have seen tremendous growth throughout Europe over the past 5 years, however the technology still has improvement potential on the component and especially on the system level. Heat pump based hybrid systems enable the use of renewables in virtually 100% of all application fields. Their capacity to provide heating and cooling at the same time makes them the preferred choice in office buildings and commercial applications. Industrial applications are possible, but need further research into new refrigerant pairs to increase the covered temperature range.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Existing measures have been successful, where available, but in general, the number of projects supported in the field of deployment under IEE was limited. Larger funding budgets should be made available to enable more continuous research.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	For the case of basic R&D, this seems not plausible, for the case of research into technology deployment, as supported under the IEE program and the future horizon 2020, targets and deadlines should be set.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	National Grid. (steven.thompson@uk.ngrid.com)
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	National Grid UK Tranmsmission.
3. Please indicate your country	United Kingdom
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	While there may be a role for non-binding renewable targets, National Grid can see the benefit of structured CO2 emissions reduction targets at Member State and EU level to provide a framework in which the market can determine the most efficient and cost-effective way to deliver the appropriate fuel-mix, rather than specific renewable energy targets . It is our view that CO2 reduction targets – possibly incorporating a sub-set of renewable energy targets – would be a more appropriate basis for collaborative working.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Other (please specify)

Please specify which other policy elements?	We support appropriate levels of incentives to enable low-carbon generation to progress to connection, however these need to be reviewed on a regular basis to ensure value for money. This policy should support the objective of security / diversity of supply so a balanced generation portfolio is achieved.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	Refer to answer to question A.2 (an example being something similar to the Renewable Obligation Certificates in the UK)
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	Support schemes should be reviewed on a regular basis and adjusted accordingly. This could be achieved automatically through trigger levels or via an annual review.
Please specify for which technologies (if applicable) to phase out support schemes over time	See previous comments.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	Our concerns relate to the length of time it can take to achieve planning consents, not only for the genertion assets but also the associated transmission infrastructure.
C.2. Which policy response to the problems identified above do you consider appropriate?	The approach of the current Directive to lay down a general framework for Member State action is fine

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Other (please specify)
Please specify which other measures	Variability at unprecedented levels will have to be managed, with major implications for the operation of transmission and distribution grids. Demand side measures, smart grids and new interconnections will be needed to balance the system. Research, development and deployment will speed up this development. The challenge the grids face in managing variability will in turn require technological innovation and substantial investments, as well as an appropriate and predictable regulatory framework that provides the network operators with the right incentives.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	

E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	N/A

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Solar thermal Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Different heating requirements need different solutions e.g. use of heat pumps in modern homes while for older, larger properties that are more difficult to insulate a hybrid solution would be more optimal.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Limits of availability of sustainably produced biofuels
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Air
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing binding sustainability criteria are sufficient
H.1.1. Please explain	Providing that the sustainability criteria is successfully implemented and monitored.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	

I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	The North Sea Countries Offshore Grid Initiative should provide the political leadership that is needed at the regional level to optimise the offshore wind potential of the North Sea. It is too early to say if this could be a template for other regions.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Gernot Pehnelt
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Germany
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, an indicative and non-legally binding target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Additional targets on the EU level will set further incentives to invest in technologies that are appropriate to reduce GHG emissions. However, sector specific and legally binding target bear the risk of setting 'wrong' targets and 'picking the wrong technologies'. The most efficient ways to reduce GHG emissions may lay in fields and sectors that are not on top of the political agenda, right now. General targets on the EU-level and/or the national level should be favoured over sectoral targets.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc)

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	Basically, further public financial support should not be neccessary for the introduction and penetration of renewables after 2020. Renewables should be competetive by the year 2020 if the external effects of other technologies (e.g. fossil fuels) are internalised in an appropriate manner and these technologies are not subsidised anymore. Therefore, most support schemes (not only in the energy sector) should be rather phased out over the next decade. However, and this refers to my answer above ('for selected circumstances / markets') public investment in R&D and infrastructure will still be neccessary and relevant in post-2020 years and decades. Research in potential new backstop-technologies should be encouraged and supported by national governments and the EU.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	N/A
B.4. Should the structure of financial support be gradually aligned EU-wide?	N/A
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States should open their support schemes to renewable generation from third countries
Please explain how it could be achieved for third countries	Generally, national support schemes regarding specific existing technologies should be phased out. If Member States and/or the EU want to continue support schemes, they should consider all renewables available, within the EU and elsewhere. Climate change is a global proplem and should be addressed globally, taking renewable generation all over the place into account.
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)

Please specify which support schemes you consider most distorting	National support schemes for certain technologies and/or domestic vs. foreign players are always distorting to some extent. Quotas or proscriptions, for instance, have a tremendous impact on the competitive abilities of the banned products/producers. Other NTBs such as certain sustainability 'standards' and 'criteria' have the potential to seriously affect the competitiveness of foreign products on European markets to a large extent. Tariffs, distorting tax measures, distortive public procurement, national support schemes and the like are clearly distorting competition. Various reports and opinions appear to show this leading to conflict with rules of the World Trade Organisation.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	National energy in the EUR sectors are still dominated by a few players and heavily regulated. The differences in national energy policies and rules are among the biggest obstacles to extending the exisiting grids in order to create a European 'supergrid' that savely connects energy supply an demand (including renewble sources such as wind in the North and sun in the South). These obstacles include connection rules as well as cost-sharing rules and other regulatory issues.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access

D.2.1. Please explain why	I wouldn't call it 'priority' access in the narrower sense but rather 'non-discriminatory' access of all energy sources. Network operators should not be allowed to use their market power in order to discriminate against certain suppliers (especially if network operators are vertically integrated and are energy producers at the same time).
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Other (please specify)

Please specify which other barriers	In the heating market, appropriate and competetive renewable technologies are already available and gained market shares in recent years. Information are available, awareness seems to be widespread among consumers, public support on the national level is sufficient, at least in Germany (the Member State I know best) and there is no serious lack of installers etc. Given this situation, current technologies in the heating and cooling market could be much more efficient in reducing GHG emissions than other quite expensive support schemes (e.g. for photovoltaics in Germany). Therefore, the somehow mislead national support schemes and some distorting measures such as NTB to trade etc might be more important obstacles for a stronger uptake of renewables in the heating and cooling market.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Enhancing energy efficiency (including insulation, smart grids, passive buildings AND the appropriate use renewables etc) is the most promising, most effective and - not least - the most efficient way to reduce GHG emissions. Therefore, energy efficiency should be the focus of further initiatives and support schemes in order to reduce GHG emissions. Renewables (including biomass, waste incineration, geothermal energy in the context of new buildings where appropriate etc) are just one pillar of a successful energy efficiency strategy. However, promoting the use of renewable energy in heating and cooling could contribute to the success of the whole strategy.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of suitable information Limits of availability of sustainably produced biofuels
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for goods Rail
G.2.1. Please explain your answer	Rail in general: - electricity from renewable sources where railroad network electrified. - diesel locomotives probably suitable for a blend of conventional diesel and biodiesel Road for goods: - Introduction of mandatory biofuels/blends for trucks or incentives probably easier than for cars.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement
H.1.1. Please explain	The existing sustainability criteria of RED are already under attack by scientists, producers, consumer organisations and NGOs. There are clearly significant problems with interpreting some of these criteria, understanding them, and complying with them. These criteria also introduce significant costs for producers, particularly those from developing countries. Furthermore, some criteria or their 'realisation' have a certain discriminatory nature, e.g. against non-European producers of biofuels. This is clearly laid out in a study I co-authored ('Recalculating Default Values for Palm Oil'), which shows that the EU calculations regarding the GHG emissions savings potantial of palm oil from South-East Asia are intransparent, incorrect and discriminatory. The discriminatory nature of sustainability criteria not only bears the risk of choosing less efficient biofuels but also a significant potential for trade conflicts. Since global warming is a global problem, it should be addressed on a global scale. When it comes to biofuels, that means that the most efficient and most sustainable sources should be accomplished. Intransparent and scientifically questionable criteria, such as the default values for palm oil and other non-EU feedstocks, are rather distorting markets than bringing the best, most sustainable and most cost-effective available technologies into the marketplace.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)

Please specify how and with whom, i.e. only neighbouring countries or more widely	As mentioned above, the greenhouse-gas effect is a global phenomenon and should be addressed globally. Any country or region in the world might be suitable for implementing technologies that help to reduce GHG emissions (or at least help to curtail the growth of GHG emissions in emerging economies). Especially huge emerging economies like China, India, Brazil, Malaysia and Indonesia provide tremendous opportunities for fruitful cooperation in renewables. EU suppliers could deliver technologies. EU consumers could benefit from imports of sustainable and cost-efficient renewables. The partner countries could benefit from economic development and reliable and sustainable energy supply. And - not least - on a global scale, the money invested in the promotion of renewables might be (re-)allocated more efficiently if the full range of potential partners and technologies is considered. It is clear however, that for such cooperation to be effective, the EU should not continue with discriminatory policies under the RED or other schemes (e.g. GAP). Various studies have shown that the GHG savings potential of non-EU feedstocks (such as palm oil or sugar cane) is significantly undervalued by the EU. Protective and discriminatory policies create conflicts with potential partners outside the EU and rather prevent a fruitful cooperation.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	I don't see a necessity to prioritize investments in certain Member States unless a serious bottleneck can be observed. Building a European supergrid or enhancing the capacity and functionality of the European grid needs a coordinated strategy. An a priory prioritization could rather hinder the negotiations.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Again, an appopriate energy grid seems to be the key, especially when it comes to energy imports from North-Africa to the EU (e.g. DESERTEC). A coordinated investment strategy for the energy grid among the Member States in cooperation with the Southern Mediterranean countries is absolutely neccessary and should be the focus.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Any initiative that helps to enhance the capacities anf the functioning of the energy grid is welcome. The NSCOGI might provide further insights into the very problems and obstacles of the complicated negotiations associated with such huge projects. The experience of this project should by all means applied on a larger scale. A really unified and liberalized electricity market with streamlined contracting and permit-granting for power transmission might be the neccessary condition for a sufficient and sustainable European supergrid.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Although prioritizing from the outset always bears the risk of false positive and false negative, focussing on the chosen technologies seems to make sense right now. However, there might arise new technologies in the years to come that are even more promising than the three covered by the current industrial initiatives. Any support schemes or initiative schould be constantly reviewed.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Public funding should focus on fundamental research in the first place. Such basic research should not be linked to a specific outcome or deadlines. However, the willingnes to spin-offs that bring successful innovations to the market could be supported somehow. But in a market driven economy (which provides the best results with respect to innovation and development), markets are the best place to decide about the success of technologies and products. Governments should provide the right conditions (infrastructure, investment in education, rule of law, efficient administration) by allocating public money correctly rather than trying to pick and directly promote 'future technologies stars'.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	J. van Wingerden, KEMA, janneke.vanwingerden@kema.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Netherlands
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	The target determines the percentage of produced energy that is needed to avoid a severe greenhouse gas effect. To reacht that target, first of all the most importnat effort is to save the use of energy. Clean and efficient generation (e.g. natural gas in stead of coal generetion) of energy is second pillar en third the renewable energy generation is neccessary to avoid greenhouse gas emissions. Those three pillars together determine the complete emission reduction. The market has to find the most efficient ways to generate renewables, therefore a sectoral approach is not advised.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Better financing possibilities

B. FINANCIAL SUPPORT

B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes
Please specify how to make support schemes more market-oriented	Energy has to be generated at the most efficient location. For biomass conversion technology like bio-SNG technology it would be very interesting to generate bio-SNG at a location where large scale biomass is available and transport the renewable gas with the European gas grid. The market detrmines the most efficient location to build this generation plant and the EU could stimulate this project with helps support the renewables target in an efficient way.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	Feed in tarifs without cap create an equal level of playing fiel in all European countries, but the tariffs have to be lowered according to a certain scheme to stimulate the market in lowering the prices and develop technology to make it more (cost) efficient. At this moment there is no equal level of playing field for RES in the EU caused by the different national support schemes.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	The gas, electricity and heat networks are integrating, because local energy generation and smart grids are becomming more common in the EU. Therefore it makes no sense to keep these markets separated, but to leave it up to the market which form of energy is most cost efficient at a certain location. At this moment the transportation market is separated from energy generation, but with developments like natural gas vehicles these markets are also integrating.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	Schemes should converge to a EU level, because energy markets have to open and level of playing field has to be equal.

B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of information on support schemes or other
C.1.1. Please provide explanations and specific examples where available	In the Netherlands the SDE+ support scheme is very complicated, which makes it hard to calculate the cash flow of a RES project in advance. Furthermore it is capped, therefore it is a 'lottery' for the subscribers. This makes it hard to receive financial guarantees, because financial institutions are reluctant to invest in uncertain projects.
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	-
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	Priority of network access and the development of networks for RES is very importnat for RES development. This ensures RES projects by taking away risks.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Enable renewable generators to offer balancing services to TSOs

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Lack of public support Lack of capacity (installers, other)
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Energy efficiency in the built environment is an important development, because houses and public buildings require less heating. Therefore small scale distributed energy systems for heating could become more efficient as large scale (domestic) heating. Smart grids are necessary to match the supply and demand of heat with the right (price) incentives.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of standards Lack of infrastructure Limits of availability of sustainably produced biofuels
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Water
G.2.1. Please explain your answer	Biomethane is suitable fuel for cars and short distance trucking (CNG) and long distance trucking (LNG), but the availability of biomethane in the natural gas grid is low at this moment in most European countries. Development of infrastructure is easy because most countries have a natural gas network. LNG can also be transported by truck or ship. Ships can also be fueled by LNG.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels

H.1.1. Please explain	To compare all energies and fuels a well to wheel analysis for fossil and RES should be obliged. Than the consumer is informed on the CO2 implications of the energy they use. Also for tax purposes a CO2 tax could be used to finance the RES production.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	Desertec is one the promissing large scale solar power projects which need large investments in the interconnection between Maroc and spain and spain and france need to extend.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Alexander Bachler, Landwirtschaftskammer Österreich, a.bachler@lk-oe.at
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Berufsinteressenvertretung der Land u. Forstwirte
3. Please indicate your country	Austria
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Die Aufteilung der Zielwerte auf ein gesamthaftes EU-Ziel und darüberhinaus auf Sektorziele erscheint als die beste Möglichkeit, die in den MS unterschiedlichen Ausgangspositionen und Voraussetzungen zur Zielerreichung optimal ausnutzen zu können. Es sollten auch verpflichtende sektorale Ziele für die MS ausverhandelt werden. Ohne verpflichtende Zielvorgaben wird die derzeitige Politik geschwächt und der weitere Weg in Richtung Erneuerbare Energieträger wird nicht mehr ausreichend konsequent verfolgt.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Other (please specify)
Please specify which other policy elements?	Wirksamer Außenschutz für die innereuropäische Erzeugung nachwachsender Rohstoffe und biogener Energieträger, insbesondere für die innereuropäische Bioethanol- und Biodieselproduktion, durch Aufrechterhaltung der Außenschutzmechanismen wie Einfuhrzölle und einer Maximalimportquote (z.B. 7% des Marktvolumens). Keine weiteren bilateralen Zollabkommen zum Import von Biotreibstoffen und deren Rohstoffen sowie entsprechende genaue Prüfung der Einhaltung der Nachhaltigkeitskriterien aus RL 2009/28/EG Art. 17 bis 19 für außereuropäische Produktionsstätten sowie strenge Kontrolle der Berichtspflichten von Drittländern und deren Bedingungen der land- und forstwirtschaftlichen Produktion im Hinblick auf umweltschonende Wirtschaftsweise und Sozialstandards.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes

Please specify how to make support schemes more market-oriented	Fossile Energieformen werden derzeit rund sechs mal stärker gefördert als erneuerbare Energien - im Jahr 2010 wurden lt. IEA global 409 Mrd. Dollar staatliche Subventionen für fossile Energieträger eingesetzt und nur 66 Mrd. Dollar für erneuerbare Energien - dies bewirkt gemeinsam mit ungerechtfertigten Vorteilen bei der Emissionsberechnung (fragwürdiger fossiler Komparator in RL 2009/28/EG und 2009/30/EG) sowie bei Versicherungen (Haftungsbegrenzung bei Atomkraftwerken) eine starke Marktverzerrung zugunsten fossiler Energieträger! Eine umfassende Darstellung der Kostenwahrheit unter Einbeziehung aller externalisierten Kosten und negativer Umwelteffekte bei fossilen Energieträgern erhöht schlagartig die Marktfähigkeit erneuerbarer Energien! Entwicklung einer eigenen EU-Richtlinie zur verpflichtenden Darstellung der Kostenwahrheit bei fossilen Energieträgern! Erhaltung von Möglichkeiten steuerlicher Begünstigungen für erneuerbare Energieformen, insbesondere auch im Treibstoffbereich und in Hinblick auf Steuerfreiheit der Reinverwendung, keine CO2-Steuerkomponenten für biogene Treibstoffe bzw. sonstige biogene Energieträger! Sämtliche Vorteile auf monetärer und nicht monetärer Ebene für fossile und nukleare Energieträger müssen schnellstmöglich und umfassend beendet werden.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Da in jedem Mitgliedstaat spezifische Gegebenheiten und Entwicklungsstadien bei erneuerbaren Energien bestehen, müssen die Förderungsmechanismen für die unterschiedlichen Technologien in jedem Mitgliedstaat entsprechend individuell optimiert werden. Im Rahmen der Neufassung der Energiesteuerrichtlinie muss die Möglichkeit der steuerlichen Bevorteilung von erneuerbaren Energieträgern, allen voran auch Biotreibstoffen, angelehnt an den Artikel 16 der RL 2003/96/EG, erhalten bleiben. Die vollständige Steuerbefreiung von biogenen Treibstoffen ist ein wesentliches Element in der Marktdurchdringung und Steigerung des Einsatzes selbiger.

B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Wie bereits mehrfach erwähnt, besteht das größte Problem der Marktverzerrung durch fehlende Kostenwahrheit bei fossilen Energieträgern: Verdeckte Subventionen, Bevorzugung in verschiedensten Regelwerken, unfairer Wettbewerb durch überhöhte Marktmacht (zB. Gazprom) und unverhältnismäßig starke Konzentration von riesigen Finanzmitteln bei wenigen Unternehmen (Ölkonzerne) sind einige Beispiele für grobe Marktverzerrungen zu ungunsten erneuerbarer Energieträger.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Other (please specify)
C.1.1. Please provide explanations and specific examples where available	zu C.1.: Einheitliche Rahmenregelungen zur Umsetzung diverser Erfordernisse der EU-Richtlinien müssen durch die Europäische Kommission im Einvernehmensprozess mit den MS geklärt werden und dürfen nicht völlig entkoppelten und mandatslosen Normungsprozessen in abgeschotteten CEN-Gremien überlassen werden. zu.C.1.1.: Ein klares Negativbeispiel für praxisuntaugliche und überbordend komplizierte administrative Prozesse sind die Vorgaben zu Nachhaltigkeitskriterien in der RL 2009/28 EG und die vielfältigen Zeitverzögerungen seitens der Kommission bei deren konkreten Umsetzung sowie die davon entkoppelten unüberschaubaren Prozesse zu Nachhaltigkeitsnormen. Auf der anderen Seite fehlen im Auftrag der Kommission zu erstellende Europäische Normen für die technischen Spezifikationen bei E10 und B10, die ehebaldigst erarbeitet und veröffentlicht werden müssten.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	Statt ständig neue und immer kompliziertere Nachhaltigkeitskriterien für nachwachsende Rohstoffe vorzugeben, muss die Kommission endlich effektive Ethikstandards und Nachhaltigkeitsvorgaben für die Bereitstellung fossiler Energieträger entwickeln. Statt ständig größere Barrieren für die Produktion erneuerbarer Energien zu entwerfen, müssen endlich die Rahmenbedingungen bei der Produktion umweltschädlicher fossiler Energieträger geregelt werden! Umgehende Verabschiedung einer Richtlinie zur Kostenwahrheit sowie zu Ethik-, Umwelt- und Nachhaltigkeitsvorgaben bei der Produktion und Bereitsstellung fossiler Energieträger!

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	Im Rahmen der Regelungen für die Kostenermittlung/-verteilung der Netzkosten von Elektrizität gibt es keine Ausnahmen von z.B. Netzverlustentgelten, Netzzutrittskosten für Ökostrom und die Kosten für allfällig notwendige Netzverstärkungen werden voll und ganz den Ökostromproduzenten angelastet.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	Ohne bevorzugten oder garantierten Netzzugang könnten unüberwindbare bzw. nur sehr schwer überwindbare bürokratische und finanzielle Hürden (Netzzutrittskosten) für kleinere dezentrale Stromerzeuger aufgebaut werden.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)

Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	zu E.1.: Da es keine Kostenwahrheit auf den Energiemärkten gibt, fossile Energieträger deutlich höher subventioniert werden als erneuerbare Energieträger, die bestehenden Regelwerke in vielerlei Hinsicht fossile Energieträger priorisieren und die Monopolstellung bzw. Marktmacht einiger weniger Fossilenergie-Anbieter (z.B. Gazprom) verstärken, müssen durch Förderregime insbesondere dezentrale erneuerbare Energiesysteme noch besser gestärkt werden. zu E.2.: Eine besondere Stärke biogener Energieträger ist die Möglichkeit zur bedarfsgerechten Bereitstellung. Die Photosynthese löst das Speicherproblem, Biomasse kann sowohl zur Grundlastabdeckung als auch bei Bedarfspitzen gezielt eingesetzt werden - im Gegensatz zu unkalkulierbaren Produktionsfluktuationen bei Windkraftwerken oder Photovoltaik-Anlagen.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of public support Lack of capacity (installers, other) Other (please specify)
Please specify which other barriers	Durch geringere Stückzahlen bei der Produktion und gleichzeitig aufwendigeren Anlagenteilen für die Brennstoffbeschickung haben vollautomatische Heizsysteme für biogene Energieträger in der Regel deutlich höhere Investitionskosten als Erdgas- oder Ölfeuerungsanlagen. Die Gewährung von Investitionszuschüssen der Mineralölindustrie zum Tausch von alten Ölkesseln durch neue Ölkessel und die dadurch entstehende Prolongierung der Abhängigkeit von fossilen Heizöl im Wärmesektor auf mehrere Jahrzehnte bei gleichzeitiger Unterversorgung des Treibstoffmarktes mit Dieselkraftstoffen ist höchst kontraproduktiv. De facto wird die Raumwärmeerzeugung mit Heizöl durch die dadurch bewirkten höheren Dieselpreise subventioniert. Die stationäre Verbrennung von fossilen Mitteldestillaten zur Raumwärmeerzeugung müsste daher (mit entsprechenden Übergangsregelungen) EU-weit verboten werden.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Effizienzsteigerung durch zügige Erneuerung des Heizanlagenbestandes: Durch die Verwendung moderner Biomassekessel kann die Energieeffizienz im Vergleich zu veralteten Allesbrennern durch den optimierten Verbrennungsvorgang und dadurch gesteigerten Wirkungsgrad deutlich verbessert werden. Im Zusammenspiel mit Speichertechnologien (Pufferspeicher) sowie Kombinationen mehrerer Heizsysteme (Zentralheizung mit z.B. solarthermischer Anlage) können weitere Effizienzsteigerungen erreicht werden. Der Einsatz von Niedertemperaturheizsystemen und deren Wärmeversorgung mittels Wärmepumpe und Solarthermie hat teilweise Berechtigung, eine generelle Elektrifizierung der Raumwärmeerzeugung (Stromheizungen, Nachtspeicheröfen) ist aber höchst ineffizient und daher strikt abzulehnen.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of standards Lack of infrastructure Lack of awareness Lack of suitable information Other (please specify)
Please specify which other barriers	Unseriöse und emotional gesteuerte Negativkampagnen aus unterschiedlichsten Interessenslagen durch NGOs und sonstige Gruppierungen mit teilweise gezielt falschen Argumenten gegen biogene Treibstoffe zur Generierung von öffentlicher Aufmerksamkeit und/oder Spenden anstelle konstruktiver und sachlicher Beiträge zur Information der Bevölkerung. Bereitschaft der Medien für Negativschlagzeilen bezüglich biogener Treibstoffe in Korrelation zum Werbeetat für fossile Energieträger.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Air

G.2.1. Please explain your answer	Im Personenverkehr auf der Straße kann nach entsprechender Verabschiedung der E10 und B10 Normen durch Erhöhung der Beimischungsquoten eine entsprechende Mehrmenge an biogenen Treibstoffen über die bestehende Infrastruktur in Verkehr gebracht werden. Im Gütertransport wird die Abhängigkeit von flüssigen Treibstoffen aufgund der derzeit nicht praxistauglichen Konzepte zur Elektrifizierung des Antriebsstrangs bei Schwerfahrzeugen noch lange Zeit andauern. Daher wird der Einsatz von biogenen Treibstoffen im Gütertransport steigen. Der Flugsektor ist ebenfalls auf Treibstoffe mit relativ hoher Energiedichte (flüssige Treibstoffe) angewiesen. In diesem Sektor können neben etwaigen Prozesskettenoptimierungen zur Treibhausgasemissionseinsparung keine anderen Alternativen als biogene Treibstoffe eingesetzt werden. Bei der Eisenbahn könnte der Einsatz erneuerbarer Energien einerseits durch den Ausbau und die stärkere Nutzung des öffentlichen Personennah- und -fernverkehrs sowie andererseits durch den stetig steigenden Ökostromanteil im Strommix der MS/EU gesteigert werden.

H. SUSTAINABILITY

H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement No, the existing binding sustainability criteria are sufficient

H.1.1. Please explain	In den MS der EU gelten seit Jahrzehnten sehr klare Forstgesetze zur nachhaltigen Biomasseproduktion im Wald und gut eingeführte Nachhaltigkeitsregeln in der Landwirtschaft (Cross Compliance). Die Einführung neuer zusätzlicher Nachhaltigkeitskriterien bedingt zusätzliche Bürokratie und höhere Kosten für die biogenen Energieträger. Gleichzeitig werden fossile Energieträger massiv bevorteilt (Emissionsberechnung) und durch die Nichteinbeziehung von Externalitäten (Umweltkatastrophen, Beschaffungskosten, usw.) zusätzlich massiv finanziell gefördert. Durch die weitere Verschärfung der bestehenden Kriterien und oder zusätzliche Einführung von neuen Nachhaltigkeitsregelungen für nachwachsende Rohstoffe würde eine weitere Marktverzerrung zu Ungunsten der erneuerbaren Energieträger bewirkt werden - dies ist strikt abzulehnen. Statt ständig neue Kriterien und Barrieren für die Produktion nachwachsender Rohstoffe innerhalb der EU zu entwickeln, sollte die Kommission umgehend eine Richtlinie für Mindestvorgaben zur Kostenwahrheit und Ethik-, Umwelt- und Nachhaltigkeitsstandards bei der Produktion fossiler Energieträger entwickeln und in Kraft setzen!

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Kooperationen beim Technologietransfer in allen Bereichen der erneuerbaren Energien und auf allen Ebenen der Forschung und Entwicklung. In Teilbereichen der landwirtschaftlichen Produktion (beispielsweise Ölsaaten) können verstärkte Kooperationen (allen voran mit den angrenzenden Nachbarstaaten - Balkanländer, Ukraine, Weißrussland) zu einer effizienteren Nutzung der umfangreich verfügbaren Brachflächen und Ertragssteigerungspotentialen führen.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)

Please explain why	Regionale Ver- und Entsorgungskonzepte für überschaubare Energieerzeugungs-Einheiten mit klaren Wertschöpfungseffekten in ländlichen Gebieten sind gegenüber Megaprojekten zur Stromerzeugung zu bevorzugen. Die Priorität sollte daher auf optimale Lösungen für dezentrale Energieversorgungskonzepte gelenkt werden. Versorgungssicherheit mit Energie kann in Krisensituationen mit regionalen Konzepten am besten gewährleistet werden. Die Infrastruktur für Megaprojekte (tausende Kilometer Öl-, Gas- und/oder Stromleitungen) kann im Krisenfall rasch lahmgelegt werden.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Vorrang muss jedenfalls die gesteigerte erneuerbare Energie-Produktion innerhalb der EU haben. Versorgungssicherheit der EU kann nicht durch Megaprojekte in politisch instabilen Drittländern erreicht werden, auch nicht mit Solarkraftwerken.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Die priorisierte Zielrichtung für bessere Versorgungssicherheit sollten dezentrale regionale Energie-Versorgungskonzepte sein - und nicht zentralisierte Großeinheiten mit riesigen Transferverlusten und -kosten. Umso näher Energieerzeugung und Energieverbrauch räumlich intelligent organisiert und optimal integriert werden können (Smart Grids), umso besser.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Other (please specify)

Please specify which other key challenges	Der SET-Plan fokussiert auf Großanlagen - im Bereich der erneuerbaren Energien und insbesondere im Bereich der nachwachsenden Rohstoffe ist die Gesamteffizienz von Systemen mit überschaubaren Ver- und Entsorgungskonzepten bei kurzen Wegen wesentlich besser als bei Großanlagen. Der SET-Plan zielt daher an den Kernanforderungen für erfolgreiche Systeme mit klarem Regionsbezug vorbei.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Der Fokus muss auf die Optimierung kleiner und mittlerer Energieerzeugungs- und -versorgungssysteme gelegt werden.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Biomassegewinnung durch neue Produktionsbereiche (Algen, Mikroalgen, etc.); Reststoffnutzung der agrarischen Produktion (z.B. Maisspindel, Stroh); Optimierung kaskadischer Nutzungspfade in der Biomasseverwertung
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Forschung und Entwicklung an Demonstrationsanlagen, häufig mit unrealistischen Kostenansätzen für "upscaling" bei Rohstoffkosten. Mehrere Beispiele für Konzepte bei biogener Treibstoffproduktion in 2. Generation mit völlig marktfremden Preiskalkulationen.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Ja. Anderenfalls gibt es seitens der Forschung und Industrie zu geringe Anstrengungen zur Steigerung der Effizienz/Verbesserung der Technologie. Ein Beispiel dafür ist der CO2-Ausstoss der Fahrzeuge - auf Basis der freiwilligen Vereinbarung der Autoindustrie konnten keine größeren Fortschritte in der CO2-Reduktion festgestellt werden. Erst seit ein verbindliches Ziel (mit Sanktionen) besteht, können merkliche Fortschritte festgestellt werden.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Kasimir Nemestothy, Landwirtschaftskammer Österreich, k.nemestothy@lk-oe.at
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Berufsinteressenvertretung der Land- und Forstwirt
3. Please indicate your country	Austria
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Die Aufteilung der Zielwerte auf ein gesamthaftes EU-Ziel und darüberhinaus auf Sektorziele erscheint als die beste Möglichkeit, die in den MS unterschiedlichen Ausgangspositionen und Voraussetzungen zur Zielerreichung optimal ausnutzen zu können. Es sollten auch verpflichtende sektorale Ziele für die MS ausverhandelt werden. Ohne verpflichtende Zielvorgaben wird die derzeitige Politik geschwächt und der weitere Weg in Richtung Erneuerbare Energieträger wird nicht mehr ausreichend konsequent verfolgt.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Other (please specify)
Please specify which other policy elements?	Wirksamer Außenschutz für die innereuropäische Erzeugung nachwachsender Rohstoffe und biogener Energieträger, insbesondere für die innereuropäische Bioethanol- und Biodieselproduktion, durch Aufrechterhaltung der Außenschutzmechanismen wie Einfuhrzölle und einer Maximalimportquote (z.B. 7% des Marktvolumens). Keine weiteren bilateralen Zollabkommen zum Import von Biotreibstoffen und deren Rohstoffen sowie entsprechende genaue Prüfung der Einhaltung der Nachhaltigkeitskriterien aus RL 2009/28/EG Art. 17 bis 19 für außereuropäische Produktionsstätten sowie strenge Kontrolle der Berichtspflichten von Drittländern und deren Bedingungen der land- und forstwirtschaftlichen Produktion im Hinblick auf umweltschonende Wirtschaftsweise und Sozialstandards.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes

Please specify how to make support schemes more market-oriented	Fossile Energieformen werden derzeit rund sechs mal stärker gefördert als erneuerbare Energien - im Jahr 2010 wurden lt. IEA global 409 Mrd. Dollar staatliche Subventionen für fossile Energieträger eingesetzt und nur 66 Mrd. Dollar für erneuerbare Energien - dies bewirkt gemeinsam mit ungerechtfertigten Vorteilen bei der Emissionsberechnung (fragwürdiger fossiler Komparator in RL 2009/28/EG und 2009/30/EG) sowie bei Versicherungen (Haftungsbegrenzung bei Atomkraftwerken) eine starke Marktverzerrung zugunsten fossiler Energieträger! Eine umfassende Darstellung der Kostenwahrheit unter Einbeziehung aller externalisierten Kosten und negativer Umwelteffekte bei fossilen Energieträgern erhöht schlagartig die Marktfähigkeit erneuerbarer Energien! Entwicklung einer eigenen EU-Richtlinie zur verpflichtenden Darstellung der Kostenwahrheit bei fossilen Energieträgern! Erhaltung von Möglichkeiten steuerlicher Begünstigungen für erneuerbare Energieformen, insbesondere auch im Treibstoffbereich und in Hinblick auf Steuerfreiheit der Reinverwendung, keine CO2-Steuerkomponenten für biogene Treibstoffe bzw. sonstige biogene Energieträger! Sämtliche Vorteile auf monetärer und nicht monetärer Ebene für fossile und nukleare Energieträger müssen schnellstmöglich und umfassend beendet werden.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Da in jedem Mitgliedstaat spezifische Gegebenheiten und Entwicklungsstadien bei erneuerbaren Energien bestehen, müssen die Förderungsmechanismen für die unterschiedlichen Technologien in jedem Mitgliedstaat entsprechend individuell optimiert werden. Im Rahmen der Neufassung der Energiesteuerrichtlinie muss die Möglichkeit der steuerlichen Bevorteilung von erneuerbaren Energieträgern, allen voran auch Biotreibstoffen, angelehnt an den Artikel 16 der RL 2003/96/EG, erhalten bleiben. Die vollständige Steuerbefreiung von biogenen Treibstoffen ist ein wesentliches Element in der Marktdurchdringung und Steigerung des Einsatzes selbiger.

B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Wie bereits mehrfach erwähnt, besteht das größte Problem der Marktverzerrung durch fehlende Kostenwahrheit bei fossilen Energieträgern: Verdeckte Subventionen, Bevorzugung in verschiedensten Regelwerken, unfairer Wettbewerb durch überhöhte Marktmacht (zB. Gazprom) und unverhältnismäßig starke Konzentration von riesigen Finanzmitteln bei wenigen Unternehmen (Ölkonzerne) sind einige Beispiele für grobe Marktverzerrungen zu ungunsten erneuerbarer Energieträger.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Other (please specify)
C.1.1. Please provide explanations and specific examples where available	zu C.1.: Einheitliche Rahmenregelungen zur Umsetzung diverser Erfordernisse der EU-Richtlinien müssen durch die Europäische Kommission im Einvernehmensprozess mit den MS geklärt werden und dürfen nicht völlig entkoppelten und mandatslosen Normungsprozessen in abgeschotteten CEN-Gremien überlassen werden. zu C.1.1.: Ein klares Negativbeispiel für praxisuntaugliche und überbordend komplizierte administrative Prozesse sind die Vorgaben zu Nachhaltigkeitskriterien in der RL 2009/28 EG und die vielfältigen Zeitverzögerungen seitens der Kommission bei deren konkreten Umsetzung sowie die davon entkoppelten unüberschaubaren Prozesse zu Nachhaltigkeitsnormen. Auf der anderen Seite fehlen im Auftrag der Kommission zu erstellende Europäische Normen für die technischen Spezifikationen bei E10 und B10, die ehebaldigst erarbeitet und veröffentlicht werden müssten.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	Statt ständig neue und immer kompliziertere Nachhaltigkeitskriterien für nachwachsende Rohstoffe vorzugeben, muss die Kommission endlich effektive Ethikstandards und Nachhaltigkeitsvorgaben für die Bereitstellung fossiler Energieträger entwickeln. Statt ständig größere Barrieren für die Produktion erneuerbarer Energien zu entwerfen, müssen endlich die Rahmenbedingungen bei der Produktion umweltschädlicher fossiler Energieträger geregelt werden! Umgehende Verabschiedung einer Richtlinie zur Kostenwahrheit sowie zu Ethik-, Umwelt- und Nachhaltigkeitsvorgaben bei der Produktion und Bereitsstellung fossiler Energieträger!

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	Im Rahmen der Regelungen für die Kostenermittlung/-verteilung der Netzkosten von Elektrizität gibt es keine Ausnahmen von z.B. Netzverlustentgelten, Netzzutrittskosten für Ökostrom und die Kosten für allfällig notwendige Netzverstärkungen werden voll und ganz den Ökostromproduzenten angelastet.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	Ohne bevorzugten oder garantierten Netzzugang könnten unüberwindbare bzw. nur sehr schwer überwindbare bürokratische und finanzielle Hürden (Netzzutrittskosten) für kleinere dezentrale Stromerzeuger aufgebaut werden.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)

Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	E.1.: Da es keine Kostenwahrheit auf den Energiemärkten gibt, fossile Energieträger deutlich höher subventioniert werden als erneuerbare Energieträger, die bestehenden Regelwerke in vielerlei Hinsicht fossile Energieträger priorisieren und die Monopolstellung bzw. Marktmacht einiger weniger Fossilenergie-Anbieter (z.B. Gazprom) verstärken, müssen durch Förderregime insbesondere dezentrale erneuerbare Energiesysteme noch besser gestärkt werden. E.2.: Eine besondere Stärke biogener Energieträger ist die Möglichkeit zur bedarfsgerechten Bereitstellung. Die Photosynthese löst das Speicherproblem, Biomasse kann sowohl zur Grundlastabdeckung als auch bei Bedarfspitzen gezielt eingesetzt werden - im Gegensatz zu unkalkulierbaren Produktionsfluktuationen bei Windkraftwerken oder Photovoltaik-Anlagen.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of public support Lack of capacity (installers, other) Other (please specify)
Please specify which other barriers	Durch geringere Stückzahlen bei der Produktion und gleichzeitig aufwendigeren Anlagenteilen für die Brennstoffbeschickung haben vollautomatische Heizsysteme für biogene Energieträger in der Regel deutlich höhere Investitionskosten als Erdgas- oder Ölfeuerungsanlagen. Die Gewährung von Investitionszuschüssen der Mineralölindustrie zum Tausch von alten Ölkesseln durch neue Ölkessel und die dadurch entstehende Prolongierung der Abhängigkeit von fossilen Heizöl im Wärmesektor auf mehrere Jahrzehnte bei gleichzeitiger Unterversorgung des Treibstoffmarktes mit Dieselkraftstoffen ist höchst kontraproduktiv. De facto wird die Raumwärmeerzeugung mit Heizöl durch die dadurch bewirkten höheren Dieselpreise subventioniert. Die stationäre Verbrennung von fossilen Mitteldestillaten zur Raumwärmeerzeugung müsste daher (mit entsprechenden Übergangsregelungen) EU-weit verboten werden.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Effizienzsteigerung durch zügige Erneuerung des Heizanlagenbestandes: Durch die Verwendung moderner Biomassekessel kann die Energieeffizienz im Vergleich zu veralteten Allesbrennern durch den optimierten Verbrennungsvorgang und dadurch gesteigerten Wirkungsgrad deutlich verbessert werden. Im Zusammenspiel mit Speichertechnologien (Pufferspeicher) sowie Kombinationen mehrerer Heizsysteme (Zentralheizung mit z.B. solarthermischer Anlage) können weitere Effizienzsteigerungen erreicht werden. Der Einsatz von Niedertemperaturheizsystemen und deren Wärmeversorgung mittels Wärmepumpe und Solarthermie hat teilweise Berechtigung, eine generelle Elektrifizierung der Raumwärmeerzeugung (Stromheizungen, Nachtspeicheröfen) ist aber höchst ineffizient und daher strikt abzulehnen.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of standards Lack of infrastructure Lack of awareness Other (please specify)
Please specify which other barriers	Unseriöse und emotional gesteuerte Negativkampagnen aus unterschiedlichsten Interessenslagen durch NGOs und sonstige Gruppierungen mit teilweise gezielt falschen Argumenten gegen biogene Treibstoffe zur Generierung von öffentlicher Aufmerksamkeit und/oder Spenden anstelle konstruktiver und sachlicher Beiträge zur Information der Bevölkerung. Bereitschaft der Medien für Negativschlagzeilen bezüglich biogener Treibstoffe in Korrelation zum Werbeetat für fossile Energieträger.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Air

G.2.1. Please explain your answer	Im Personenverkehr auf der Straße kann nach entsprechender Verabschiedung der E10 und B10 Normen durch Erhöhung der Beimischungsquoten eine entsprechende Mehrmenge an biogenen Treibstoffen über die bestehende Infrastruktur in Verkehr gebracht werden. Im Gütertransport wird die Abhängigkeit von flüssigen Treibstoffen aufgund der derzeit nicht praxistauglichen Konzepte zur Elektrifizierung des Antriebsstrangs bei Schwerfahrzeugen noch lange Zeit andauern. Daher wird der Einsatz von biogenen Treibstoffen im Gütertransport steigen. Der Flugsektor ist ebenfalls auf Treibstoffe mit relativ hoher Energiedichte (flüssige Treibstoffe) angewiesen. In diesem Sektor können neben etwaigen Prozesskettenoptimierungen zur Treibhausgasemissionseinsparung keine anderen Alternativen als biogene Treibstoffe eingesetzt werden. Bei der Eisenbahn könnte der Einsatz erneuerbarer Energien einerseits durch den Ausbau und die stärkere Nutzung des öffentlichen Personennah- und -fernverkehrs sowie andererseits durch den stetig steigenden Ökostromanteil im Strommix der MS/EU gesteigert werden.

H. SUSTAINABILITY

H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement No, the existing binding sustainability criteria are sufficient

H.1.1. Please explain	In den MS der EU gelten seit Jahrzehnten sehr klare Forstgesetze zur nachhaltigen Biomasseproduktion im Wald und gut eingeführte Nachhaltigkeitsregeln in der Landwirtschaft (Cross Compliance). Die Einführung neuer zusätzlicher Nachhaltigkeitskriterien bedingt zusätzliche Bürokratie und höhere Kosten für die biogenen Energieträger. Gleichzeitig werden fossile Energieträger massiv bevorteilt (Emissionsberechnung) und durch die Nichteinbeziehung von Externalitäten (Umweltkatastrophen, Beschaffungskosten, usw.) zusätzlich massiv finanziell gefördert. Durch die weitere Verschärfung der bestehenden Kriterien und oder zusätzliche Einführung von neuen Nachhaltigkeitsregelungen für nachwachsende Rohstoffe würde eine weitere Marktverzerrung zu Ungunsten der erneuerbaren Energieträger bewirkt werden - dies ist strikt abzulehnen. Statt ständig neue Kriterien und Barrieren für die Produktion nachwachsender Rohstoffe innerhalb der EU zu entwickeln, sollte die Kommission umgehend eine Richtlinie für Mindestvorgaben zur Kostenwahrheit und Ethik-, Umwelt- und Nachhaltigkeitsstandards bei der Produktion fossiler Energieträger entwickeln und in Kraft setzen!

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Kooperationen beim Technologietransfer in allen Bereichen der erneuerbaren Energien und auf allen Ebenen der Forschung und Entwicklung. In Teilbereichen der landwirtschaftlichen Produktion (beispielsweise Ölsaaten) können verstärkte Kooperationen (allen voran mit den angrenzenden Nachbarstaaten - Balkanländer, Ukraine, Weißrussland) zu einer effizienteren Nutzung der umfangreich verfügbaren Brachflächen und Ertragssteigerungspotentialen führen.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)

Please explain why	Regionale Ver- und Entsorgungskonzepte für überschaubare Energieerzeugungs-Einheiten mit klaren Wertschöpfungseffekten in ländlichen Gebieten sind gegenüber Megaprojekten zur Stromerzeugung zu bevorzugen. Die Priorität sollte daher auf optimale Lösungen für dezentrale Energieversorgungskonzepte gelenkt werden. Versorgungssicherheit mit Energie kann in Krisensituationen mit regionalen Konzepten am besten gewährleistet werden. Die Infrastruktur für Megaprojekte (tausende Kilometer Öl-, Gas- und/oder Stromleitungen) kann im Krisenfall rasch lahmgelegt werden.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Vorrang muss jedenfalls die gesteigerte erneuerbare Energie-Produktion innerhalb der EU haben. Versorgungssicherheit der EU kann nicht durch Megaprojekte in politisch instabilen Drittländern erreicht werden, auch nicht mit Solarkraftwerken.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Die priorisierte Zielrichtung für bessere Versorgungssicherheit sollten dezentrale regionale Energie-Versorgungskonzepte sein - und nicht zentralisierte Großeinheiten mit riesigen Transferverlusten und -kosten. Umso näher Energieerzeugung und Energieverbrauch räumlich intelligent organisiert und optimal integriert werden können (Smart Grids), umso besser.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Other (please specify)

Please specify which other key challenges	Der SET-Plan fokussiert auf Großanlagen - im Bereich der erneuerbaren Energien und insbesondere im Bereich der nachwachsenden Rohstoffe ist die Gesamteffizienz von Systemen mit überschaubaren Ver- und Entsorgungskonzepten bei kurzen Wegen wesentlich besser als bei Großanlagen. Der SET-Plan zielt daher an den Kernanforderungen für erfolgreiche Systeme mit klarem Regionsbezug vorbei.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Der Fokus muss auf die Optimierung kleiner und mittlerer Energieerzeugungs- und -versorgungssysteme gelegt werden.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Biomassegewinnung durch neue Produktionsbereiche (Algen, Mikroalgen, etc.); Reststoffnutzung der agrarischen Produktion (z.B. Maisspindel, Stroh); Optimierung kaskadischer Nutzungspfade in der Biomasseverwertung
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Forschung und Entwicklung an Demonstrationsanlagen, häufig mit unrealistischen Kostenansätzen für "upscaling" bei Rohstoffkosten. Mehrere Beispiele für Konzepte bei biogener Treibstoffproduktion in 2. Generation mit völlig marktfremden Preiskalkulationen.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Ja. Anderenfalls gibt es seitens der Forschung und Industrie zu geringe Anstrengungen zur Steigerung der Effizienz/Verbesserung der Technologie. Ein Beispiel dafür ist der CO2-Ausstoss der Fahrzeuge - auf Basis der freiwilligen Vereinbarung der Autoindustrie konnten keine größeren Fortschritte in der CO2-Reduktion festgestellt werden. Erst seit ein verbindliches Ziel (mit Sanktionen) besteht, können merkliche Fortschritte festgestellt werden.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	RNDr. Radomír Čevelík, Insitute for testing and certification, a.s., director@itczlin.cz
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Testing and certification, NB 1023
3. Please indicate your country	Czech Republic
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	No
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	None of the above
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should bear greater responsibility for system costs
E.2. How can it be ensured that market arrangements reward flexibility?	Current market arrangements are sufficient to reward flexibility

E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Lack of suitable information
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of infrastructure Lack of suitable information
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail Air
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing binding sustainability criteria are sufficient
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness Industrial manufacturing and supply chain
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Not successful
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Waldverband Österreich, waldverband@lk-oe.at
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Interessenvertretung Forstwirtschaft, Kleinwald
3. Please indicate your country	Austria
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Die Aufteilung der Zielwerte auf ein gemeinsames EU-Ziel und darüberhinaus auf Sektorziele erscheint als die beste Möglichkeit, die in den MS unterschiedlichen Ausgangspositionen und Voraussetzungen zur Zielerreichung optimal ausnutzen zu können. Es sollten auch verpflichtende sektorale Ziele für die MS ausverhandelt werden. Ohne verpflichtende Zielvorgaben wird die derzeitige Politik geschwächt und der weitere Weg in Richtung Erneuerbare Energieträger wird nicht mehr ausreichend konsequent verfolgt.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Other (please specify)
Please specify which other policy elements?	Wirksamer Außenschutz für die innereuropäische Erzeugung nachwachsender Rohstoffe und biogener Energieträger, insbesondere für die innereuropäische Bioethanol- und Biodieselproduktion, durch Aufrechterhaltung der Außenschutzmechanismen wie Einfuhrzölle und einer Maximalimportquote (z.B. 7% des Marktvolumens). Keine weiteren bilateralen Zollabkommen zum Import von Biotreibstoffen und deren Rohstoffen sowie entsprechende genaue Prüfung der Einhaltung der Nachhaltigkeitskriterien aus RL 2009/28/EG Art. 17 bis 19 für außereuropäische Produktionsstätten sowie strenge Kontrolle der Berichtspflichten von Drittländern und deren Bedingungen der land- und forstwirtschaftlichen Produktion im Hinblick auf umweltschonende Wirtschaftsweise und Sozialstandards.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes

Please specify how to make support schemes more market-oriented	Fossile Energieformen werden derzeit rund sechs mal stärker gefördert als erneuerbare Energien - im Jahr 2010 wurden lt. IEA global 409 Mrd. Dollar staatliche Subventionen für fossile Energieträger eingesetzt und nur 66 Mrd. Dollar für erneuerbare Energien - dies bewirkt gemeinsam mit ungerechtfertigten Vorteilen bei der Emissionsberechnung (fragwürdiger fossiler Komparator in RL 2009/28/EG und 2009/30/EG) sowie bei Versicherungen (Haftungsbegrenzung bei Atomkraftwerken) eine starke Marktverzerrung zugunsten fossiler Energieträger! Eine umfassende Darstellung der Kostenwahrheit unter Einbeziehung aller externalisierten Kosten und negativer Umwelteffekte bei fossilen Energieträgern erhöht schlagartig die Marktfähigkeit erneuerbarer Energien! Entwicklung einer eigenen EU-Richtlinie zur verpflichtenden Darstellung der Kostenwahrheit bei fossilen Energieträgern! Erhaltung von Möglichkeiten steuerlicher Begünstigungen für erneuerbare Energieformen, insbesondere auch im Treibstoffbereich und in Hinblick auf Steuerfreiheit der Reinverwendung, keine CO2-Steuerkomponenten für biogene Treibstoffe bzw. sonstige biogene Energieträger! Sämtliche Vorteile auf monetärer und nicht monetärer Ebene für fossile und nukleare Energieträger müssen schnellstmöglich und umfassend beendet werden.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Da in jedem Mitgliedstaat spezifische Gegebenheiten und Entwicklungsstadien bei erneuerbaren Energien bestehen, müssen die Förderungsmechanismen für die unterschiedlichen Technologien in jedem Mitgliedstaat entsprechend individuell optimiert werden. Im Rahmen der Neufassung der Energiesteuerrichtlinie muss die Möglichkeit der steuerlichen Bevorteilung von erneuerbaren Energieträgern, allen voran auch Biotreibstoffen, angelehnt an den Artikel 16 der RL 2003/96/EG, erhalten bleiben. Die vollständige Steuerbefreiung von biogenen Treibstoffen ist ein wesentliches Element in der Marktdurchdringung und Steigerung des Einsatzes selbiger.

B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Wie bereits mehrfach erwähnt, besteht das größte Problem der Marktverzerrung durch fehlende Kostenwahrheit bei fossilen Energieträgern: Verdeckte Subventionen, Bevorzugung in verschiedensten Regelwerken, unfairer Wettbewerb durch überhöhte Marktmacht (zB. Gazprom) und unverhältnismäßig starke Konzentration von riesigen Finanzmitteln bei wenigen Unternehmen (Ölkonzerne) sind einige Beispiele für grobe Marktverzerrungen zu ungunsten erneuerbarer Energieträger.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Other (please specify)
C.1.1. Please provide explanations and specific examples where available	zu C.1.: Einheitliche Rahmenregelungen zur Umsetzung diverser Erfordernisse der EU-Richtlinien müssen durch die Europäische Kommission im Einvernehmensprozess mit den MS geklärt werden und dürfen nicht völlig entkoppelten und mandatslosen Normungsprozessen in abgeschotteten CEN-Gremien überlassen werden. zu C.1.1.: Ein klares Negativbeispiel für praxisuntaugliche und überbordend komplizierte administrative Prozesse sind die Vorgaben zu Nachhaltigkeitskriterien in der RL 2009/28 EG und die vielfältigen Zeitverzögerungen seitens der Kommission bei deren konkreten Umsetzung sowie die davon entkoppelten unüberschaubaren Prozesse zu Nachhaltigkeitsnormen. Auf der anderen Seite fehlen im Auftrag der Kommission zu erstellende Europäische Normen für die technischen Spezifikationen bei E10 und B10, die ehebaldigst erarbeitet und veröffentlicht werden müssten.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	Statt ständig neue und immer kompliziertere Nachhaltigkeitskriterien für nachwachsende Rohstoffe vorzugeben, muss die Kommission endlich effektive Ethikstandards und Nachhaltigkeitsvorgaben für die Bereitstellung fossiler Energieträger entwickeln. Statt ständig größere Barrieren für die Produktion erneuerbarer Energien zu entwerfen, müssen endlich die Rahmenbedingungen bei der Produktion umweltschädlicher fossiler Energieträger geregelt werden! Umgehende Verabschiedung einer Richtlinie zur Kostenwahrheit sowie zu Ethik-, Umwelt- und Nachhaltigkeitsvorgaben bei der Produktion und Bereitsstellung fossiler Energieträger!

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	Im Rahmen der Regelungen für die Kostenermittlung/-verteilung der Netzkosten von Elektrizität gibt es keine Ausnahmen von z.B. Netzverlustentgelten, Netzzutrittskosten für Ökostrom und die Kosten für allfällig notwendige Netzverstärkungen werden voll und ganz den Ökostromproduzenten angelastet.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	Ohne bevorzugten oder garantierten Netzzugang könnten unüberwindbare bzw. nur sehr schwer überwindbare bürokratische und finanzielle Hürden (Netzzutrittskosten) für kleinere dezentrale Stromerzeuger aufgebaut werden.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)

Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	zu E.1.: Da es keine Kostenwahrheit auf den Energiemärkten gibt, fossile Energieträger deutlich höher subventioniert werden als erneuerbare Energieträger, die bestehenden Regelwerke in vielerlei Hinsicht fossile Energieträger priorisieren und die Monopolstellung bzw. Marktmacht einiger weniger Fossilenergie-Anbieter (z.B. Gazprom) verstärken, müssen durch Förderregime insbesondere dezentrale erneuerbare Energiesysteme noch besser gestärkt werden. zu E.2.: Eine besondere Stärke biogener Energieträger ist die Möglichkeit zur bedarfsgerechten Bereitstellung. Die Photosynthese löst das Speicherproblem, Biomasse kann sowohl zur Grundlastabdeckung als auch bei Bedarfspitzen gezielt eingesetzt werden - im Gegensatz zu unkalkulierbaren Produktionsfluktuationen bei Windkraftwerken oder Photovoltaik-Anlagen.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of public support Lack of capacity (installers, other) Other (please specify)
Please specify which other barriers	Durch geringere Stückzahlen bei der Produktion und gleichzeitig aufwendigeren Anlagenteilen für die Brennstoffbeschickung haben vollautomatische Heizsysteme für biogene Energieträger in der Regel deutlich höhere Investitionskosten als Erdgas- oder Ölfeuerungsanlagen. Die Gewährung von Investitionszuschüssen der Mineralölindustrie zum Tausch von alten Ölkesseln durch neue Ölkessel und die dadurch entstehende Prolongierung der Abhängigkeit von fossilen Heizöl im Wärmesektor auf mehrere Jahrzehnte bei gleichzeitiger Unterversorgung des Treibstoffmarktes mit Dieselkraftstoffen ist höchst kontraproduktiv. De facto wird die Raumwärmeerzeugung mit Heizöl durch die dadurch bewirkten höheren Dieselpreise subventioniert. Die stationäre Verbrennung von fossilen Mitteldestillaten zur Raumwärmeerzeugung müsste daher (mit entsprechenden Übergangsregelungen) EU-weit verboten werden.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Effizienzsteigerung durch zügige Erneuerung des Heizanlagenbestandes: Durch die Verwendung moderner Biomassekessel kann die Energieeffizienz im Vergleich zu veralteten Allesbrennern durch den optimierten Verbrennungsvorgang und dadurch gesteigerten Wirkungsgrad deutlich verbessert werden. Im Zusammenspiel mit Speichertechnologien (Pufferspeicher) sowie Kombinationen mehrerer Heizsysteme (Zentralheizung mit z.B. solarthermischer Anlage) können weitere Effizienzsteigerungen erreicht werden. Der Einsatz von Niedertemperaturheizsystemen und deren Wärmeversorgung mittels Wärmepumpe und Solarthermie hat teilweise Berechtigung, eine generelle Elektrifizierung der Raumwärmeerzeugung (Stromheizungen, Nachtspeicheröfen) ist aber höchst ineffizient und daher strikt abzulehnen.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of standards Lack of infrastructure Lack of suitable information Other (please specify)
Please specify which other barriers	Unseriöse und emotional gesteuerte Negativkampagnen aus unterschiedlichsten Interessenslagen durch NGOs und sonstige Gruppierungen mit teilweise gezielt falschen Argumenten gegen biogene Treibstoffe zur Generierung von öffentlicher Aufmerksamkeit und/oder Spenden anstelle konstruktiver und sachlicher Beiträge zur Information der Bevölkerung. Bereitschaft der Medien für Negativschlagzeilen bezüglich biogener Treibstoffe in Korrelation zum Werbeetat für fossile Energieträger.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Air

G.2.1. Please explain your answer	Im Personenverkehr auf der Straße kann nach entsprechender Verabschiedung der E10 und B10 Normen durch Erhöhung der Beimischungsquoten eine entsprechende Mehrmenge an biogenen Treibstoffen über die bestehende Infrastruktur in Verkehr gebracht werden. Im Gütertransport wird die Abhängigkeit von flüssigen Treibstoffen aufgund der derzeit nicht praxistauglichen Konzepte zur Elektrifizierung des Antriebsstrangs bei Schwerfahrzeugen noch lange Zeit andauern. Daher wird der Einsatz von biogenen Treibstoffen im Gütertransport steigen. Der Flugsektor ist ebenfalls auf Treibstoffe mit relativ hoher Energiedichte (flüssige Treibstoffe) angewiesen. In diesem Sektor können neben etwaigen Prozesskettenoptimierungen zur Treibhausgasemissionseinsparung keine anderen Alternativen als biogene Treibstoffe eingesetzt werden. Bei der Eisenbahn könnte der Einsatz erneuerbarer Energien einerseits durch den Ausbau und die stärkere Nutzung des öffentlichen Personennah- und -fernverkehrs sowie andererseits durch den stetig steigenden Ökostromanteil im Strommix der MS/EU gesteigert werden.

H. SUSTAINABILITY

H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement No, the existing binding sustainability criteria are sufficient

H.1.1. Please explain	In den MS der EU gelten seit Jahrzehnten sehr klare Forstgesetze zur nachhaltigen Biomasseproduktion im Wald und gut eingeführte Nachhaltigkeitsregeln in der Landwirtschaft (Cross Compliance). Die Einführung neuer zusätzlicher Nachhaltigkeitskriterien bedingt zusätzliche Bürokratie und höhere Kosten für die biogenen Energieträger. Gleichzeitig werden fossile Energieträger massiv bevorteilt (Emissionsberechnung) und durch die Nichteinbeziehung von Externalitäten (Umweltkatastrophen, Beschaffungskosten, usw.) zusätzlich massiv finanziell gefördert. Durch die weitere Verschärfung der bestehenden Kriterien und oder zusätzliche Einführung von neuen Nachhaltigkeitsregelungen für nachwachsende Rohstoffe würde eine weitere Marktverzerrung zu Ungunsten der erneuerbaren Energieträger bewirkt werden - dies ist strikt abzulehnen. Statt ständig neue Kriterien und Barrieren für die Produktion nachwachsender Rohstoffe innerhalb der EU zu entwickeln, sollte die Kommission umgehend eine Richtlinie für Mindestvorgaben zur Kostenwahrheit und Ethik-, Umwelt- und Nachhaltigkeitsstandards bei der Produktion fossiler Energieträger entwickeln und in Kraft setzen!

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Kooperationen beim Technologietransfer in allen Bereichen der erneuerbaren Energien und auf allen Ebenen der Forschung und Entwicklung. In Teilbereichen der landwirtschaftlichen Produktion (beispielsweise Ölsaaten) können verstärkte Kooperationen (allen voran mit den angrenzenden Nachbarstaaten - Balkanländer, Ukraine, Weißrussland) zu einer effizienteren Nutzung der umfangreich verfügbaren Brachflächen und Ertragssteigerungspotentialen führen.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)

Please explain why	Regionale Ver- und Entsorgungskonzepte für überschaubare Energieerzeugungs-Einheiten mit klaren Wertschöpfungseffekten in ländlichen Gebieten sind gegenüber Megaprojekten zur Stromerzeugung zu bevorzugen. Die Priorität sollte daher auf optimale Lösungen für dezentrale Energieversorgungskonzepte gelenkt werden. Versorgungssicherheit mit Energie kann in Krisensituationen mit regionalen Konzepten am besten gewährleistet werden. Die Infrastruktur für Megaprojekte (tausende Kilometer Öl-, Gas- und/oder Stromleitungen) kann im Krisenfall rasch lahmgelegt werden.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Vorrang muss jedenfalls die gesteigerte erneuerbare Energie-Produktion innerhalb der EU haben. Versorgungssicherheit der EU kann nicht durch Megaprojekte in politisch instabilen Drittländern erreicht werden, auch nicht mit Solarkraftwerken.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Die priorisierte Zielrichtung für bessere Versorgungssicherheit sollten dezentrale regionale Energie-Versorgungskonzepte sein - und nicht zentralisierte Großeinheiten mit riesigen Transferverlusten und -kosten. Umso näher Energieerzeugung und Energieverbrauch räumlich intelligent organisiert und optimal integriert werden können (Smart Grids), umso besser.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Other (please specify)

Please specify which other key challenges	Der SET-Plan fokussiert auf Großanlagen - im Bereich der erneuerbaren Energien und insbesondere im Bereich der nachwachsenden Rohstoffe ist die Gesamteffizienz von Systemen mit überschaubaren Ver- und Entsorgungskonzepten bei kurzen Wegen wesentlich besser als bei Großanlagen. Der SET-Plan zielt daher an den Kernanforderungen für erfolgreiche Systeme mit klarem Regionsbezug vorbei.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Der Fokus muss auf die Optimierung kleiner und mittlerer Energieerzeugungs- und -versorgungssysteme gelegt werden.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Biomassegewinnung durch neue Produktionsbereiche (Algen, Mikroalgen, etc.); Reststoffnutzung der agrarischen Produktion (z.B. Maisspindel, Stroh); Optimierung kaskadischer Nutzungspfade in der Biomasseverwertung
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Forschung und Entwicklung an Demonstrationsanlagen, häufig mit unrealistischen Kostenansätzen für "upscaling" bei Rohstoffkosten. Mehrere Beispiele für Konzepte bei biogener Treibstoffproduktion in 2. Generation mit völlig marktfremden Preiskalkulationen.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Ja. Anderenfalls gibt es seitens der Forschung und Industrie zu geringe Anstrengungen zur Steigerung der Effizienz/Verbesserung der Technologie. Ein Beispiel dafür ist der CO2-Ausstoss der Fahrzeuge - auf Basis der freiwilligen Vereinbarung der Autoindustrie konnten keine größeren Fortschritte in der CO2-Reduktion festgestellt werden. Erst seit ein verbindliches Ziel (mit Sanktionen) besteht, können merkliche Fortschritte festgestellt werden.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Martin Höbarth, Landwirtschaftskammer Österreich, m.hoebarth@lk-oe.at
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Berufsinteressenvertretung d. Land-u.Forstwirte Ö.
3. Please indicate your country	Austria
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Die Aufteilung der Zielwerte auf ein gesamthaftes EU-Ziel und darüberhinaus auf Sektorziele erscheint als die beste Möglichkeit, die in den MS unterschiedlichen Ausgangspositionen und Voraussetzungen zur Zielerreichung optimal ausnutzen zu können. Es sollten auch verpflichtende sektorale Ziele für die MS ausverhandelt werden. Ohne verpflichtende Zielvorgaben wird die derzeitige Politik geschwächt und der weitere Weg in Richtung Erneuerbare Energieträger wird nicht mehr ausreichend konsequent verfolgt.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Other (please specify)
Please specify which other policy elements?	Wirksamer Außenschutz für die innereuropäische Erzeugung nachwachsender Rohstoffe und biogener Energieträger, insbesondere für die innereuropäische Bioethanol- und Biodieselproduktion, durch Aufrechterhaltung der Außenschutzmechanismen wie Einfuhrzölle und einer Maximalimportquote (z.B. 7% des Marktvolumens). Keine weiteren bilateralen Zollabkommen zum Import von Biotreibstoffen und deren Rohstoffen sowie entsprechende genaue Prüfung der Einhaltung der Nachhaltigkeitskriterien aus RL 2009/28/EG Art. 17 bis 19 für außereuropäische Produktionsstätten sowie strenge Kontrolle der Berichtspflichten von Drittländern und deren Bedingungen der land- und forstwirtschaftlichen Produktion im Hinblick auf umweltschonende Wirtschaftsweise und Sozialstandards.

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B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes

Please specify how to make support schemes more market-oriented	Fossile Energieformen werden derzeit rund sechs mal stärker gefördert als erneuerbare Energien - im Jahr 2010 wurden lt. IEA global 409 Mrd. Dollar staatliche Subventionen für fossile Energieträger eingesetzt und nur 66 Mrd. Dollar für erneuerbare Energien - dies bewirkt gemeinsam mit ungerechtfertigten Vorteilen bei der Emissionsberechnung (fragwürdiger fossiler Komparator in RL 2009/28/EG und 2009/30/EG) sowie bei Versicherungen (Haftungsbegrenzung bei Atomkraftwerken) eine starke Marktverzerrung zugunsten fossiler Energieträger! Eine umfassende Darstellung der Kostenwahrheit unter Einbeziehung aller externalisierten Kosten und negativer Umwelteffekte bei fossilen Energieträgern erhöht schlagartig die Marktfähigkeit erneuerbarer Energien! Entwicklung einer eigenen EU-Richtlinie zur verpflichtenden Darstellung der Kostenwahrheit bei fossilen Energieträgern! Erhaltung von Möglichkeiten steuerlicher Begünstigungen für erneuerbare Energieformen, insbesondere auch im Treibstoffbereich und in Hinblick auf Steuerfreiheit der Reinverwendung, keine CO2-Steuerkomponenten für biogene Treibstoffe bzw. sonstige biogene Energieträger! Sämtliche Vorteile auf monetärer und nicht monetärer Ebene für fossile und nukleare Energieträger müssen schnellstmöglich und umfassend beendet werden.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Da in jedem Mitgliedstaat spezifische Gegebenheiten und Entwicklungsstadien bei erneuerbaren Energien bestehen, müssen die Förderungsmechanismen für die unterschiedlichen Technologien in jedem Mitgliedstaat entsprechend individuell optimiert werden. Im Rahmen der Neufassung der Energiesteuerrichtlinie muss die Möglichkeit der steuerlichen Bevorteilung von erneuerbaren Energieträgern, allen voran auch Biotreibstoffen, angelehnt an den Artikel 16 der RL 2003/96/EG, erhalten bleiben. Die vollständige Steuerbefreiung von biogenen Treibstoffen ist ein wesentliches Element in der Marktdurchdringung und Steigerung des Einsatzes selbiger.

B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Wie bereits mehrfach erwähnt, besteht das größte Problem der Marktverzerrung durch fehlende Kostenwahrheit bei fossilen Energieträgern: Verdeckte Subventionen, Bevorzugung in verschiedensten Regelwerken, unfairer Wettbewerb durch überhöhte Marktmacht (zB. Gazprom) und unverhältnismäßig starke Konzentration von riesigen Finanzmitteln bei wenigen Unternehmen (Ölkonzerne) sind einige Beispiele für grobe Marktverzerrungen zu ungunsten erneuerbarer Energieträger.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Other (please specify)
C.1.1. Please provide explanations and specific examples where available	zu C.1.: Einheitliche Rahmenregelungen zur Umsetzung diverser Erfordernisse der EU-Richtlinien müssen durch die Europäische Kommission im Einvernehmensprozess mit den MS geklärt werden und dürfen nicht völlig entkoppelten und mandatslosen Normungsprozessen in abgeschotteten CEN-Gremien überlassen werden. zu C.1.1.: Ein klares Negativbeispiel für praxisuntaugliche und überbordend komplizierte administrative Prozesse sind die Vorgaben zu Nachhaltigkeitskriterien in der RL 2009/28 EG und die vielfältigen Zeitverzögerungen seitens der Kommission bei deren konkreten Umsetzung sowie die davon entkoppelten unüberschaubaren Prozesse zu Nachhaltigkeitsnormen. Auf der anderen Seite fehlen im Auftrag der Kommission zu erstellende Europäische Normen für die technischen Spezifikationen bei E10 und B10, die ehebaldigst erarbeitet und veröffentlicht werden müssten.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	Statt ständig neue und immer kompliziertere Nachhaltigkeitskriterien für nachwachsende Rohstoffe vorzugeben, muss die Kommission endlich effektive Ethikstandards und Nachhaltigkeitsvorgaben für die Bereitstellung fossiler Energieträger entwickeln. Statt ständig größere Barrieren für die Produktion erneuerbarer Energien zu entwerfen, müssen endlich die Rahmenbedingungen bei der Produktion umweltschädlicher fossiler Energieträger geregelt werden! Umgehende Verabschiedung einer Richtlinie zur Kostenwahrheit sowie zu Ethik-, Umwelt- und Nachhaltigkeitsvorgaben bei der Produktion und Bereitsstellung fossiler Energieträger!

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	Im Rahmen der Regelungen für die Kostenermittlung/-verteilung der Netzkosten von Elektrizität gibt es keine Ausnahmen von z.B. Netzverlustentgelten, Netzzutrittskosten für Ökostrom und die Kosten für allfällig notwendige Netzverstärkungen werden voll und ganz den Ökostromproduzenten angelastet.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	Ohne bevorzugten oder garantierten Netzzugang könnten unüberwindbare bzw. nur sehr schwer überwindbare bürokratische und finanzielle Hürden (Netzzutrittskosten) für kleinere dezentrale Stromerzeuger aufgebaut werden.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)

Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	zu E.1.: Da es keine Kostenwahrheit auf den Energiemärkten gibt, fossile Energieträger deutlich höher subventioniert werden als erneuerbare Energieträger, die bestehenden Regelwerke in vielerlei Hinsicht fossile Energieträger priorisieren und die Monopolstellung bzw. Marktmacht einiger weniger Fossilenergie-Anbieter (z.B. Gazprom) verstärken, müssen durch Förderregime insbesondere dezentrale erneuerbare Energiesysteme noch besser gestärkt werden. zu E.2.: Eine besondere Stärke biogener Energieträger ist die Möglichkeit zur bedarfsgerechten Bereitstellung. Die Photosynthese löst das Speicherproblem, Biomasse kann sowohl zur Grundlastabdeckung als auch bei Bedarfspitzen gezielt eingesetzt werden - im Gegensatz zu unkalkulierbaren Produktionsfluktuationen bei Windkraftwerken oder Photovoltaik-Anlagen.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of public support Lack of capacity (installers, other) Other (please specify)
Please specify which other barriers	Durch geringere Stückzahlen bei der Produktion und gleichzeitig aufwendigeren Anlagenteilen für die Brennstoffbeschickung haben vollautomatische Heizsysteme für biogene Energieträger in der Regel deutlich höhere Investitionskosten als Erdgas- oder Ölfeuerungsanlagen. Die Gewährung von Investitionszuschüssen der Mineralölindustrie zum Tausch von alten Ölkesseln durch neue Ölkessel und die dadurch entstehende Prolongierung der Abhängigkeit von fossilen Heizöl im Wärmesektor auf mehrere Jahrzehnte bei gleichzeitiger Unterversorgung des Treibstoffmarktes mit Dieselkraftstoffen ist höchst kontraproduktiv. De facto wird die Raumwärmeerzeugung mit Heizöl durch die dadurch bewirkten höheren Dieselpreise subventioniert. Die stationäre Verbrennung von fossilen Mitteldestillaten zur Raumwärmeerzeugung müsste daher (mit entsprechenden Übergangsregelungen) EU-weit verboten werden.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Effizienzsteigerung durch zügige Erneuerung des Heizanlagenbestandes: Durch die Verwendung moderner Biomassekessel kann die Energieeffizienz im Vergleich zu veralteten Allesbrennern durch den optimierten Verbrennungsvorgang und dadurch gesteigerten Wirkungsgrad deutlich verbessert werden. Im Zusammenspiel mit Speichertechnologien (Pufferspeicher) sowie Kombinationen mehrerer Heizsysteme (Zentralheizung mit z.B. solarthermischer Anlage) können weitere Effizienzsteigerungen erreicht werden. Der Einsatz von Niedertemperaturheizsystemen und deren Wärmeversorgung mittels Wärmepumpe und Solarthermie hat teilweise Berechtigung, eine generelle Elektrifizierung der Raumwärmeerzeugung (Stromheizungen, Nachtspeicheröfen) ist aber höchst ineffizient und daher strikt abzulehnen.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of standards Lack of infrastructure Lack of awareness Lack of suitable information Other (please specify)
Please specify which other barriers	Unseriöse und emotional gesteuerte Negativkampagnen aus unterschiedlichsten Interessenslagen durch NGOs und sonstige Gruppierungen mit teilweise gezielt falschen Argumenten gegen biogene Treibstoffe zur Generierung von öffentlicher Aufmerksamkeit und/oder Spenden anstelle konstruktiver und sachlicher Beiträge zur Information der Bevölkerung. Bereitschaft der Medien für Negativschlagzeilen bezüglich biogener Treibstoffe in Korrelation zum Werbeetat für fossile Energieträger.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Air

G.2.1. Please explain your answer	Im Personenverkehr auf der Straße kann nach entsprechender Verabschiedung der E10 und B10 Normen durch Erhöhung der Beimischungsquoten eine entsprechende Mehrmenge an biogenen Treibstoffen über die bestehende Infrastruktur in Verkehr gebracht werden. Im Gütertransport wird die Abhängigkeit von flüssigen Treibstoffen aufgund der derzeit nicht praxistauglichen Konzepte zur Elektrifizierung des Antriebsstrangs bei Schwerfahrzeugen noch lange Zeit andauern. Daher wird der Einsatz von biogenen Treibstoffen im Gütertransport steigen. Der Flugsektor ist ebenfalls auf Treibstoffe mit relativ hoher Energiedichte (flüssige Treibstoffe) angewiesen. In diesem Sektor können neben etwaigen Prozesskettenoptimierungen zur Treibhausgasemissionseinsparung keine anderen Alternativen als biogene Treibstoffe eingesetzt werden. Bei der Eisenbahn könnte der Einsatz erneuerbarer Energien einerseits durch den Ausbau und die stärkere Nutzung des öffentlichen Personennah- und -fernverkehrs sowie andererseits durch den stetig steigenden Ökostromanteil im Strommix der MS/EU gesteigert werden.

H. SUSTAINABILITY

H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement No, the existing binding sustainability criteria are sufficient

H.1.1. Please explain	In den MS der EU gelten seit Jahrzehnten sehr klare Forstgesetze zur nachhaltigen Biomasseproduktion im Wald und gut eingeführte Nachhaltigkeitsregeln in der Landwirtschaft (Cross Compliance). Die Einführung neuer zusätzlicher Nachhaltigkeitskriterien bedingt zusätzliche Bürokratie und höhere Kosten für die biogenen Energieträger. Gleichzeitig werden fossile Energieträger massiv bevorteilt (Emissionsberechnung) und durch die Nichteinbeziehung von Externalitäten (Umweltkatastrophen, Beschaffungskosten, usw.) zusätzlich massiv finanziell gefördert. Durch die weitere Verschärfung der bestehenden Kriterien und oder zusätzliche Einführung von neuen Nachhaltigkeitsregelungen für nachwachsende Rohstoffe würde eine weitere Marktverzerrung zu Ungunsten der erneuerbaren Energieträger bewirkt werden - dies ist strikt abzulehnen. Statt ständig neue Kriterien und Barrieren für die Produktion nachwachsender Rohstoffe innerhalb der EU zu entwickeln, sollte die Kommission umgehend eine Richtlinie für Mindestvorgaben zur Kostenwahrheit und Ethik-, Umwelt- und Nachhaltigkeitsstandards bei der Produktion fossiler Energieträger entwickeln und in Kraft setzen!

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Kooperationen beim Technologietransfer in allen Bereichen der erneuerbaren Energien und auf allen Ebenen der Forschung und Entwicklung. In Teilbereichen der landwirtschaftlichen Produktion (beispielsweise Ölsaaten) können verstärkte Kooperationen (allen voran mit den angrenzenden Nachbarstaaten - Balkanländer, Ukraine, Weißrussland) zu einer effizienteren Nutzung der umfangreich verfügbaren Brachflächen und Ertragssteigerungspotentialen führen.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)

Please explain why	Regionale Ver- und Entsorgungskonzepte für überschaubare Energieerzeugungs-Einheiten mit klaren Wertschöpfungseffekten in ländlichen Gebieten sind gegenüber Megaprojekten zur Stromerzeugung zu bevorzugen. Die Priorität sollte daher auf optimale Lösungen für dezentrale Energieversorgungskonzepte gelenkt werden. Versorgungssicherheit mit Energie kann in Krisensituationen mit regionalen Konzepten am besten gewährleistet werden. Die Infrastruktur für Megaprojekte (tausende Kilometer Öl-, Gas- und/oder Stromleitungen) kann im Krisenfall rasch lahmgelegt werden.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Vorrang muss jedenfalls die gesteigerte erneuerbare Energie-Produktion innerhalb der EU haben. Versorgungssicherheit der EU kann nicht durch Megaprojekte in politisch instabilen Drittländern erreicht werden, auch nicht mit Solarkraftwerken.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Die priorisierte Zielrichtung für bessere Versorgungssicherheit sollten dezentrale regionale Energie-Versorgungskonzepte sein - und nicht zentralisierte Großeinheiten mit riesigen Transferverlusten und -kosten. Umso näher Energieerzeugung und Energieverbrauch räumlich intelligent organisiert und optimal integriert werden können (Smart Grids), umso besser.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Other (please specify)

Please specify which other key challenges	Der SET-Plan fokussiert auf Großanlagen - im Bereich der erneuerbaren Energien und insbesondere im Bereich der nachwachsenden Rohstoffe ist die Gesamteffizienz von Systemen mit überschaubaren Ver- und Entsorgungskonzepten bei kurzen Wegen wesentlich besser als bei Großanlagen. Der SET-Plan zielt daher an den Kernanforderungen für erfolgreiche Systeme mit klarem Regionsbezug vorbei.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Der Fokus muss auf die Optimierung kleiner und mittlerer Energieerzeugungs- und -versorgungssysteme gelegt werden.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Biomassegewinnung durch neue Produktionsbereiche (Algen, Mikroalgen, etc.); Reststoffnutzung der agrarischen Produktion (z.B. Maisspindel, Stroh); Optimierung kaskadischer Nutzungspfade in der Biomasseverwertung
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Forschung und Entwicklung an Demonstrationsanlagen, häufig mit unrealistischen Kostenansätzen für "upscaling" bei Rohstoffkosten. Mehrere Beispiele für Konzepte bei biogener Treibstoffproduktion in 2. Generation mit völlig marktfremden Preiskalkulationen.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Ja. Anderenfalls gibt es seitens der Forschung und Industrie zu geringe Anstrengungen zur Steigerung der Effizienz/Verbesserung der Technologie. Ein Beispiel dafür ist der CO2-Ausstoss der Fahrzeuge - auf Basis der freiwilligen Vereinbarung der Autoindustrie konnten keine größeren Fortschritte in der CO2-Reduktion festgestellt werden. Erst seit ein verbindliches Ziel (mit Sanktionen) besteht, können merkliche Fortschritte festgestellt werden.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Metropolitan Region FrankfurtRheinMain (Contact meister@region-frankfurt.de)
2. Are you responding to this questionnaire on behalf of /as:	Public Authority
3. Please indicate your country	Germany
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Setting targets for renewable energy sources post-2020 will be of major importance for international coordination, framework conditions, and monitoring as well as for communication and motivation.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of standards Lack of infrastructure
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Rail
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)
Please specify which criteria	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	

I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	

J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Lennart Rahm, lennart.rahm@sverige.nu
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Sweden
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Due to the recent, alarming reports from the IPCC group on climate change, it seems essential to accelerate the EU work with mandatory targets soonest possible. An often forgotten part of it is energy sawing and energy efficiency. In 1970th Denmark halved its energy consumption. And a long time ago the Brundtland report (UN) stated that the whole Europe fairly easy could split their energy consumption by some 50 %. In Sweden two newly presented reports state the same result.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	Solar cells as in Germany. Geothermal and wawe power in appropriate countries, Large scale solar steam power stations as in Spain. El accumulating devices. Fuel cells for vehicles.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Accelerate convergence of national support schemes
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	N/A
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	busy
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications
C.1.1. Please provide explanations and specific examples where available	no time
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	no

D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access
D.2.1. Please explain why	no
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	no time
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	N/A

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Building regulations etc. Other (please specify)
Please specify which other barriers	lack of knowledge and of education
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Solar thermal Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Natural ventilation is better than cooling devices

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Other (please specify)

Please specify which other barriers	Large scale Methanol combinates using forest rest products are urgently required in biomass countries like Sweden, Finland, etc. Methanol from renewables combined with direct methanol fuel cells seems to be the future solution for heavy vehicles and maybe air crafts.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail Water
G.2.1. Please explain your answer	see G1 above

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)
Please specify which criteria	see G1 above
H.1.1. Please explain	done

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	N/A
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	dont know

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Yes indeed - cooperation is totally cheaper. Also valid for solar fields etc.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Bernd Frieboese Bernd.Frieboese@web.de
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Germany
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Better financing possibilities

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	- electricity storage, batteries - peak or temporary electricity generation for periods with shortages of solar or wind generation - geothermal heat and electricity energy-saving technology, especially in building, like thermal insulation
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)
Please specify how to make support schemes more market-oriented	A - follof the German system of feed-in tariffs B - design a system to integrate peak demand generation into the electricity market
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	feed-in tarrifs, considering regional climate conditions financial support must consider regional wealth levels financial support should be targeted at energy-saving measures as well as at green energy sources
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	For Transport, a focus could be put on demand reduction: promote local supplies to reduce the need for personal and freight traffic.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	They are supposed to distort markets, giving an advantage to renewable energy over fossil fuels.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Lack of information on support schemes or other
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage Enable renewable generators to offer balancing services to TSOs

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Favourable regulatory treatment of storage operators
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Geothermal Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	In the long run, energy efficiency is more effective, but the initial costs are higher. So some form of credit financing could help.

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Pace of technology development Lack of infrastructure Lack of awareness Lack of suitable information Limits of availability of sustainably produced biofuels
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail
G.2.1. Please explain your answer	Generally, the demand for transport should be reduced by promoting regional supply structures. Remaining long- or mid distance traffic (both goods and passengers) should be moved towards railways. Electric trains can replace diesel. In road vehicles, the use of electricity is not as easy as in railways. For road vehicles, efficiency should be a priority.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)
Please specify which criteria	In general, the use of biomass must not interfere with food supply and nature conservation.
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	Some countries may need more help than others, and some countries may have more suitable climate conditions than others.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Kim Terry Communities Against Turbines Scotland kimcterry@hotmail.co.uk
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Communities Against turbines Scotland
3. Please indicate your country	United Kingdom
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	The Principle of Proportionality is binding in both the development of EU legislation and State Aid for environmental protection. To comply it has to be demonstrated (a) what greenhouse gas tonnages are to be reduced; (b) the cost basis for implementation and the alternative implementation strategies considered and (c) the environmental objectives involved, namely the environmental degradation which is to be avoided. Neither the NREAPs nor the EU's documentation for Directive 2009/28/EC demonstrate (a) or (b). Directive 2001/77/EC required by the end of 2005 a report which should: "Consider the progress made in reflecting the external costs of electricity produced from non-renewable energy sources and the impact of public support granted to electricity production". This cannot be found. In DG Clima's analysis in March 2010 of a possible initiative to step up beyond 20% greenhouse gas savings: "Explain how the options respect the proportionality principle? Climate change is a transboundary environmental problem. Achieving GHG reductions targets in the EU requires a balanced distribution of efforts between countries and sectors in order to ensure that the environmental objectives are met, but also the common market is not unduly hampered". Neither is there an answer to (C). Furthermore, the Commission has failed to comply with the decision of the EU Ombudsman in Complaint 2587/2009/JF. The renewable programme is a breach of the most fundamental principle of EU law.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)

Please specify which other policy elements?	"The long-term perspective of investors" and the EU's ambition to move towards a reduction of 80-95% of GHG emissions in a 2050 perspective is the focus of this consultation and resulting measures. The Lisbon Treaty is clear in that the "Union shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance. Each institution shall act within the limits of the powers conferred on it in the Treaties. The institutions of the Union shall apply the principle of proportionality". Massive costs and environmental impacts are occurring and the Commission and the Member States have failed to demonstrate, how the renewable energy programme and the focus of this consultation, are in compliance with the terms of the Lisbon Treaty above. The citizen's interest does not lie with a 95% reduction in GHG emissions and establishing a long term perspective for investors in technology sectors. Furthermore, there has been a complete failure to verify the emission savings and environmental performance of renewable installations installed to date and engineering analysis is clearly showing how ineffective intermittent generators, such as wind and solar, are in delivering reliable energy and effective environmental protection.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	N/A
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Phase out support schemes over time (please specify for which technologies if applicable)

Please specify for which technologies (if applicable) to phase out support schemes over time	ECJ judgement in case C-379/98 in relation to justifying state aid for wind generated renewable electricity was on the basis that it was “useful for protecting the environment in so far as it contributes to the reduction in emissions of greenhouse gases”. “It should be noted that that policy is also designed to protect the health and life of humans, animals and plants”. The Commission is aware it is subject to a Communication ACCC/C/2010/54 at the UNECE Aarhus Convention Compliance Committee in relation to the renewable energy programme in Ireland. This has demonstrated that the funding mechanisms are to ensure delivery of an EU obligation in relation to renewable energy and not part of a commitment, to contribute to any quantifiable environmental target related to quantified carbon dioxide savings. In approving this funding the EU failed to evaluate the environmental effectiveness of the programme or if the citizen’s rights with regard to public participation in decision making had been complied with. The inefficiencies on the grid induced by wind energy were known in advance, but ignored. Emission savings claimed for in the funding application have not occurred. Any further installation of wind energy will not lead to emissions savings, yet a quadrupling is required by the NREAP. A similar situation has occurred in other Member States. Aid schemes approved by the EU for renewable energy are not protecting the environment and saving fossil energy resources.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)
C.1.1. Please provide explanations and specific examples where available	The Lisbon Treaty requires that: “Decisions shall be taken as openly and as closely as possible to the citizen. The Commission shall carry out broad consultations with parties concerned in order to ensure that the Union's actions are coherent and transparent”. The EU has ratified the United Nations Economic Commission for Europe’s (UNECE) Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. A Strategic Environmental Assessment (SEA) is mandatory under Directive 2001/42/EC for all programmes leading to future development consent of wind farms and other renewable infrastructure. Communication ACCC/C/2010/54 at the Aarhus Convention Compliance Committee has shown that the Units Heads of DG Environment and DG Energy in June 2010 directed the Member States that no SEA was required for the NREAP if it did not include specific mandatory measures. Note: The renewable targets and the NREAPs are mandatory. The Compliance Committee have concluded that public participation was required for the NREAP and have formally requested: “Could you please explain why the Commission says that it is not responsible for the actions of the Member State in this case?” The Commission is acting without ‘proper authority’ in the manner in which it is implementing this programme, in that it has deliberately bypassed legally binding procedures related to environmental assessment and democratic accountability.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	The Commission has failed to comply with both the terms of the Lisbon Treaty above and its obligations under the Aarhus Convention with both the structure and the implementation of Directive 2009/28/EC. With regard to implementing a programme of this nature, Article 7 of the Convention is clear: it requires that the public affected be provided with the necessary information, so that they can participate effectively during the preparation of the plan or programme within a transparent and fair framework, when all options are open and effective public participation can take place. EU legislation implements this through the more detailed process of Strategic Environmental Assessment. Furthermore the Commission's legal team in their opening statement to the Aarhus Convention Compliance Committee meeting on Communication ACCC/C/2010/54, stated that in terms of the National Renewable Energy Action Plan, the Irish public were only entitled under the terms of the Convention to information on threats to the environment. They were not entitled to information on comparative costs or effectiveness of the renewable technologies. Under the Treaty of Lisbon, the citizen has a Right to good administration, a Right to effective remedy and to a fair trial and a Right to have damages made good. The Right to have damages made good applies to institutions and bodies of the EU and Member States when they are implementing Union law.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above

D.1.1. Please specify which obstacles and the nature and degree of them for each	Europe's population has stabilised, while Europe's industry is more efficient, so electrical power consumption figures are stabilising. Yet to support a renewable programme with unknown figures related to environmental performance, impacts and financial costs, an enormous network development is to be initiated to facilitate unreliable and intermittent renewable generation, e.g. as regards the Republic of Ireland, a doubling of the high voltage grid by an extra 5,000 km. The EU Commission's 'Priority Interconnection Plan' COM (2006) 846 is very critical of 'time consuming public consultation procedures'. Yet this plan has an investment of €30 billion in infrastructure by the EU by 2013, with an estimated €700 – €800 million annually to be spent on connecting more renewable sources. In Com (2011) 658 on a proposal for regulation of a pan-European energy infrastructure, this states in relation to proportionality that the proposal does not go beyond what is necessary to achieve the objectives perused. This is not correct, the renewable programme has by-passed both proper environmental, technical and financial assessment and legally binding measures related to public participation. It is certainly not proportionate in terms of achieving demonstrated environmental protection objectives. Now the citizen is expected to carry the burden of this grid expansion, with massive and unnecessary financial and environmental impacts.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Other (please specify)

Please specify which other rules	Both the internal and external costs associated with any grid expansion to facilitate renewable energy need to be assessed and compared with the 'do nothing scenario', given that the existing grid functions without any of this development. With regards to the EU's binding climate change and renewable energy targets, it is necessary to point out Principle 10 of the United Nation's Rio Declaration, namely; "Environmental issues are best handled with participation of all concerned citizens, at the relevant level". These binding targets were decided solely on political considerations, in which there was neither any environmental assessment nor public participation with concerned citizens. These massive grid expansions to facilitate intermittent renewable generation are being forced upon a population, who have neither been informed nor provided with an opportunity to participate in these key decisions. Clearly renewable energy should only be provided with access to the grid, when it demonstrates that it is superior and more effective than current generation capacity. At no stage have the necessary assessments in this regard been completed to justify the preferential treatment provided to such generation. Indeed, ever indication is that the renewable energy being promoted solely for political reasons is not providing any significant environmental benefits, which anyhow could have been achieved with far lower cost and environmental impacts by other means.

D.2.1. Please explain why	As regards grid related rules there is already a huge backlash developing from the general public as more and more grid expansions are developed to facilitate intermittent and ineffective renewable generation, such as wind energy. As the Commission is aware from Communication ACCC/C/2010/54 it approved €110 million in funding for the Ireland-to UK electrical connector, even though the sole purpose of this project was to facilitate more wind energy on the Irish grid, a policy, which had by-passed the legally required public participation. The EU's European Investment Bank has supplied €300 million in loans to the interconnector project and a further €235 million to the State-owned ESB to develop further networks to facilitate wind energy in Ireland. These loans are related to a programme which has by-passed legally required public participation procedures. Now the citizen is expected to pay back this money for infrastructure that is not needed, and for which he was provided with no proper environmental information nor the opportunity to participate in the decision-making. Given that Europe is already heavily indebt it is simply unacceptable that such practices should be occurring, driven by EU Institutions which have deliberately by-passed the legally binding rules which are applicable to them. Proper accountability and adherence to democratic procedures is not optional with regard to grid development.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Other (please specify)

Please specify which other measures	The integration of solar power in Germany has caused a huge financial burden to be placed on the citizen for no real environmental benefit. In 2012 an estimated €100 billion subvention cost only helps delivers 3% of Germany's electricity supply, in an irregular and ineffective manner at that. Indeed the development of renewable electricity in German has essentially doubled generation costs. All other countries that have expanded renewable energy are seeing massive price hikes for the consumer, coupled with a failure to demonstrate any significant decrease in fuel usage or emissions. Once again this demonstrates the failure to properly assess policy before implementation. Input from engineers not in the pay of the wind industry has been deliberately ignored. Europe's industry cannot remain competitive given these massive costs, which are bound to be raised even further due to dysfunctional and ineffective system integration costs for renewable power, which has neither rational nor legal reason to be there in the first place.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Other (please specify)

Please specify which other barriers	The uptake of renewables in heating and cooling is being driven, both at EU and Member State level, by polices which have not been properly assessed and whose implementation is related to political expediency and not environmental protection. Indeed the promotion of wood biomass for domestic heating is not only leading to the destruction of natural wood resources, but as the moisture content of such fuel, particular in Northern Europe, is high; it is leading to increased particulate emissions and urban pollution. As regards the renewable Directive, the external costs of existing heating and cooling arrangements are unknown, yet we are to subsidise renewables for which no external cost assessment is available. This type of policy will only lead to unsustainable businesses, which are totally dependent on subsidy bubbles to survive and have little or no viable long term future. The Common Agriculture Policy had its inception in such rash politically-based decision making, in which market-based economics was replaced by a political structure. This agricultural policy resulted in an enormous cost burden for the European citizen, and lead to practices which were unsustainable from both financial and environmental perspectives. It is clear that the EU has not learnt anything from this debacle: it is now rapidly implementing other politically-agreed targets, by-passing legally-required assessment and public participation requirements.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Other (please specify)

Please specify which other pathways	The counter-productive nature of the EU's energy policies is also evident in the promotion of biomass for domestic heating, with all its associated environmental impacts, plus a significant impact on human health. Yet the most environmentally-effective form of renewable heat, that of electrically-driven heat pumps, is being put out of business by soaring electricity costs caused by the renewables' bubble. Yet at no stage was this considered in a proper assessment as part of policy development. As Der Spiegel reported in March 2011 in relation to German's Eco-Trap: "Not everything that looks green serves the environment. The ecological principle of proceeding with care doesn't seem to apply to environmental policy. The more, the better, seems to be the principle. No one is calculating whether all the billions being invested in protecting the environment are actually being spent wisely. Ordinary citizens can't judge it and many experts have no interest in shedding any light on this aspect because their livelihoods are at stake…. In many cases, a closer look at environmental measures reveals that they're expensive and don't have much effect".

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	It is likely that global energy prices will rise in line with both population increase and a general improvement in living standards. Market forces will then dictate that consumers must use energy more efficiently. However, what the EU is proposing instead is a massive intrusion on the Citizen's rights, in that he should be denied access to certain energy sources and forced to use other highly ineffective ones, based on political decisions which have by-passed proper assessment and legally binding public participation procedures. In particular, given that the EU has completely failed to assess and quantify the external costs of carbon dioxide emissions, it has no legal right to restrict the citizen's access to such fuels and introduce massive financial support programmes for those, which may well carry the tag renewable, but in reality do not deliver any environmental benefits which could not have been achieved at a fraction of the cost by a rational and science-based evaluation. While energy efficiency and environmental protection in the heating and cooling sector should be promoted, this should be based strictly on the principles of the Lisbon treaty, namely a highly competitive social market economy and a high level of protection/improvement in the quality of the environment. The current promotion of renewable energy does not fulfil those requirements.

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Other (please specify)

Please specify which other barriers	It is likely that global energy prices will rise in line with both population increase and a general improvement in living standards. Market forces will then dictate that consumers must use energy more efficiently. However, what the EU is proposing instead is a massive intrusion on the Citizen's rights, in that he should be denied access to certain energy sources and forced to use other highly ineffective ones, based on political decisions which have by-passed proper assessment and legally binding public participation procedures. In particular, given that the EU has completely failed to assess and quantify the external costs of carbon dioxide emissions, it has no legal right to restrict the citizen's access to such fuels and introduce massive financial support programmes for those, which may well carry the tag renewable, but in reality do not deliver any environmental benefits which could not have been achieved at a fraction of the cost by a rational and science-based evaluation. While energy efficiency and environmental protection in the heating and cooling sector should be promoted, this should be based strictly on the principles of the Lisbon treaty, namely a highly competitive social market economy and a high level of protection/improvement in the quality of the environment. The current promotion of renewable energy does not fulfil those requirements.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail

G.2.1. Please explain your answer	Many European rail networks are electrified and in a number of Member States, particularly Germany, rail costs are soaring as electrical generation costs have effectively doubled due to renewable energy inputs, which are massively ineffective in terms of environmental protection. This is in effect rendering uncompetitive what is an extremely effective form of transportation, particularly for social groups who would not have ready access to a car. Yet clearly this impact has never been assessed and quantified in the development of these policies which, to quote Mark Twain, are being driven by an administrative structure where "people's beliefs and convictions are in almost every case gotten at second-hand, and without examination, from authorities who have not themselves examined the questions at issue but have taken them at second-hand from other non-examiners, whose opinions about them were not worth a brass farthing". One can only wonder if people who have been placed in positions of responsibility for developing EU energy policy did even attempt to understand the impacts of these policies, as certainly there is no documented evidence to demonstrate they did.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement
H.1.1. Please explain	The sums of money which have been made available for Europe's biofuel policies are colossal, and are only matched by the potential for environmental devastation. Given the rising global population, which in many cases can't feed itself, to divert food products into fuel tanks is simply obscene. Furthermore, Biofuels have not provided the environmental benefits that were claimed. And of course there was no proper environmental assessment of the policy made before it was introduced. This policy should be stopped before it does more damage both in Europe and in poor countries of the South.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	

I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	As already answered in Section D, existing grid networks are perfectly adequate for today's and future needs. They may need replacement in relation to the age of the components, but they do not need to be expanded.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	In relation to COM (2011) 539 on "The EU Energy Policy: engaging with partners beyond our borders" and the Mediterranean Solar Plan, we comment that this plan is widely speculative, particularly given the complete failure of solar power to deliver either cost effective or reliable electricity. Europe is already collapsing under a burden of financial debt and it is appalling to see that the EU Commission wants to increase this burden based on speculative and ill-conceived projects in neighbouring countries. Spain has already had to slash its solar subsidies and Germany cannot continue to support solar development any more, not to mention the fact that neither the citizens nor the environment benefited from these colossal expenditures. Again the Commission is creating a 'bubble economy' for equipment suppliers, while destroying jobs in other sectors with rising electricity prices and unsustainable sovereign debt levels. Spain has now stopped all payments for renewables.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	In a similar manner offshore wind is a technology sector associated with massive costs (€4.3 million per MW installed) for an unreliable electricity supply, which in turn has massive environmental impacts, in particular associated with grid expansions. It is distressing that the EU Commission cannot produce any objective documentation to support this technology sector. With regard to the Communication ACCC/C/2010/54 and Ombudsman Complaint 2587/2009/JF of 3rd Feb 2011 on the Irish State Broadcaster, the EU Commissioner for Climate Action Connie Hedegaard stated in relation to offshore wind: "It actually pays off, it is sound economics". When a formal reply was received concerning a request for supporting technical information, no such documentation was provided. The reply said: "…as the Commissioner's statement did not refer to any particular project or development, nor was it based on any one or particular piece of documentation but on publicly available information and her general experience, knowledge and political views". The only document available, from the European Environment Agency on "Europe's onshore and offshore wind energy potential", quotes the European Wind Energy Association as its technical source. How objective can that be?

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Other (please specify)

Please specify which other key challenges	Some very serious questions have to be answered concerning the taxpayers' money being diverted into renewable energy research, in particular as there has been a complete lack of data made available as to the environmental effectiveness of this sector, despite it being a legal obligation to possess and to update such environmental data. With regard to the Intelligent Energy Europe programme, both projects funded by the EU Commission in relation to wind energy, "Wind Energy - The Facts" and "GP Wind" contain blatantly incorrect claims about the emissions and fuel savings from this intermittent source, in which the inefficiencies induced on the grid are ignored. Under Regulation 1367/2000, which imposes the requirements of the Aarhus Convention on Institutions of the EU, the EU Commission is refusing to confirm how it complies with its legal requirements in relation to the two programmes, i.e. that it shall, insofar as is within its power, ensure that any information that is compiled by it, or on its behalf, is up-to-date, accurate and comparable. In particular with regard to "Wind Energy – The Facts", the EU contributed 50% of the €773,662 used by the European Wind Energy Association to run a "dissemination" campaign. Yet at no stage has an independent and transparent technical analysis ever been completed of the EU's colossal support for wind energy and its effectiveness.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	The EU Commission needs to comply with its legal requirements under the Aarhus Convention, to possess and update environmental information which is relevant to its function. Note: environmental information includes not only information on emissions and impacts, but also cost benefit and other economic analysis. To date the Commission has failed, despite a legal requirement to do so, to assess the renewable energy it so actively supports and to determine the external impacts of non-renewable sources. As it wrote in reply to UNECE in Communication ACCC/C/2010/54, "it is generally recognised that renewable energy, and wind energy in particular, is preferential from an environmental point of view to non-renewable energy". Its position is therefore based on 'public opinion', not on technical expertise, while failing legal compliance. If the "polluter pays" principle allows external costs to be internalised, this must be based on a transparent and factual analysis, which to date has been bypassed. Energy policy going forward must be supported by evidence-based assessments rather than soundbites, e.g. "In the opening months of 2007, the European Union stepped up its energy and climate change ambitions to new levels. The Commission put forward an integrated package of proposals calling for a quantum leap in the EU's commitment to change. A political consensus grew up in support of this approach" - SEC(2008) 85/3 of January 2008.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	The answer to this question has been amply covered in the replies above. The EU has implemented a massive renewable energy programme, putting mandatory targets on Member States, plus a colossal financial burden on the citizen, adverse health effects, and huge unwarranted environmental impacts on Europe's landscape and biodiversity. At every stage of the process, legally binding procedures related to assessment and public participation were bypassed. The European Commission must recognise the complete ineffectiveness of its energy policy and bring it to a halt, or inevitably the European Courts will do it for them, and ensure damages are made good. "Saving the planet" is but a fantasy in a context where the remedy is worse than the illness. Biofuels cause deforestation, use as much oil as they save, and increase the price of food. Wind farms are a nightmare and a health hazard for millions of unwitting neighbours. They actually cause the extinction of bird and bat species while pretending to save them. Wind and solar energies are a bottomless pit threatening the stability of the euro and the future of the EU. These destructive policies must stop.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Struan Stevenson. Member of European Parliament. struan.stevenson@europarl.europa.eu
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	United Kingdom
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)
Please specify which other policy elements?	The vast subsidies paid to renewable energy companies and landowners are unacceptable. Generous ROCs (Renewable Obligation Certificates) and feed-in tariffs mean that power companies and landowners are awash with subsidy as they scramble to meet the Government's targets. The big power companies are raking it in from the consumers and posting profits that have soared to billions every year whilst more and more taxpayers are facing fuel poverty.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	We should be investing much more into developing the new sunrise technologies such as the hydrogen economy. So far, no-one has invented an efficient way to store electricity. But hydrogen, which is the lightest and most abundant chemical element in the Universe, can be readily stored and can provide an effective energy source. In Germany they are building hydrogen powered cars, trains and ferries. Hydrogen powered homes are under construction. We need to cut our dependency on fossil fuels and look to the future.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Phase out support schemes over time (please specify for which technologies if applicable)
Please specify for which technologies (if applicable) to phase out support schemes over time	The support schemes, such as the ROC and Feed-in Tariffs in the UK must be ended. They simply give money to companies to build renewable structures which simply are not economically viable. This ends up with vast increases to taxpyers bills and only serves to increase our dependency on foreign gas.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Yes, there is abosultely a difference. The terms 'energy' and 'electricity' are often confused when discussing renewable technologies. Public awareness regarding these terms is poor. Even the Scottish Government has confused these terms in the past.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)

C.1.1. Please provide explanations and specific examples where available	There is a lack of awareness both amongst the public and also in political spheres. People do not realise the true cost of renewables. Just because these technologies make use of natural resources, it does not make them 'free'. Furthermore, contrary to popular belief, renewable energy such as windfarms does not reduce CO2 emissions. In Scotland, these vast structures are being built on area of peatland which store vast amounts of carbon dioxide which is released into the atmosphere once the peatlands are disturbed. Likewise, offshore turbines are being built on areas of 'blue carbon' in our oceans, which also stores large amounts of CO2. Yet very few people are aware of this as Governments are either ill-informed or are using energy policy as a means for political rather than economic gain.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	Energy Policy is a Member state issue.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should bear greater responsibility for system costs
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING

F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Lack of capacity (installers, other)
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Other (please specify)
Please specify which other pathways	We must look into other technolgies such as hydrogen or even 'windgas'. The current technologies simply are not economically viable and can not be applied in every Member State.
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of infrastructure Lack of awareness Lack of suitable information
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for goods Rail Water
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)

Please specify how and with whom, i.e. only neighbouring countries or more widely	We should co-operate with countries that have experience in technologies that are not yet prevalent within the EU. This would include Norway and the USA. There is a lot we can learn from their successes and failures.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Industrial manufacturing and supply chain
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Storage. At present there is no mechanism to store electricity from renewable energy structrues in the long term. This is vital.

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Technologies that use hydrogen. We also need firm conclusions on shale gas and its safety.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Not successful
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Libertiamo
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Think Tank
3. Please indicate your country	Italy
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, an indicative and non-legally binding target at EU level is appropriate No, targets for renewable energy sources are unnecessary

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Libertiamo believes that market-led solutions are the best way to ensure economic prosperity, environmental protection, and long-term growth in Europe. Top-down EU targets generally interfere in the marketplace, stifle innovation, and distort the marketplace of ideas. The European Union, and many individual Member States within the Union, is facing a critical moment, with highly indebted economies requiring investment, growth, and cutting of both public borrowing and public expenditure. Further, more stringent targets would lead to increased government expenditure, through subsidies for domestic biofuel industries, and would artificially inflate prices and potentially discriminate against cheaper or more efficient domestic or foreign products, to the detriment of consumers. However, if targets for renewable energy are to be pursued, it is crucial that a level-playing field in the marketplace is provided to allow for renewables to compete against each other. This ensures best value for consumers (including governments) who are able to choose from the most cost-effective (e.g. cheapest), most efficient (e.g. highest yielding) and most effective biofuel feedstocks. Distorting effects, such as burdensome "sustainability" criteria; non-tariffs barriers contained within free trade agreements; and discrimination within government procurement rules, should not be contemplated.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)
Please specify which other policy elements?	Libertiamo supports the efforts to provide further transparency concerning the process for calculating values and other criteria within the EU's renewable energy policy. A commitment to full transparency in terms of release of data and methodologies would be very welcome. As provided for in the response to Section A1, market-distorting measures such as discrimination within public procurement rules lead to higher government spending and a worse result for both taxpayers and consumers. If public procurement obligations are to be introduced for renewable energies, all energy sources (e.g. in the case of biofuels, all feedstocks) should be treated equally. Discrimination in these criteria, including in favour of inefficient domestic products, is misguided and counter-productive.

B. FINANCIAL SUPPORT

B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Phase out support schemes over time (please specify for which technologies if applicable)
Please specify for which technologies (if applicable) to phase out support schemes over time	Libertiamo believes that subsidies from government distort the marketplace, restrict free competition, and artificially raise prices for consumers.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States should open their support schemes to renewable generation from third countries
Please explain how it could be achieved for third countries	Libertiamo believes, as outlined in the response to section B2, that support schemes and subsidies are unjustified and market-distorting. However, if the current policy of awarding subsidies to renewable energies is to continue, a policy of non-discrimination should be adopted which allows the best-value renewable energies to compete in the EU marketplace, including competition for subsidies. Opening up the support schemes to third countries would therefore remove a barrier to trade, lead to a less discriminatory EU policy, and provide better value for consumers and taxpayers.
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)

Please specify which support schemes you consider most distorting	As outlined in the response to section B2, Libertiamo believes that all subsidies and support schemes are distorting for competition. However, it is clear that some schemes are more distorting than others. Support schemes which, in additional to financial assistance, also contain administrative or other support (often in the form of discrimination against foreign competition) would fall into the category of more distorting. In fact, the option suggested in section B6, to open up support schemes to all countries, would have the effect of weakening the distortion of competition within the EU marketplace and so is an example of a support scheme which would be less distorting.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	Compliance with the Renewable Energy Directive, including the sustainability criteria, requires significant resources in terms of time input, management oversight, research, administrative work, and often substantial direct costs as well, such as subscription to a certification system. This financial and administrative burden is unnecessary and unjustified as it adds costs for business during a time of severe economic recession, and discriminates against small businesses and organisations, including those from outside the European Union, who are unable to absorb such costs.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	The European Commission should immediately cease all payments of European taxpayers' money to non-governmental organisations (NGOs) who routinely promote policies which are anti-development, anti-growth, anti-business, anti-innovation and anti-science. These NGOs, including prominent international organisations such as Friends of the Earth and World Wildlife Fund should not be using taxpayers money, given to them by the European Commission, to pay for lobbying campaigns, public relations efforts, and publicity stunts. The Commission has donated millions of Euros of taxpayers' money to organisations who advocate policies which would be disastrous for the European economy, which discriminate against many of the poorest people around the world, such as palm oil workers in Asia or community forestry in Africa, both of whom have been targeted with aggressive campaigns from environmental organisations funded by the EU. The Commission has a responsibility not to fund campaigns which damage trade relations, harm consumers, and smear the businesses who provide jobs and opportunities which will lift Europe out of the current crisis.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk – producers of renewable energy should operate without any aid
E.2. How can it be ensured that market arrangements reward flexibility?	

E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Other (please specify)
Please specify which other barriers	Artificial market barriers within the RED have significantly curtailed the interest in, and uptake of, renewable energy in the field of transport. Sustainability criteria and schemes which are burdensome, overly-bureaucratic and expensive have provided disincentives for entry into the EU marketplace. The intransparent method of calculating default values undermines the confidence in the system, and produces results which clearly discriminate against certain feedstocks or regions of the world. The effective exclusion of palm biodiesel from the EU market, as signalled by a default value of 17%, would remove from consideration one of the lowest-cost options for biodiesel in the European Union, and as such is clearly detrimental firstly to the achievement of the EU's energy targets, and secondly to the need for a competitive and cost-efficient biodiesel market in Europe.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement

H.1.1. Please explain	As mentioned in the response to section G1, the existing sustainability criteria within the RED are costly, administratively bureaucratic, and probably a breach of the EU's WTO commitments. Libertiamo further believes that additional criteria being proposed by the European Commission currently, including increasing the level of minimum greenhouse gas emissions savings, or the introduction of a scientifically unsound ILUC factor, would have the effect of further increasing the burden of bureaucracy and costs for producers, suppliers and consumers. Libertiamo strongly urges the EU not to follow the advice of environmental NGOs, who have consisted advocating policies which are anti-growth, anti-development, discriminatory towards the EU's trading partners, and would make the EU member states less likely to meet their 2020 GHG reduction targets. Instead, the EU should listen to the voices in industry, science and academia in Europe and around the world who have advocated for the removal of discriminatory criteria in the default values, and the removal of protectionist barriers against better-value imports which drive up prices. The EU should also accept that any regulatory activity based on unscientific, unproven or unmeasurable criteria – such as any ILUC factor – would be highly damaging and could lead to a trade challenge.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)

Please specify how and with whom, i.e. only neighbouring countries or more widely	Key to reaching Europe's 2020 climate targets are the efficiency, cost-effectiveness and competitiveness of renewable energy sources. Where a number of competing sources exist, such as in the market for biodiesel or bioethanol feedstocks, all feedstocks should be considered as part of a healthy biofuels market in Europe. In many cases, products from non-EU countries would provide better or more efficient products than those produced in the EU – this can be seen by the vastly higher yields for example from palm oil from Malaysia as opposed to rapeseed from Germany. Instead of erecting protectionist trade barriers, in the form of default values, sustainability criteria and other measures, the EU should encourage the import into Europe of any and all high-quality and high efficiency feedstocks.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Other measures (please specify)
Please specify which other measures	The United States of America, Brazil, Canada, Indonesia and Malaysia have all at varying times and to varying degrees spoke of the possibility of a WTO challenge to the EU's renewable energy policies. Clearly, this needs to be addressed in any post-2020 policy. Relations with these countries, and cooperation in the international trading system in general, would be better served by the European Union abandoning costly, bureaucratic and protectionist schemes which serve to artificially inflate prices, decrease competition, and reduce innovation and efficiencies. In addition, the European Union should cease funding the lobbying operations of environmental NGOs, whose agenda is to implement costly regulations which not only effect businesses and consumers in Europe negatively, but have significant negative effects on poverty alleviation, economic development, and job creation in the developing world. Instead of listening to the lobbying operations of these groups who run campaigns from their comfortable offices in Brussels, the EU should listen to the local workers and smallholders in Brazil, Indonesia, Malaysia, Argentina and elsewhere whose livelihoods are being threatened by campaigning from Western Green NGOs.

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Gregor Grill, Landwirtschaftskammer Österreich, g.grill@lk-oe.at
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Interessensvertretung Land- und Forstwirtschaft
3. Please indicate your country	Austria
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Die Aufteilung der Zielwerte auf ein gesamthaftes EU-Ziel und darüberhinaus auf Sektorziele erscheint als die beste Möglichkeit, die in den MS unterschiedlichen Ausgangspositionen und Voraussetzungen zur Zielerreichung optimal ausnutzen zu können. Es sollten auch verpflichtende sektorale Ziele für die MS ausverhandelt werden. Ohne verpflichtende Zielvorgaben wird die derzeitige Politik geschwächt und der weitere Weg in Richtung Erneuerbare Energieträger wird nicht mehr ausreichend konsequent verfolgt.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Other (please specify)
Please specify which other policy elements?	Wirksamer Außenschutz für die innereuropäische Erzeugung nachwachsender Rohstoffe und biogener Energieträger, insbesondere für die innereuropäische Bioethanol- und Biodieselproduktion, durch Aufrechterhaltung der Außenschutzmechanismen wie Einfuhrzölle und einer Maximalimportquote (z.B. 7% des Marktvolumens). Keine weiteren bilateralen Zollabkommen zum Import von Biotreibstoffen und deren Rohstoffen sowie entsprechende genaue Prüfung der Einhaltung der Nachhaltigkeitskriterien aus RL 2009/28/EG Art. 17 bis 19 für außereuropäische Produktionsstätten sowie strenge Kontrolle der Berichtspflichten von Drittländern und deren Bedingungen der land- und forstwirtschaftlichen Produktion im Hinblick auf umweltschonende Wirtschaftsweise und Sozialstandards.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes

Please specify how to make support schemes more market-oriented	Fossile Energieformen werden derzeit rund sechs mal stärker gefördert als erneuerbare Energien - im Jahr 2010 wurden lt. IEA global 409 Mrd. Dollar staatliche Subventionen für fossile Energieträger eingesetzt und nur 66 Mrd. Dollar für erneuerbare Energien - dies bewirkt gemeinsam mit ungerechtfertigten Vorteilen bei der Emissionsberechnung (fragwürdiger fossiler Komparator in RL 2009/28/EG und 2009/30/EG) sowie bei Versicherungen (Haftungsbegrenzung bei Atomkraftwerken) eine starke Marktverzerrung zugunsten fossiler Energieträger! Eine umfassende Darstellung der Kostenwahrheit unter Einbeziehung aller externalisierten Kosten und negativer Umwelteffekte bei fossilen Energieträgern erhöht schlagartig die Marktfähigkeit erneuerbarer Energien! Entwicklung einer eigenen EU-Richtlinie zur verpflichtenden Darstellung der Kostenwahrheit bei fossilen Energieträgern! Erhaltung von Möglichkeiten steuerlicher Begünstigungen für erneuerbare Energieformen, insbesondere auch im Treibstoffbereich und in Hinblick auf Steuerfreiheit der Reinverwendung, keine CO2-Steuerkomponenten für biogene Treibstoffe bzw. sonstige biogene Energieträger! Sämtliche Vorteile auf monetärer und nicht monetärer Ebene für fossile und nukleare Energieträger müssen schnellstmöglich und umfassend beendet werden.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Da in jedem Mitgliedstaat spezifische Gegebenheiten und Entwicklungsstadien bei erneuerbaren Energien bestehen, müssen die Förderungsmechanismen für die unterschiedlichen Technologien in jedem Mitgliedstaat entsprechend individuell optimiert werden. Im Rahmen der Neufassung der Energiesteuerrichtlinie muss die Möglichkeit der steuerlichen Bevorteilung von erneuerbaren Energieträgern, allen voran auch Biotreibstoffen, angelehnt an den Artikel 16 der RL 2003/96/EG, erhalten bleiben. Die vollständige Steuerbefreiung von biogenen Treibstoffen ist ein wesentliches Element in der Marktdurchdringung und Steigerung des Einsatzes selbiger.

B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Wie bereits mehrfach erwähnt, besteht das größte Problem der Marktverzerrung durch fehlende Kostenwahrheit bei fossilen Energieträgern: Verdeckte Subventionen, Bevorzugung in verschiedensten Regelwerken, unfairer Wettbewerb durch überhöhte Marktmacht (zB. Gazprom) und unverhältnismäßig starke Konzentration von riesigen Finanzmitteln bei wenigen Unternehmen (Ölkonzerne) sind einige Beispiele für grobe Marktverzerrungen zu ungunsten erneuerbarer Energieträger.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Other (please specify)
C.1.1. Please provide explanations and specific examples where available	zu C.1.: Einheitliche Rahmenregelungen zur Umsetzung diverser Erfordernisse der EU-Richtlinien müssen durch die Europäische Kommission im Einvernehmensprozess mit den MS geklärt werden und dürfen nicht völlig entkoppelten und mandatslosen Normungsprozessen in abgeschotteten CEN-Gremien überlassen werden. zu C.1.1.: Ein klares Negativbeispiel für praxisuntaugliche und überbordend komplizierte administrative Prozesse sind die Vorgaben zu Nachhaltigkeitskriterien in der RL 2009/28 EG und die vielfältigen Zeitverzögerungen seitens der Kommission bei deren konkreten Umsetzung sowie die davon entkoppelten unüberschaubaren Prozesse zu Nachhaltigkeitsnormen. Auf der anderen Seite fehlen im Auftrag der Kommission zu erstellende Europäische Normen für die technischen Spezifikationen bei E10 und B10, die ehebaldigst erarbeitet und veröffentlicht werden müssten.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	Statt ständig neue und immer kompliziertere Nachhaltigkeitskriterien für nachwachsende Rohstoffe vorzugeben, muss die Kommission endlich effektive Ethikstandards und Nachhaltigkeitsvorgaben für die Bereitstellung fossiler Energieträger entwickeln. Statt ständig größere Barrieren für die Produktion erneuerbarer Energien zu entwerfen, müssen endlich die Rahmenbedingungen bei der Produktion umweltschädlicher fossiler Energieträger geregelt werden! Umgehende Verabschiedung einer Richtlinie zur Kostenwahrheit sowie zu Ethik-, Umwelt- und Nachhaltigkeitsvorgaben bei der Produktion und Bereitsstellung fossiler Energieträger!

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	Im Rahmen der Regelungen für die Kostenermittlung/-verteilung der Netzkosten von Elektrizität gibt es keine Ausnahmen von z.B. Netzverlustentgelten, Netzzutrittskosten für Ökostrom und die Kosten für allfällig notwendige Netzverstärkungen werden voll und ganz den Ökostromproduzenten angelastet.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	Ohne bevorzugten oder garantierten Netzzugang könnten unüberwindbare bzw. nur sehr schwer überwindbare bürokratische und finanzielle Hürden (Netzzutrittskosten) für kleinere dezentrale Stromerzeuger aufgebaut werden.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)

Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	zu E.1.: Da es keine Kostenwahrheit auf den Energiemärkten gibt, fossile Energieträger deutlich höher subventioniert werden als erneuerbare Energieträger, die bestehenden Regelwerke in vielerlei Hinsicht fossile Energieträger priorisieren und die Monopolstellung bzw. Marktmacht einiger weniger Fossilenergie-Anbieter (z.B. Gazprom) verstärken, müssen durch Förderregime insbesondere dezentrale erneuerbare Energiesysteme noch besser gestärkt werden. zu E.2.: Eine besondere Stärke biogener Energieträger ist die Möglichkeit zur bedarfsgerechten Bereitstellung. Die Photosynthese löst das Speicherproblem, Biomasse kann sowohl zur Grundlastabdeckung als auch bei Bedarfspitzen gezielt eingesetzt werden - im Gegensatz zu unkalkulierbaren Produktionsfluktuationen bei Windkraftwerken oder Photovoltaik-Anlagen.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of public support Lack of capacity (installers, other) Other (please specify)
Please specify which other barriers	Durch geringere Stückzahlen bei der Produktion und gleichzeitig aufwendigeren Anlagenteilen für die Brennstoffbeschickung haben vollautomatische Heizsysteme für biogene Energieträger in der Regel deutlich höhere Investitionskosten als Erdgas- oder Ölfeuerungsanlagen. Die Gewährung von Investitionszuschüssen der Mineralölindustrie zum Tausch von alten Ölkesseln durch neue Ölkessel und die dadurch entstehende Prolongierung der Abhängigkeit von fossilen Heizöl im Wärmesektor auf mehrere Jahrzehnte bei gleichzeitiger Unterversorgung des Treibstoffmarktes mit Dieselkraftstoffen ist höchst kontraproduktiv. De facto wird die Raumwärmeerzeugung mit Heizöl durch die dadurch bewirkten höheren Dieselpreise subventioniert. Die stationäre Verbrennung von fossilen Mitteldestillaten zur Raumwärmeerzeugung müsste daher (mit entsprechenden Übergangsregelungen) EU-weit verboten werden.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Effizienzsteigerung durch zügige Erneuerung des Heizanlagenbestandes: Durch die Verwendung moderner Biomassekessel kann die Energieeffizienz im Vergleich zu veralteten Allesbrennern durch den optimierten Verbrennungsvorgang und dadurch gesteigerten Wirkungsgrad deutlich verbessert werden. Im Zusammenspiel mit Speichertechnologien (Pufferspeicher) sowie Kombinationen mehrerer Heizsysteme (Zentralheizung mit z.B. solarthermischer Anlage) können weitere Effizienzsteigerungen erreicht werden. Der Einsatz von Niedertemperaturheizsystemen und deren Wärmeversorgung mittels Wärmepumpe und Solarthermie hat teilweise Berechtigung, eine generelle Elektrifizierung der Raumwärmeerzeugung (Stromheizungen, Nachtspeicheröfen) ist aber höchst ineffizient und daher strikt abzulehnen.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of standards Lack of infrastructure Lack of awareness Lack of suitable information Other (please specify)
Please specify which other barriers	Unseriöse und emotional gesteuerte Negativkampagnen aus unterschiedlichsten Interessenslagen durch NGOs und sonstige Gruppierungen mit teilweise gezielt falschen Argumenten gegen biogene Treibstoffe zur Generierung von öffentlicher Aufmerksamkeit und/oder Spenden anstelle konstruktiver und sachlicher Beiträge zur Information der Bevölkerung. Bereitschaft der Medien für Negativschlagzeilen bezüglich biogener Treibstoffe in Korrelation zum Werbeetat für fossile Energieträger.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Air

G.2.1. Please explain your answer	Im Personenverkehr auf der Straße kann nach entsprechender Verabschiedung der E10 und B10 Normen durch Erhöhung der Beimischungsquoten eine entsprechende Mehrmenge an biogenen Treibstoffen über die bestehende Infrastruktur in Verkehr gebracht werden. Im Gütertransport wird die Abhängigkeit von flüssigen Treibstoffen aufgund der derzeit nicht praxistauglichen Konzepte zur Elektrifizierung des Antriebsstrangs bei Schwerfahrzeugen noch lange Zeit andauern. Daher wird der Einsatz von biogenen Treibstoffen im Gütertransport steigen. Der Flugsektor ist ebenfalls auf Treibstoffe mit relativ hoher Energiedichte (flüssige Treibstoffe) angewiesen. In diesem Sektor können neben etwaigen Prozesskettenoptimierungen zur Treibhausgasemissionseinsparung keine anderen Alternativen als biogene Treibstoffe eingesetzt werden. Bei der Eisenbahn könnte der Einsatz erneuerbarer Energien einerseits durch den Ausbau und die stärkere Nutzung des öffentlichen Personennah- und -fernverkehrs sowie andererseits durch den stetig steigenden Ökostromanteil im Strommix der MS/EU gesteigert werden.

H. SUSTAINABILITY

H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement No, the existing binding sustainability criteria are sufficient

H.1.1. Please explain	In den MS der EU gelten seit Jahrzehnten sehr klare Forstgesetze zur nachhaltigen Biomasseproduktion im Wald und gut eingeführte Nachhaltigkeitsregeln in der Landwirtschaft (Cross Compliance). Die Einführung neuer zusätzlicher Nachhaltigkeitskriterien bedingt zusätzliche Bürokratie und höhere Kosten für die biogenen Energieträger. Gleichzeitig werden fossile Energieträger massiv bevorteilt (Emissionsberechnung) und durch die Nichteinbeziehung von Externalitäten (Umweltkatastrophen, Beschaffungskosten, usw.) zusätzlich massiv finanziell gefördert. Durch die weitere Verschärfung der bestehenden Kriterien und oder zusätzliche Einführung von neuen Nachhaltigkeitsregelungen für nachwachsende Rohstoffe würde eine weitere Marktverzerrung zu Ungunsten der erneuerbaren Energieträger bewirkt werden - dies ist strikt abzulehnen. Statt ständig neue Kriterien und Barrieren für die Produktion nachwachsender Rohstoffe innerhalb der EU zu entwickeln, sollte die Kommission umgehend eine Richtlinie für Mindestvorgaben zur Kostenwahrheit und Ethik-, Umwelt- und Nachhaltigkeitsstandards bei der Produktion fossiler Energieträger entwickeln und in Kraft setzen!

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Kooperationen beim Technologietransfer in allen Bereichen der erneuerbaren Energien und auf allen Ebenen der Forschung und Entwicklung. In Teilbereichen der landwirtschaftlichen Produktion (beispielsweise Ölsaaten) können verstärkte Kooperationen (allen voran mit den angrenzenden Nachbarstaaten - Balkanländer, Ukraine, Weißrussland) zu einer effizienteren Nutzung der umfangreich verfügbaren Brachflächen und Ertragssteigerungspotentialen führen.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)

Please explain why	Regionale Ver- und Entsorgungskonzepte für überschaubare Energieerzeugungs-Einheiten mit klaren Wertschöpfungseffekten in ländlichen Gebieten sind gegenüber Megaprojekten zur Stromerzeugung zu bevorzugen. Die Priorität sollte daher auf optimale Lösungen für dezentrale Energieversorgungskonzepte gelenkt werden. Versorgungssicherheit mit Energie kann in Krisensituationen mit regionalen Konzepten am besten gewährleistet werden. Die Infrastruktur für Megaprojekte (tausende Kilometer Öl-, Gas- und/oder Stromleitungen) kann im Krisenfall rasch lahmgelegt werden.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Vorrang muss jedenfalls die gesteigerte erneuerbare Energie-Produktion innerhalb der EU haben. Versorgungssicherheit der EU kann nicht durch Megaprojekte in politisch instabilen Drittländern erreicht werden, auch nicht mit Solarkraftwerken.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Die priorisierte Zielrichtung für bessere Versorgungssicherheit sollten dezentrale regionale Energie-Versorgungskonzepte sein - und nicht zentralisierte Großeinheiten mit riesigen Transferverlusten und -kosten. Umso näher Energieerzeugung und Energieverbrauch räumlich intelligent organisiert und optimal integriert werden können (Smart Grids), umso besser.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Other (please specify)

Please specify which other key challenges	Der SET-Plan fokussiert auf Großanlagen - im Bereich der erneuerbaren Energien und insbesondere im Bereich der nachwachsenden Rohstoffe ist die Gesamteffizienz von Systemen mit überschaubaren Ver- und Entsorgungskonzepten bei kurzen Wegen wesentlich besser als bei Großanlagen. Der SET-Plan zielt daher an den Kernanforderungen für erfolgreiche Systeme mit klarem Regionsbezug vorbei.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Der Fokus muss auf die Optimierung kleiner und mittlerer Energieerzeugungs- und -versorgungssysteme gelegt werden.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Biomassegewinnung durch neue Produktionsbereiche (Algen, Mikroalgen, etc.); Reststoffnutzung der agrarischen Produktion (z.B. Maisspindel, Stroh); Optimierung kaskadischer Nutzungspfade in der Biomasseverwertung
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Forschung und Entwicklung an Demonstrationsanlagen, häufig mit unrealistischen Kostenansätzen für "upscaling" bei Rohstoffkosten. Mehrere Beispiele für Konzepte bei biogener Treibstoffproduktion in 2. Generation mit völlig marktfremden Preiskalkulationen.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Ja. Anderenfalls gibt es seitens der Forschung und Industrie zu geringe Anstrengungen zur Steigerung der Effizienz/Verbesserung der Technologie. Ein Beispiel dafür ist der CO2-Ausstoss der Fahrzeuge - auf Basis der freiwilligen Vereinbarung der Autoindustrie konnten keine größeren Fortschritte in der CO2-Reduktion festgestellt werden. Erst seit ein verbindliches Ziel (mit Sanktionen) besteht, können merkliche Fortschritte festgestellt werden.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Dr Alan Owen Robert Gordon University, Aberdeen UK a.owen@rgu.ac.uk
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	United Kingdom
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	The strong relationship between energy, food production and water availability means that energy shortages (or, more likely, restriction through price) will have a considerable knock-on effect throughout society, not just in terms of more expensive petrol or electricity. It is likely that resource shortage is actually more pressing than Climate Change effects.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	Marine (wave & tidal)
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)
Please specify how to make support schemes more market-oriented	target support towards cost-effective, simple, reliable technologies. An effective demonstration of viable, reliable devices will attract investors.

B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	N/A
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of information on support schemes or other
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Increased availability of storage

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	N/A

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Lack of awareness Lack of capacity (installers, other)
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Pace of technology development Lack of infrastructure Lack of awareness
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Rail
G.2.1. Please explain your answer	The storage and transmission of renewable energy is likely to be in some form of hydrogen and/or hydrocarbon. More goods need to shifted to rail to reduce emissions and embedded energy costs.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	System integration Industrial manufacturing and supply chain

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Mary Young youM522@aol.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	United Kingdom
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	The Principle of Proportionality is binding in both the development of EU legislation and State Aid for environmental protection. To comply it has to be demonstrated (a) what greenhouse gas tonnages are to be reduced; (b) the cost basis for implementation and the alternative implementation strategies considered and (c) the environmental objectives involved, namely the environmental degradation which is to be avoided. Neither the NREAPs nor the EU's documentation for Directive 2009/28/EC demonstrate (a) or (b). Directive 2001/77/EC required by the end of 2005 a report which should: "Consider the progress made in reflecting the external costs of electricity produced from non-renewable energy sources and the impact of public support granted to electricity production". This cannot be found. In DG Clima's analysis in March 2010 of a possible initiative to step up beyond 20% greenhouse gas savings: "Explain how the options respect the proportionality principle? Climate change is a transboundary environmental problem. Achieving GHG reductions targets in the EU requires a balanced distribution of efforts between countries and sectors in order to ensure that the environmental objectives are met, but also the common market is not unduly hampered". Neither is there an answer to (C). Furthermore, the Commission has failed to comply with the decision of the EU Ombudsman in Complaint 2587/2009/JF. The renewable programme is a breach of the most fundamental principle of EU law.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)

Please specify which other policy elements?	"The long-term perspective of investors" and the EU's ambition to move towards a reduction of 80-95% of GHG emissions in a 2050 perspective is the focus of this consultation and resulting measures. The Lisbon Treaty is clear in that the "Union shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance. Each institution shall act within the limits of the powers conferred on it in the Treaties. The institutions of the Union shall apply the principle of proportionality". Massive costs and environmental impacts are occurring and the Commission and the Member States have failed to demonstrate, how the renewable energy programme and the focus of this consultation, are in compliance with the terms of the Lisbon Treaty above. The citizen's interest does not lie with a 95% reduction in GHG emissions and establishing a long term perspective for investors in technology sectors. Furthermore, there has been a complete failure to verify the emission savings and environmental performance of renewable installations installed to date and engineering analysis is clearly showing how ineffective intermittent generators, such as wind and solar, are in delivering reliable energy and effective environmental protection.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	No
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Phase out support schemes over time (please specify for which technologies if applicable)

Please specify for which technologies (if applicable) to phase out support schemes over time	ECJ judgement in case C-379/98 in relation to justifying state aid for wind generated renewable electricity was on the basis that it was “useful for protecting the environment in so far as it contributes to the reduction in emissions of greenhouse gases”. “It should be noted that that policy is also designed to protect the health and life of humans, animals and plants”. The Commission is aware it is subject to a Communication ACCC/C/2010/54 at the UNECE Aarhus Convention Compliance Committee in relation to the renewable energy programme in Ireland. This has demonstrated that the funding mechanisms are to ensure delivery of an EU obligation in relation to renewable energy and not part of a commitment, to contribute to any quantifiable environmental target related to quantified carbon dioxide savings. In approving this funding the EU failed to evaluate the environmental effectiveness of the programme or if the citizen’s rights with regard to public participation in decision making had been complied with. The inefficiencies on the grid induced by wind energy were known in advance, but ignored. Emission savings claimed for in the funding application have not occurred. Any further installation of wind energy will not lead to emissions savings, yet a quadrupling is required by the NREAP. A similar situation has occurred in other Member States. Aid schemes approved by the EU for renewable energy are not protecting the environment and saving fossil energy resources.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)
C.1.1. Please provide explanations and specific examples where available	The Lisbon Treaty requires that: “Decisions shall be taken as openly and as closely as possible to the citizen. The Commission shall carry out broad consultations with parties concerned in order to ensure that the Union's actions are coherent and transparent”. The EU has ratified the United Nations Economic Commission for Europe’s (UNECE) Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. A Strategic Environmental Assessment (SEA) is mandatory under Directive 2001/42/EC for all programmes leading to future development consent of wind farms and other renewable infrastructure. Communication ACCC/C/2010/54 at the Aarhus Convention Compliance Committee has shown that the Units Heads of DG Environment and DG Energy in June 2010 directed the Member States that no SEA was required for the NREAP if it did not include specific mandatory measures. Note: The renewable targets and the NREAPs are mandatory. The Compliance Committee have concluded that public participation was required for the NREAP and have formally requested: “Could you please explain why the Commission says that it is not responsible for the actions of the Member State in this case?” The Commission is acting without ‘proper authority’ in the manner in which it is implementing this programme, in that it has deliberately bypassed legally binding procedures related to environmental assessment and democratic accountability.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	The Commission has failed to comply with both the terms of the Lisbon Treaty above and its obligations under the Aarhus Convention with both the structure and the implementation of Directive 2009/28/EC. With regard to implementing a programme of this nature, Article 7 of the Convention is clear: it requires that the public affected be provided with the necessary information, so that they can participate effectively during the preparation of the plan or programme within a transparent and fair framework, when all options are open and effective public participation can take place. EU legislation implements this through the more detailed process of Strategic Environmental Assessment. Furthermore the Commission's legal team in their opening statement to the Aarhus Convention Compliance Committee meeting on Communication ACCC/C/2010/54, stated that in terms of the National Renewable Energy Action Plan, the Irish public were only entitled under the terms of the Convention to information on threats to the environment. They were not entitled to information on comparative costs or effectiveness of the renewable technologies. Under the Treaty of Lisbon, the citizen has a Right to good administration, a Right to effective remedy and to a fair trial and a Right to have damages made good. The Right to have damages made good applies to institutions and bodies of the EU and Member States when they are implementing Union law.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above

D.1.1. Please specify which obstacles and the nature and degree of them for each	Europe's population has stabilised, while Europe's industry is more efficient, so electrical power consumption figures are stabilising. Yet to support a renewable programme with unknown figures related to environmental performance, impacts and financial costs, an enormous network development is to be initiated to facilitate unreliable and intermittent renewable generation, e.g. as regards the Republic of Ireland, a doubling of the high voltage grid by an extra 5,000 km. The EU Commission's 'Priority Interconnection Plan' COM (2006) 846 is very critical of 'time consuming public consultation procedures'. Yet this plan has an investment of €30 billion in infrastructure by the EU by 2013, with an estimated €700 – €800 million annually to be spent on connecting more renewable sources. In Com (2011) 658 on a proposal for regulation of a pan-European energy infrastructure, this states in relation to proportionality that the proposal does not go beyond what is necessary to achieve the objectives perused. This is not correct, the renewable programme has by-passed both proper environmental, technical and financial assessment and legally binding measures related to public participation. It is certainly not proportionate in terms of achieving demonstrated environmental protection objectives. Now the citizen is expected to carry the burden of this grid expansion, with massive and unnecessary financial and environmental impacts.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Other (please specify)

Please specify which other rules	Both the internal and external costs associated with any grid expansion to facilitate renewable energy need to be assessed and compared with the 'do nothing scenario', given that the existing grid functions without any of this development. With regards to the EU's binding climate change and renewable energy targets, it is necessary to point out Principle 10 of the United Nation's Rio Declaration, namely; "Environmental issues are best handled with participation of all concerned citizens, at the relevant level". These binding targets were decided solely on political considerations, in which there was neither any environmental assessment nor public participation with concerned citizens. These massive grid expansions to facilitate intermittent renewable generation are being forced upon a population, who have neither been informed nor provided with an opportunity to participate in these key decisions. Clearly renewable energy should only be provided with access to the grid, when it demonstrates that it is superior and more effective than current generation capacity. At no stage have the necessary assessments in this regard been completed to justify the preferential treatment provided to such generation. Indeed, ever indication is that the renewable energy being promoted solely for political reasons is not providing any significant environmental benefits, which anyhow could have been achieved with far lower cost and environmental impacts by other means.

D.2.1. Please explain why	As regards grid related rules there is already a huge backlash developing from the general public as more and more grid expansions are developed to facilitate intermittent and ineffective renewable generation, such as wind energy. As the Commission is aware from Communication ACCC/C/2010/54 it approved €110 million in funding for the Ireland-to UK electrical connector, even though the sole purpose of this project was to facilitate more wind energy on the Irish grid, a policy, which had by-passed the legally required public participation. The EU's European Investment Bank has supplied €300 million in loans to the interconnector project and a further €235 million to the State-owned ESB to develop further networks to facilitate wind energy in Ireland. These loans are related to a programme which has by-passed legally required public participation procedures. Now the citizen is expected to pay back this money for infrastructure that is not needed, and for which he was provided with no proper environmental information nor the opportunity to participate in the decision-making. Given that Europe is already heavily indebt it is simply unacceptable that such practices should be occurring, driven by EU Institutions which have deliberately by-passed the legally binding rules which are applicable to them. Proper accountability and adherence to democratic procedures is not optional with regard to grid development.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Other (please specify)

Please specify which other measures	The integration of solar power in Germany has caused a huge financial burden to be placed on the citizen for no real environmental benefit. In 2012 an estimated €100 billion subvention cost only helps delivers 3% of Germany's electricity supply, in an irregular and ineffective manner at that. Indeed the development of renewable electricity in German has essentially doubled generation costs. All other countries that have expanded renewable energy are seeing massive price hikes for the consumer, coupled with a failure to demonstrate any significant decrease in fuel usage or emissions. Once again this demonstrates the failure to properly assess policy before implementation. Input from engineers not in the pay of the wind industry has been deliberately ignored. Europe's industry cannot remain competitive given these massive costs, which are bound to be raised even further due to dysfunctional and ineffective system integration costs for renewable power, which has neither rational nor legal reason to be there in the first place.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Other (please specify)

Please specify which other barriers	The uptake of renewables in heating and cooling is being driven, both at EU and Member State level, by polices which have not been properly assessed and whose implementation is related to political expediency and not environmental protection. Indeed the promotion of wood biomass for domestic heating is not only leading to the destruction of natural wood resources, but as the moisture content of such fuel, particular in Northern Europe, is high; it is leading to increased particulate emissions and urban pollution. As regards the renewable Directive, the external costs of existing heating and cooling arrangements are unknown, yet we are to subsidise renewables for which no external cost assessment is available. This type of policy will only lead to unsustainable businesses, which are totally dependent on subsidy bubbles to survive and have little or no viable long term future. The Common Agriculture Policy had its inception in such rash politically-based decision making, in which market-based economics was replaced by a political structure. This agricultural policy resulted in an enormous cost burden for the European citizen, and lead to practices which were unsustainable from both financial and environmental perspectives. It is clear that the EU has not learnt anything from this debacle: it is now rapidly implementing other politically-agreed targets, by-passing legally-required assessment and public participation requirements.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Other (please specify)

Please specify which other pathways	The counter-productive nature of the EU's energy policies is also evident in the promotion of biomass for domestic heating, with all its associated environmental impacts, plus a significant impact on human health. Yet the most environmentally-effective form of renewable heat, that of electrically-driven heat pumps, is being put out of business by soaring electricity costs caused by the renewables' bubble. Yet at no stage was this considered in a proper assessment as part of policy development. As Der Spiegel reported in March 2011 in relation to German's Eco-Trap: "Not everything that looks green serves the environment. The ecological principle of proceeding with care doesn't seem to apply to environmental policy. The more, the better, seems to be the principle. No one is calculating whether all the billions being invested in protecting the environment are actually being spent wisely. Ordinary citizens can't judge it and many experts have no interest in shedding any light on this aspect because their livelihoods are at stake…. In many cases, a closer look at environmental measures reveals that they're expensive and don't have much effect".

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	It is likely that global energy prices will rise in line with both population increase and a general improvement in living standards. Market forces will then dictate that consumers must use energy more efficiently. However, what the EU is proposing instead is a massive intrusion on the Citizen's rights, in that he should be denied access to certain energy sources and forced to use other highly ineffective ones, based on political decisions which have by-passed proper assessment and legally binding public participation procedures. In particular, given that the EU has completely failed to assess and quantify the external costs of carbon dioxide emissions, it has no legal right to restrict the citizen's access to such fuels and introduce massive financial support programmes for those, which may well carry the tag renewable, but in reality do not deliver any environmental benefits which could not have been achieved at a fraction of the cost by a rational and science-based evaluation. While energy efficiency and environmental protection in the heating and cooling sector should be promoted, this should be based strictly on the principles of the Lisbon treaty, namely a highly competitive social market economy and a high level of protection/improvement in the quality of the environment. The current promotion of renewable energy does not fulfil those requirements.

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Other (please specify)

Please specify which other barriers	With regard to the 10% target for transport fuel, this was an essentially political target bereft of any environmental assessment. Indeed, the April 2007 consultation by the Commission was simply a 'Vox Pop' based on four questions: "How should a biofuel sustainability system be designed? How should overall effects on land use be monitored? How should the use of second-generation biofuels be encouraged? What further action is needed to make it possible to achieve a 10% biofuel share?" These questions fail to qualify as public participation in decision making, since the target is already established. The current situation is that the introduction of E10 biofuel into Germany has been a disaster. The Commission is also well aware that it has been sued, accused of violating European transparency laws. Client Earth, Friends of the Earth Europe, Fern and Corporate Europe Observatory filed the lawsuit following the Commission's refusal to provide access to information in decisions related to the sustainability of Europe's Biofuels policy. The 10% target should therefore be reviewed and subject to the proper technical, environmental and financial assessment, in conjunction with proper public participation, which was mandatory for such a biofuel programme in the first place.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail

G.2.1. Please explain your answer	Many European rail networks are electrified and in a number of Member States, particularly Germany, rail costs are soaring as electrical generation costs have effectively doubled due to renewable energy inputs, which are massively ineffective in terms of environmental protection. This is in effect rendering uncompetitive what is an extremely effective form of transportation, particularly for social groups who would not have ready access to a car. Yet clearly this impact has never been assessed and quantified in the development of these policies which, to quote Mark Twain, are being driven by an administrative structure where "people's beliefs and convictions are in almost every case gotten at second-hand, and without examination, from authorities who have not themselves examined the questions at issue but have taken them at second-hand from other non-examiners, whose opinions about them were not worth a brass farthing". One can only wonder if people who have been placed in positions of responsibility for developing EU energy policy did even attempt to understand the impacts of these policies, as certainly there is no documented evidence to demonstrate they did.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement
H.1.1. Please explain	The sums of money which have been made available for Europe's biofuel policies are colossal, and are only matched by the potential for environmental devastation. Given the rising global population, which in many cases can't feed itself, to divert food products into fuel tanks is simply obscene. Furthermore, Biofuels have not provided the environmental benefits that were claimed. And of course there was no proper environmental assessment of the policy made before it was introduced. This policy should be stopped before it does more damage both in Europe and in poor countries of the South.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	

I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	As already answered in Section D, existing grid networks are perfectly adequate for today's and future needs. They may need replacement in relation to the age of the components, but they do not need to be expanded
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	In relation to COM (2011) 539 on "The EU Energy Policy: engaging with partners beyond our borders" and the Mediterranean Solar Plan, we comment that this plan is widely speculative, particularly given the complete failure of solar power to deliver either cost effective or reliable electricity. Europe is already collapsing under a burden of financial debt and it is appalling to see that the EU Commission wants to increase this burden based on speculative and ill-conceived projects in neighbouring countries. Spain has already had to slash its solar subsidies and Germany cannot continue to support solar development any more, not to mention the fact that neither the citizens nor the environment benefited from these colossal expenditures. Again the Commission is creating a 'bubble economy' for equipment suppliers, while destroying jobs in other sectors with rising electricity prices and unsustainable sovereign debt levels.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	In a similar manner offshore wind is a technology sector associated with massive costs (€4.3 million per MW installed) for an unreliable electricity supply, which in turn has massive environmental impacts, in particular associated with grid expansions. It is distressing that the EU Commission cannot produce any objective documentation to support this technology sector. With regard to the Communication ACCC/C/2010/54 and Ombudsman Complaint 2587/2009/JF of 3rd Feb 2011 on the Irish State Broadcaster, the EU Commissioner for Climate Action Connie Hedegaard stated in relation to offshore wind: "It actually pays off, it is sound economics". When a formal reply was received concerning a request for supporting technical information, no such documentation was provided. The reply said: "…as the Commissioner's statement did not refer to any particular project or development, nor was it based on any one or particular piece of documentation but on publicly available information and her general experience, knowledge and political views". The only document available, from the European Environment Agency on "Europe's onshore and offshore wind energy potential", quotes the European Wind Energy Association as its technical source. How objective can that be?

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Other (please specify)

Please specify which other key challenges	Some very serious questions have to be answered concerning the taxpayers' money being diverted into renewable energy research, in particular as there has been a complete lack of data made available as to the environmental effectiveness of this sector, despite it being a legal obligation to possess and to update such environmental data. With regard to the Intelligent Energy Europe programme, both projects funded by the EU Commission in relation to wind energy, "Wind Energy - The Facts" and "GP Wind" contain blatantly incorrect claims about the emissions and fuel savings from this intermittent source, in which the inefficiencies induced on the grid are ignored. Under Regulation 1367/2000, which imposes the requirements of the Aarhus Convention on Institutions of the EU, the EU Commission is refusing to confirm how it complies with its legal requirements in relation to the two programmes, i.e. that it shall, insofar as is within its power, ensure that any information that is compiled by it, or on its behalf, is up-to-date, accurate and comparable. In particular with regard to "Wind Energy – The Facts", the EU contributed 50% of the €773,662 used by the European Wind Energy Association to run a "dissemination" campaign. Yet at no stage has an independent and transparent technical analysis ever been completed of the EU's colossal support for wind energy and its effectiveness.

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	The Treaty of Lisbon is clear, in that the Union "shall promote scientific and technological advance". Wind, solar photovoltaic and biofuels, which are cornerstones of the mission of the SET plan, have not to date, and there are absolutely no indicators that they will in the future, provided a reliable, cost effective and environmentally-effective source of energy. They are not therefore connected with any scientific and technological advance. Neither is there transparency in the manner in which the SET plan is being implemented. Not only is there a complete failure to assess the environmental effectiveness of the above technologies, which are the only justification for their financial support framework, but as regards wind energy the output is dominated by the European Wind Energy Association, instead of the required independent and transparent technical analysis of this sector, which is being provided with colossal support at the citizen's expense. There is every indication that the EU Commission is providing funding for industrial sectors in a manner which is opaque, and detrimental to the requirements of the Lisbon Treaty to promote "a highly competitive social market economy, aiming at full employment and social progress".

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	The EU Commission needs to comply with its legal requirements under the Aarhus Convention, to possess and update environmental information which is relevant to its function. Note: environmental information includes not only information on emissions and impacts, but also cost benefit and other economic analysis. To date the Commission has failed, despite a legal requirement to do so, to assess the renewable energy it so actively supports and to determine the external impacts of non-renewable sources. As it wrote in reply to UNECE in Communication ACCC/C/2010/54, "it is generally recognised that renewable energy, and wind energy in particular, is preferential from an environmental point of view to non-renewable energy". Its position is therefore based on 'public opinion', not on technical expertise, while failing legal compliance. If the "polluter pays" principle allows external costs to be internalised, this must be based on a transparent and factual analysis, which to date has been bypassed. Energy policy going forward must be supported by evidence-based assessments rather than soundbites, e.g. "In the opening months of 2007, the European Union stepped up its energy and climate change ambitions to new levels. The Commission put forward an integrated package of proposals calling for a quantum leap in the EU's commitment to change. A political consensus grew up in support of this approach" - SEC(2008) 85/3 of January 2008.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	

J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	The answer to this question has been amply covered in the replies above. The EU has implemented a massive renewable energy programme, putting mandatory targets on Member States, plus a colossal financial burden on the citizen, adverse health effects, and huge unwarranted environmental impacts on Europe's landscape and biodiversity. At every stage of the process, legally binding procedures related to assessment and public participation were bypassed. The European Commission must recognise the complete ineffectiveness of its energy policy and bring it to a halt, or inevitably the European Courts will do it for them, and ensure damages are made good. "Saving the planet" is but a fantasy in a context where the remedy is worse than the illness. Biofuels cause deforestation, use as much oil as they save, and increase the price of food. Wind farms are a nightmare and a health hazard for millions of unwitting neighbours. They actually cause the extinction of bird and bat species while pretending to save them. Wind and solar energies are a bottomless pit threatening the stability of the euro and the future of the EU. These destructive policies must stop.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Dimitrios MENDRINOS; Centre for Renewable Energy Sources and Saving; email: dmendrin@cres.gr
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Greece
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Better financing possibilities

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Accelerate convergence of national support schemes
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology

B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	In my opinion, all sectors should be treated with the same way.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of capacity (installers, other)
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Geothermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of infrastructure
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	

I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Geothermal energy in terms of: i) enhanced geothermal systems for electricity generation and district heating/cooling ii) ground source heat pumps for heating and cooling Both forms of geothermal energy have a high resource base able to cover the bulk of EU energy needs, are available everywhere, 24 hours per day, 7 days per week, all year round.

J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Certainly.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Österreichischer Forstverein, forst@lk-oe.at
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Interessensvertretung
3. Please indicate your country	Austria
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Die Aufteilung der Zielwerte auf ein gesamthaftes EU-Ziel und darüberhinaus auf Sektorziele erscheint als die beste Möglichkeit, die in den MS unterschiedlichen Ausgangspositionen und Voraussetzungen zur Zielerreichung optimal ausnutzen zu können. Es sollten auch verpflichtende sektorale Ziele für die MS ausverhandelt werden. Ohne verpflichtende Zielvorgaben wird die derzeitige Politik geschwächt und der weitere Weg in Richtung Erneuerbare Energieträger wird nicht mehr ausreichend konsequent verfolgt.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Other (please specify)
Please specify which other policy elements?	Wirksamer Außenschutz für die innereuropäische Erzeugung nachwachsender Rohstoffe und biogener Energieträger, insbesondere für die innereuropäische Bioethanol- und Biodieselproduktion, durch Aufrechterhaltung der Außenschutzmechanismen wie Einfuhrzölle und einer Maximalimportquote (z.B. 7% des Marktvolumens). Keine weiteren bilateralen Zollabkommen zum Import von Biotreibstoffen und deren Rohstoffen sowie entsprechende genaue Prüfung der Einhaltung der Nachhaltigkeitskriterien aus RL 2009/28/EG Art. 17 bis 19 für außereuropäische Produktionsstätten sowie strenge Kontrolle der Berichtspflichten von Drittländern und deren Bedingungen der land- und forstwirtschaftlichen Produktion im Hinblick auf umweltschonende Wirtschaftsweise und Sozialstandards.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes

Please specify how to make support schemes more market-oriented	Fossile Energieformen werden derzeit rund sechs mal stärker gefördert als erneuerbare Energien - im Jahr 2010 wurden lt. IEA global 409 Mrd. Dollar staatliche Subventionen für fossile Energieträger eingesetzt und nur 66 Mrd. Dollar für erneuerbare Energien - dies bewirkt gemeinsam mit ungerechtfertigten Vorteilen bei der Emissionsberechnung (fragwürdiger fossiler Komparator in RL 2009/28/EG und 2009/30/EG) sowie bei Versicherungen (Haftungsbegrenzung bei Atomkraftwerken) eine starke Marktverzerrung zugunsten fossiler Energieträger! Eine umfassende Darstellung der Kostenwahrheit unter Einbeziehung aller externalisierten Kosten und negativer Umwelteffekte bei fossilen Energieträgern erhöht schlagartig die Marktfähigkeit erneuerbarer Energien! Entwicklung einer eigenen EU-Richtlinie zur verpflichtenden Darstellung der Kostenwahrheit bei fossilen Energieträgern! Erhaltung von Möglichkeiten steuerlicher Begünstigungen für erneuerbare Energieformen, insbesondere auch im Treibstoffbereich und in Hinblick auf Steuerfreiheit der Reinverwendung, keine CO2-Steuerkomponenten für biogene Treibstoffe bzw. sonstige biogene Energieträger! Sämtliche Vorteile auf monetärer und nicht monetärer Ebene für fossile und nukleare Energieträger müssen schnellstmöglich und umfassend beendet werden.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Da in jedem Mitgliedstaat spezifische Gegebenheiten und Entwicklungsstadien bei erneuerbaren Energien bestehen, müssen die Förderungsmechanismen für die unterschiedlichen Technologien in jedem Mitgliedstaat entsprechend individuell optimiert werden. Im Rahmen der Neufassung der Energiesteuerrichtlinie muss die Möglichkeit der steuerlichen Bevorteilung von erneuerbaren Energieträgern, allen voran auch Biotreibstoffen, angelehnt an den Artikel 16 der RL 2003/96/EG, erhalten bleiben. Die vollständige Steuerbefreiung von biogenen Treibstoffen ist ein wesentliches Element in der Marktdurchdringung und Steigerung des Einsatzes selbiger.

B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Wie bereits mehrfach erwähnt, besteht das größte Problem der Marktverzerrung durch fehlende Kostenwahrheit bei fossilen Energieträgern: Verdeckte Subventionen, Bevorzugung in verschiedensten Regelwerken, unfairer Wettbewerb durch überhöhte Marktmacht (zB. Gazprom) und unverhältnismäßig starke Konzentration von riesigen Finanzmitteln bei wenigen Unternehmen (Ölkonzerne) sind einige Beispiele für grobe Marktverzerrungen zu ungunsten erneuerbarer Energieträger.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Other (please specify)
C.1.1. Please provide explanations and specific examples where available	zu C.1.: Einheitliche Rahmenregelungen zur Umsetzung diverser Erfordernisse der EU-Richtlinien müssen durch die Europäische Kommission im Einvernehmensprozess mit den MS geklärt werden und dürfen nicht völlig entkoppelten und mandatslosen Normungsprozessen in abgeschotteten CEN-Gremien überlassen werden. Zu C.1.1.: Ein klares Negativbeispiel für praxisuntaugliche und überbordend komplizierte administrative Prozesse sind die Vorgaben zu Nachhaltigkeitskriterien in der RL 2009/28 EG und die vielfältigen Zeitverzögerungen seitens der Kommission bei deren konkreten Umsetzung sowie die davon entkoppelten unüberschaubaren Prozesse zu Nachhaltigkeitsnormen. Auf der anderen Seite fehlen im Auftrag der Kommission zu erstellende Europäische Normen für die technischen Spezifikationen bei E10 und B10, die ehebaldigst erarbeitet und veröffentlicht werden müssten.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	Statt ständig neue und immer kompliziertere Nachhaltigkeitskriterien für nachwachsende Rohstoffe vorzugeben, muss die Kommission endlich effektive Ethikstandards und Nachhaltigkeitsvorgaben für die Bereitstellung fossiler Energieträger entwickeln. Statt ständig größere Barrieren für die Produktion erneuerbarer Energien zu entwerfen, müssen endlich die Rahmenbedingungen bei der Produktion umweltschädlicher fossiler Energieträger geregelt werden! Umgehende Verabschiedung einer Richtlinie zur Kostenwahrheit sowie zu Ethik-, Umwelt- und Nachhaltigkeitsvorgaben bei der Produktion und Bereitsstellung fossiler Energieträger!

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	Im Rahmen der Regelungen für die Kostenermittlung/-verteilung der Netzkosten von Elektrizität gibt es keine Ausnahmen von z.B. Netzverlustentgelten, Netzzutrittskosten für Ökostrom und die Kosten für allfällig notwendige Netzverstärkungen werden voll und ganz den Ökostromproduzenten angelastet.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	Ohne bevorzugten oder garantierten Netzzugang könnten unüberwindbare bzw. nur sehr schwer überwindbare bürokratische und finanzielle Hürden (Netzzutrittskosten) für kleinere dezentrale Stromerzeuger aufgebaut werden.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)

Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	zu E.1.: Da es keine Kostenwahrheit auf den Energiemärkten gibt, fossile Energieträger deutlich höher subventioniert werden als erneuerbare Energieträger, die bestehenden Regelwerke in vielerlei Hinsicht fossile Energieträger priorisieren und die Monopolstellung bzw. Marktmacht einiger weniger Fossilenergie-Anbieter (z.B. Gazprom) verstärken, müssen durch Förderregime insbesondere dezentrale erneuerbare Energiesysteme noch besser gestärkt werden. zu E.2.: Eine besondere Stärke biogener Energieträger ist die Möglichkeit zur bedarfsgerechten Bereitstellung. Die Photosynthese löst das Speicherproblem, Biomasse kann sowohl zur Grundlastabdeckung als auch bei Bedarfspitzen gezielt eingesetzt werden - im Gegensatz zu unkalkulierbaren Produktionsfluktuationen bei Windkraftwerken oder Photovoltaik-Anlagen.
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of public support Lack of capacity (installers, other) Other (please specify)
Please specify which other barriers	Durch geringere Stückzahlen bei der Produktion und gleichzeitig aufwendigeren Anlagenteilen für die Brennstoffbeschickung haben vollautomatische Heizsysteme für biogene Energieträger in der Regel deutlich höhere Investitionskosten als Erdgas- oder Ölfeuerungsanlagen. Die Gewährung von Investitionszuschüssen der Mineralölindustrie zum Tausch von alten Ölkesseln durch neue Ölkessel und die dadurch entstehende Prolongierung der Abhängigkeit von fossilen Heizöl im Wärmesektor auf mehrere Jahrzehnte bei gleichzeitiger Unterversorgung des Treibstoffmarktes mit Dieselkraftstoffen ist höchst kontraproduktiv. De facto wird die Raumwärmeerzeugung mit Heizöl durch die dadurch bewirkten höheren Dieselpreise subventioniert. Die stationäre Verbrennung von fossilen Mitteldestillaten zur Raumwärmeerzeugung müsste daher (mit entsprechenden Übergangsregelungen) EU-weit verboten werden.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Effizienzsteigerung durch zügige Erneuerung des Heizanlagenbestandes: Durch die Verwendung moderner Biomassekessel kann die Energieeffizienz im Vergleich zu veralteten Allesbrennern durch den optimierten Verbrennungsvorgang und dadurch gesteigerten Wirkungsgrad deutlich verbessert werden. Im Zusammenspiel mit Speichertechnologien (Pufferspeicher) sowie Kombinationen mehrerer Heizsysteme (Zentralheizung mit z.B. solarthermischer Anlage) können weitere Effizienzsteigerungen erreicht werden. Der Einsatz von Niedertemperaturheizsystemen und deren Wärmeversorgung mittels Wärmepumpe und Solarthermie hat teilweise Berechtigung, eine generelle Elektrifizierung der Raumwärmeerzeugung (Stromheizungen, Nachtspeicheröfen) ist aber höchst ineffizient und daher strikt abzulehnen.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of standards Lack of infrastructure Lack of awareness Lack of suitable information Other (please specify)
Please specify which other barriers	Unseriöse und emotional gesteuerte Negativkampagnen aus unterschiedlichsten Interessenslagen durch NGOs und sonstige Gruppierungen mit teilweise gezielt falschen Argumenten gegen biogene Treibstoffe zur Generierung von öffentlicher Aufmerksamkeit und/oder Spenden anstelle konstruktiver und sachlicher Beiträge zur Information der Bevölkerung. Bereitschaft der Medien für Negativschlagzeilen bezüglich biogener Treibstoffe in Korrelation zum Werbeetat für fossile Energieträger.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Air

G.2.1. Please explain your answer	Im Personenverkehr auf der Straße kann nach entsprechender Verabschiedung der E10 und B10 Normen durch Erhöhung der Beimischungsquoten eine entsprechende Mehrmenge an biogenen Treibstoffen über die bestehende Infrastruktur in Verkehr gebracht werden. Im Gütertransport wird die Abhängigkeit von flüssigen Treibstoffen aufgund der derzeit nicht praxistauglichen Konzepte zur Elektrifizierung des Antriebsstrangs bei Schwerfahrzeugen noch lange Zeit andauern. Daher wird der Einsatz von biogenen Treibstoffen im Gütertransport steigen. Der Flugsektor ist ebenfalls auf Treibstoffe mit relativ hoher Energiedichte (flüssige Treibstoffe) angewiesen. In diesem Sektor können neben etwaigen Prozesskettenoptimierungen zur Treibhausgasemissionseinsparung keine anderen Alternativen als biogene Treibstoffe eingesetzt werden. Bei der Eisenbahn könnte der Einsatz erneuerbarer Energien einerseits durch den Ausbau und die stärkere Nutzung des öffentlichen Personennah- und -fernverkehrs sowie andererseits durch den stetig steigenden Ökostromanteil im Strommix der MS/EU gesteigert werden.

H. SUSTAINABILITY

H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement No, the existing binding sustainability criteria are sufficient

H.1.1. Please explain	In den MS der EU gelten seit Jahrzehnten sehr klare Forstgesetze zur nachhaltigen Biomasseproduktion im Wald und gut eingeführte Nachhaltigkeitsregeln in der Landwirtschaft (Cross Compliance). Die Einführung neuer zusätzlicher Nachhaltigkeitskriterien bedingt zusätzliche Bürokratie und höhere Kosten für die biogenen Energieträger. Gleichzeitig werden fossile Energieträger massiv bevorteilt (Emissionsberechnung) und durch die Nichteinbeziehung von Externalitäten (Umweltkatastrophen, Beschaffungskosten, usw.) zusätzlich massiv finanziell gefördert. Durch die weitere Verschärfung der bestehenden Kriterien und oder zusätzliche Einführung von neuen Nachhaltigkeitsregelungen für nachwachsende Rohstoffe würde eine weitere Marktverzerrung zu Ungunsten der erneuerbaren Energieträger bewirkt werden - dies ist strikt abzulehnen. Statt ständig neue Kriterien und Barrieren für die Produktion nachwachsender Rohstoffe innerhalb der EU zu entwickeln, sollte die Kommission umgehend eine Richtlinie für Mindestvorgaben zur Kostenwahrheit und Ethik-, Umwelt- und Nachhaltigkeitsstandards bei der Produktion fossiler Energieträger entwickeln und in Kraft setzen!

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Kooperationen beim Technologietransfer in allen Bereichen der erneuerbaren Energien und auf allen Ebenen der Forschung und Entwicklung. In Teilbereichen der landwirtschaftlichen Produktion (beispielsweise Ölsaaten) können verstärkte Kooperationen (allen voran mit den angrenzenden Nachbarstaaten - Balkanländer, Ukraine, Weißrussland) zu einer effizienteren Nutzung der umfangreich verfügbaren Brachflächen und Ertragssteigerungspotentialen führen.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)

Please explain why	Regionale Ver- und Entsorgungskonzepte für überschaubare Energieerzeugungs-Einheiten mit klaren Wertschöpfungseffekten in ländlichen Gebieten sind gegenüber Megaprojekten zur Stromerzeugung zu bevorzugen. Die Priorität sollte daher auf optimale Lösungen für dezentrale Energieversorgungskonzepte gelenkt werden. Versorgungssicherheit mit Energie kann in Krisensituationen mit regionalen Konzepten am besten gewährleistet werden. Die Infrastruktur für Megaprojekte (tausende Kilometer Öl-, Gas- und/oder Stromleitungen) kann im Krisenfall rasch lahmgelegt werden.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Vorrang muss jedenfalls die gesteigerte erneuerbare Energie-Produktion innerhalb der EU haben. Versorgungssicherheit der EU kann nicht durch Megaprojekte in politisch instabilen Drittländern erreicht werden, auch nicht mit Solarkraftwerken.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Die priorisierte Zielrichtung für bessere Versorgungssicherheit sollten dezentrale regionale Energie-Versorgungskonzepte sein - und nicht zentralisierte Großeinheiten mit riesigen Transferverlusten und -kosten. Umso näher Energieerzeugung und Energieverbrauch räumlich intelligent organisiert und optimal integriert werden können (Smart Grids), umso besser.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Other (please specify)

Please specify which other key challenges	Der SET-Plan fokussiert auf Großanlagen - im Bereich der erneuerbaren Energien und insbesondere im Bereich der nachwachsenden Rohstoffe ist die Gesamteffizienz von Systemen mit überschaubaren Ver- und Entsorgungskonzepten bei kurzen Wegen wesentlich besser als bei Großanlagen. Der SET-Plan zielt daher an den Kernanforderungen für erfolgreiche Systeme mit klarem Regionsbezug vorbei.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Der Fokus muss auf die Optimierung kleiner und mittlerer Energieerzeugungs- und -versorgungssysteme gelegt werden.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Biomassegewinnung durch neue Produktionsbereiche (Algen, Mikroalgen, etc.); Reststoffnutzung der agrarischen Produktion (z.B. Maisspindel, Stroh); Optimierung kaskadischer Nutzungspfade in der Biomasseverwertung
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Forschung und Entwicklung an Demonstrationsanlagen, häufig mit unrealistischen Kostenansätzen für "upscaling" bei Rohstoffkosten. Mehrere Beispiele für Konzepte bei biogener Treibstoffproduktion in 2. Generation mit völlig marktfremden Preiskalkulationen.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Ja. Anderenfalls gibt es seitens der Forschung und Industrie zu geringe Anstrengungen zur Steigerung der Effizienz/Verbesserung der Technologie. Ein Beispiel dafür ist der CO2-Ausstoss der Fahrzeuge - auf Basis der freiwilligen Vereinbarung der Autoindustrie konnten keine größeren Fortschritte in der CO2-Reduktion festgestellt werden. Erst seit ein verbindliches Ziel (mit Sanktionen) besteht, können merkliche Fortschritte festgestellt werden.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Joseph Caulfield
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Ireland
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	The Principle of Proportionality is binding in both the development of EU legislation and State Aid for environmental protection. To comply it has to be demonstrated (a) what greenhouse gas tonnages are to be reduced; (b) the cost basis for implementation and the alternative implementation strategies considered and (c) the environmental objectives involved, namely the environmental degradation which is to be avoided. Neither the NREAPs nor the EU's documentation for Directive 2009/28/EC demonstrate (a) or (b). Directive 2001/77/EC required by the end of 2005 a report which should: "Consider the progress made in reflecting the external costs of electricity produced from non-renewable energy sources and the impact of public support granted to electricity production". This cannot be found. In DG Clima's analysis in March 2010 of a possible initiative to step up beyond 20% greenhouse gas savings: "Explain how the options respect the proportionality principle? Climate change is a transboundary environmental problem. Achieving GHG reductions targets in the EU requires a balanced distribution of efforts between countries and sectors in order to ensure that the environmental objectives are met, but also the common market is not unduly hampered". Neither is there an answer to (C). Furthermore, the Commission has failed to comply with the decision of the EU Ombudsman in Complaint 2587/2009/JF. The renewable programme is a breach of the most fundamental principle of EU law.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)

Please specify which other policy elements?	"The long-term perspective of investors" and the EU's ambition to move towards a reduction of 80-95% of GHG emissions in a 2050 perspective is the focus of this consultation and resulting measures. The Lisbon Treaty is clear in that the "Union shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance. Each institution shall act within the limits of the powers conferred on it in the Treaties. The institutions of the Union shall apply the principle of proportionality". Massive costs and environmental impacts are occurring and the Commission and the Member States have failed to demonstrate, how the renewable energy programme and the focus of this consultation, are in compliance with the terms of the Lisbon Treaty above. The citizen's interest does not lie with a 95% reduction in GHG emissions and establishing a long term perspective for investors in technology sectors. Furthermore, there has been a complete failure to verify the emission savings and environmental performance of renewable installations installed to date and engineering analysis is clearly showing how ineffective intermittent generators, such as wind and solar, are in delivering reliable energy and effective environmental protection.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Phase out support schemes over time (please specify for which technologies if applicable)

Please specify for which technologies (if applicable) to phase out support schemes over time	ECJ judgement in case C-379/98 in relation to justifying state aid for wind generated renewable electricity was on the basis that it was "useful for protecting the environment in so far as it contributes to the reduction in emissions of greenhouse gases". "It should be noted that that policy is also designed to protect the health and life of humans, animals and plants". The Commission is aware it is subject to a Communication ACCC/C/2010/54 at the UNECE Aarhus Convention Compliance Committee in relation to the renewable energy programme in Ireland. This has demonstrated that the funding mechanisms are to ensure delivery of an EU obligation in relation to renewable energy and not part of a commitment, to contribute to any quantifiable environmental target related to quantified carbon dioxide savings. In approving this funding the EU failed to evaluate the environmental effectiveness of the programme or if the citizen's rights with regard to public participation in decision making had been complied with. The inefficiencies on the grid induced by wind energy were known in advance, but ignored. Emission savings claimed for in the funding application have not occurred. Any further installation of wind energy will not lead to emissions savings, yet a quadrupling is required by the NREAP. A similar situation has occurred in other Member States. Aid schemes approved by the EU for renewable energy are not protecting the environment and saving fossil energy resources.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	N/A
B.4. Should the structure of financial support be gradually aligned EU-wide?	N/A
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)
C.1.1. Please provide explanations and specific examples where available	The Lisbon Treaty requires that: “Decisions shall be taken as openly and as closely as possible to the citizen. The Commission shall carry out broad consultations with parties concerned in order to ensure that the Union's actions are coherent and transparent”. The EU has ratified the United Nations Economic Commission for Europe’s (UNECE) Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. A Strategic Environmental Assessment (SEA) is mandatory under Directive 2001/42/EC for all programmes leading to future development consent of wind farms and other renewable infrastructure. Communication ACCC/C/2010/54 at the Aarhus Convention Compliance Committee has shown that the Units Heads of DG Environment and DG Energy in June 2010 directed the Member States that no SEA was required for the NREAP if it did not include specific mandatory measures. Note: The renewable targets and the NREAPs are mandatory. The Compliance Committee have concluded that public participation was required for the NREAP and have formally requested: “Could you please explain why the Commission says that it is not responsible for the actions of the Member State in this case?” The Commission is acting without ‘proper authority’ in the manner in which it is implementing this programme, in that it has deliberately bypassed legally binding procedures related to environmental assessment and democratic accountability.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	The Commission has failed to comply with both the terms of the Lisbon Treaty above and its obligations under the Aarhus Convention with both the structure and the implementation of Directive 2009/28/EC. With regard to implementing a programme of this nature, Article 7 of the Convention is clear in requires that the public affected be provided with the necessary information, so that they can participate effectively during the preparation of the plan or programme within a transparent and fair framework, when all options are open and effective public participation can take place. EU legislation implements this through the more detailed process of Strategic Environmental Assessment. Furthermore the Commission's legal team in their opening statement to the Aarhus Convention Compliance Committee meeting on Communication ACCC/C/2010/54, in that in terms of the National Renewable Energy Action Plan, sated that the Irish public were only entitled under the terms of the Convention to information on threats to the environment. They were not entitled to information on comparative costs or effectiveness of the renewable technologies. Under the Treaty of Lisbon, the citizen has a Right to good administration, a Right to effective remedy and to a fair trial and a Right to have damages made good. The Right to have damages made good applies to institutions and bodies of the EU and Member States when they are implementing Union law.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above

D.1.1. Please specify which obstacles and the nature and degree of them for each	Europe's population has stabilised, while Europe's industry is more efficient, so electrical power consumption figures are stabilising. Yet to support a renewable programme with completely unknown figures related to environmental performance, impacts and financial costs, an enormous network development is to be initiated to facilitate unreliable and intermittent renewable generation, as regards the Republic of Ireland, a doubling of the high voltage grid by an extra 5,000 km. The EU Commission's 'Priority Interconnection Plan' COM (2006) 846 is very critical of 'time consuming public consultation procedures'. Yet this plan has an investment of €30 billion in infrastructure by the EU by 2013, with an estimated €700 – €800 million annually to be spent on connecting more renewable sources. In Com (2011) 658 on a proposal for regulation of a pan-European energy infrastructure, this states in relation to proportionality that the proposal does not go beyond what is necessary to achieve the objectives perused. This is not correct, the renewable programme has by-passed both proper environmental, technical and financial assessment and legally binding measures related to public participation. It is certainly not proportionate in terms of achieving demonstrated environmental protection objectives. Now the citizen is expected to carry the burden of this grid expansion, with massive and unnecessary financial and environmental impacts.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Other (please specify)

Please specify which other rules	Both the internal and external costs associated with any grid expansion to facilitate renewable energy need to be assessed and compared with the 'do nothing scenario', given that the existing grid functions without any of this development. With regards to the EU's binding climate change and renewable energy targets, it is necessary to point out Principle 10 of the United Nation's Rio Declaration, namely; "Environmental issues are best handled with participation of all concerned citizens, at the relevant level". These binding targets were decided solely on political considerations, in which there was neither any environmental assessment nor public participation with concerned citizens. These massive grid expansions to facilitate intermittent renewable generation are being forced upon a population, who have neither been informed nor provided with an opportunity to participate in these key decisions. Clearly renewable energy should only be provided with access to the grid, when it demonstrates that it is superior and more effective than current generation capacity. At no stage have the necessary assessments in this regard been completed to justify the preferential treatment provided to such generation. Indeed, ever indication is that the renewable energy being promoted solely for political reasons is not providing any significant environmental benefits, which anyhow could have been achieved with far lower cost and environmental impacts by other means.

D.2.1. Please explain why	As regards grid related rules there is already a huge backlash developing from the general public as more and more grid expansions are developed to facilitate intermittent and ineffective renewable generation, such as wind energy. As the Commission is aware from Communication ACCC/C/2010/54 it approved €110 million in funding for the Ireland to UK electrical connector, even though the sole purpose of this project was to facilitate more wind energy on the Irish grid, a policy, which had by-passed the legally required public participation. In relation to the EU's European Investment Bank, this has supplied €300 million in loans to the interconnector project and a further €235 million to the State owned ESB to develop further networks to facilitate wind energy in Ireland. All related to a programme which has by-passed legally required public participation procedures. Now the citizen is expected to pay back this money for infrastructure, which is not need and for which he was provided with no proper environmental information or the opportunity to participate in the decision-making. Given that Europe is already heavily indebt it is simply unacceptable that such practices should be occurring driven by EU Institutions, which have deliberately by-passed the legally binding rules which are applicable to them. Proper accountability and adherence to democratic procedures is not optional with regard to grid development.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Other (please specify)

Please specify which other measures	The integration of solar power in Germany has caused a huge financial burden to be placed on the citizen for no real environmental benefit. Now in 2012 an estimated €100 billion subvention cost for what only delivers 3% of Germany's electricity supply in a highly irregular and ineffective manner. Indeed the development of renewable electricity in German has essentially doubled generation costs. Indeed all countries, which have undergone renewable expansions, are seeing massive cost rises for the consumer coupled with a failure to demonstrate any significant decrease in fuel usage or emissions. Once again this clearly demonstrates the failure to assess this policy before implementation and the manner in which the input from the technical sector has been deliberately ignored. Europe's industry cannot remain competitive given these massive costs, which are seemingly now to be raised even further with dysfunctional and ineffective system integration costs for renewable power inputs, which have no demonstrated or legal reason to be there in the first place.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Other (please specify)

Please specify which other barriers	The uptake of renewables in heating and cooling is being driven, both at EU and Member State level by polices, which have not been properly assessed and whose implementation is related to political expediency and not environmental protection. Indeed the promotion of wood biomass for domestic heating is not only leading to the destruction of natural wood resources, but as the moisture content of such fuel, particular in Northern Europe, is high; it is leading to increased particulate emissions and urban pollution. As regards the renewable Directive, the external costs of existing heating and cooling arrangements are unknown, yet we are to subsidise renewables for which no external cost assessment is available. This type of policy will only lead to unsustainable businesses, which are totally dependent on subsidy bubbles to survive and have little or no viable long term future. The Common Agriculture Policy had its inception in such rash political based decision making, in which market based economics was replaced by a political structure. This agricultural policy resulted in an enormous cost burden for the European citizen and lead to practices, which were unsustainable from both a financial and environmental perspective. Clearly it can be seen that the EU has not learnt anything from this debacle and is now rapidly implementing politically agreed targets, which have by-passed legally required assessment and public participation requirements.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Other (please specify)

Please specify which other pathways	The completely counter productive nature of the EU's energy policies can be seen in the manner in which wood biomass in domestic heating is being promoted, with all its associated environmental impacts, particularly the significant impact on human health, while the most environmentally effective form of renewable heat, that of electrically driven heat pumps, is being put out of business by soaring electricity costs. Yet at no stage was this considered in a proper assessment as part of policy development. As Der Spiegel reported in March 2011 in relation to German's Eco-Trap: "Not everything that looks green serves the environment. The ecological principle of proceeding with care doesn't seem to apply to environmental policy. The more, the better, seems to be the principle. No one is calculating whether all the billions being invested in protecting the environment are actually being spent wisely. Ordinary citizens can't judge it and many experts have no interest in shedding any light on this aspect because their livelihoods are at stake. A large amount of money flows into studies, risk assessments and providing seals of approval. In many cases, a closer look at environmental measures reveals that they're expensive and don't have much effect".

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	It is likely that global energy prices will rise in line with both population increase and a general improvement in living standards. Market forces will then dictate that consumers will use energy more efficiently. However, what the EU is proposing is a massive intrusion on the Citizen's rights, in that he should be denied access to certain energy sources and forced to use other highly ineffective sources, on the basis of political decisions, which have by-passed proper assessment and legally binding public participation procedures. In particular given that the EU has completely failed to assess and quantify the external costs of carbon dioxide emissions, it has no legal right to restrict the citizen's access to such fuels and introduce massive financial support programmes for those, which may well carry the tag renewable, but in reality do not deliver any environmental benefits, which could not have been achieved at a fraction of the cost by a rational and science based evaluation. While energy efficiency and environmental protection in the heating and sector should be promoted, this should be based strictly on the principles of the Lisbon treaty, namely a highly competitive social market economy and a high level of protection and an improvement in the quality of the environment. The current promotion of renewable energy does not fulfil those requirements.

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Other (please specify)

Please specify which other barriers	With regard to the 10% target for transport fuel, this was a completely political target bereft of any environmental assessment. Indeed the April 2007 consultation by the Commission was simply a 'Vox Pop' based on four questions: "How should a biofuel sustainability system be designed? How should overall effects on land use be monitored? How should the use of second-generation biofuels be encouraged? What further action is needed to make it possible to achieve a 10% biofuel share?" In no uncertain terms this fulfil the legal requirements in relation to public participation in decision making. The current situation is that the introduction of E10 biofuel into Germany has been a complete disaster. The Commission is also well aware in that it has been sued, accused of violating European transparency laws. Client Earth, Friends of the Earth Europe, Fern and Corporate Europe Observatory filed the lawsuit following the Commission's refusal to provide access to information in decisions related to the sustainability of Europe's Biofuels policy. The 10% target should therefore be reviewed and subject to the proper technical, environmental and financial assessment, in conjunction with proper public participation, which was mandatory for such a biofuel programme in the first place.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail

G.2.1. Please explain your answer	Many European rail networks are electrified and in a number of Member States, particularly Germany, rail costs are soaring as electrical generation costs have effectively doubled due to renewable energy inputs, which are massively ineffective in terms of environmental protection. This is in effect making what is an extremely effective form of transportation, particularly for social groups who would not have ready access to a car, uncompetitive. Yet clearly this impact has never been assessed and quantified in the development of these policies, in which to quote Mark Twain, it is being driven by an administrative structure where; "people's beliefs and convictions are in almost every case gotten at second-hand, and without examination, from authorities who have not themselves examined the questions at issue but have taken them at second-hand from other non-examiners, whose opinions about them were not worth a brass farthing". One can only wonder, if people who have been placed in a position of responsibility of development of Europe's energy policy, even attempt to understand the impacts of these policies, as certainly there is no documented evidence to demonstrate they do.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement
H.1.1. Please explain	The sums of money which have been made available by Europe's biofuel policies are colossal, and are only matched by the potential for environmental devastation. With a rising global population, which in many cases can't feed itself, to divert food grade products into fuel tanks, when other options are available, is simply obscene. Furthermore, Biofuels have not provided the environmental benefits, which were claimed for them, to which must be added the fact again that there was no proper environmental assessment of the policy before it was introduced. This policy should be stopped before it does more damage both in Europe and elsewhere.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A

I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	N/A
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	As already answered in Section D, existing grid networks are perfectly adequate for todays and future needs. They may need replacement in relation to the age of the components, but they do not need to be expanded.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	In relation to COM (2011) 539 on "The EU Energy Policy: Engaging with partners beyond our borders" and the Mediterranean Solar Plan, this plan is widely speculative, particularly given the complete failure of solar power to deliver either cost effective or reliable electricity. Europe is already collapsing under a burden of financial debt and it is appalling to see that the EU Commission wants to increase this burden based on speculative and ill conceived projects in neighbouring countries. Spain has already had to slash its completely overgenerous solar subsidies and Germany simply cannot continue to support solar development any more, not to mention the fact that neither the citizen nor the environment benefited from these colossal expenditures. Yet again the Commission is solely creating a 'bubble economy' for equipment suppliers.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	In a similar manner offshore wind is a technology sector associated with massive costs (€4.3 million per MW installed) for an unreliable electricity supply, which in turn has massive environmental impacts, in particular associated with grid expansions. It is particularly distressing that the EU Commission cannot produce any objective documentation to support this technology sector. With regard to the Communication ACCC/C/2010/54 and Ombudsman Complaint 2587/2009/JF, on the 3rd Feb 2011 on the Irish State Broadcaster the EU Commissioner for Climate Action Connie Hedegaard stated in relation to offshore wind: “It actually pays off, it is sound economics”. When a formal reply for the supporting technical information was received, no background documentation was connected to the request; “as the Commissioner's statement did not refer to any particular project or development, nor was it based on any one or particular piece of documentation but on publicly available information and her general experience, knowledge and political views”. The only document being available coming from the European Environment Agency on “Europe’s onshore and offshore wind energy potential”. This in turn quotes the European Wind Energy Association as its technical source.

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Other (please specify)

Please specify which other key challenges	There has to be some very serious questions asked about the sums of taxpayers now being diverted into renewable energy research, in particular as there has been a complete lack of data made available as to the environmental effectiveness of this sector, despite it being a legal obligation to posses and update such environmental data. With regard to the Intelligent Energy Europe programme, both projects funded by the EU Commission in relation to wind energy, “Wind Energy - The Facts” and “GP Wind”, contain blatantly incorrect claims about the emissions and fuel savings for this intermittent source, in which the inefficiencies induced on the grid are ignored. Under Regulation 1367/2000, which imposes the requirements of the Aarhus Convention on Institutions of the EU, the EU Commission is refusing to confirm how it complies with its legal requirement in relation to the two programmes, it that it shall, insofar as is within its power, ensure that any information that is compiled by it, or on its behalf, is up-to-date, accurate and comparable. In particular with regard to Wind Energy – The Facts, the EU contributed 50% of the €773,662 used by the European Wind Energy Association to run a dissemination campaign. Yet at no stage has an independent and transparent technical analysis ever been completed of the EU’s colossal support for wind energy and its effectiveness.

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	The Treaty of Lisbon is clear, in that the Union "shall promote scientific and technological advance". Wind, solar photovoltaic and biofuels, which are cornerstones of the mission of the SET plan have not to date, and there are absolutely no indicators that that they will in the future, provided a reliable, cost effective and environmentally effective source of energy. They are not therefore connected with any scientific and technological advance. Neither is there transparency in the manner in which the SET plan is being implemented. Not only is there a complete failure to assess the environmental effectiveness of the above technologies, which are the only justification for their financial support framework, but as regards wind energy, the output is dominated by the European Wind Energy Association, instead of the critically required independent and transparent technical analysis of this sector, which is being provided with colossal support at the citizen's expense. Clearly there is every indication that the EU Commission providing funding for sectors in a manner which is not transparent and which is detrimental to the requirements of the Lisbon Treaty, to promote "a highly competitive social market economy, aiming at full employment and social progress".

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	The EU Commission needs to comply with its legal requirement under the Aarhus Convention to posses and update environmental information, which is relevant to its function. Note: Environmental information includes not only information on emissions and impact, but also cost benefit and other economic analysis. To date the Commission has failed, despite a legal requirement to do so, to both assess the renewable energy it is so actively supports and determine the external impacts of non-renewable sources. As it wrote in reply to UNECE in Communication ACCC/C/2010/54, "it is generally recognised that renewable energy, and wind energy in particular, is preferential from an environmental point of view to non-renewable energy". Its position is therefore based on 'public opinion' and not demonstrated legal compliance. While the Polluter Pays Principle allows external costs to be internalised, this must be based on a transparent and factual analysis, which to date has been bypassed. Energy policy going forward must be based on evidence based assessment rather than as SEC(2008) 85/3 of January 2008 stated, "In the opening months of 2007, the European Union stepped up its energy and climate change ambitions to new levels. The Commission put forward an integrated package of proposals calling for a quantum leap in the EU's commitment to change. A political consensus grew up in support of this approach".
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	The answer to this question has been clearly covered in the replies above. The EU has implemented a massive renewables programme, putting mandatory targets on Member States, a colossal financial burden on the citizen and huge unwarranted environmental impacts on the landscape and biodiversity of Europe. At every stage of the process legally binding procedures related to assessment and public participation were bypassed. The EU can recognise the complete ineffectiveness of the programme and bring it to a halt or it can see this happen through the inevitable circumstances in which it is challenged in the European Courts and forced to ensure damages are made good. Currently it is clear in that the only defence it has in relation to non-compliance with procedures related to assessment and public participation, is that it is exempt as it is on a mission to save the world.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	European Trade Union Confederation (ktrevayne@etuc.org)
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	interprofessional trade union organisation
3. Please indicate your country	European organisation
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	The ETUC calls for a coherent EU energy policy (see ETUC Resolution on Energy Strategy for Europe 2011-2020: http://etuc.org/a/7952). Europe must aim at ensuring its energy independence and diversify its energy supply, through strategic planning and by means of an ambitious adjustment in favour of renewable energy. We are committed to the Spring Alliance's call for an increased share of at least 35% of renewables in electricity supply EU-wide by 2020, as well as increased investment in combined heat and power and the development of clean coal technologies, such as CCS. Considering the investment cycle in the industry, EU binding targets are needed for at least 2030 to channel investment, particularly as we know where we need to get to by 2050 according to IPCC recommendations.

A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Accelerate convergence of national support schemes Open up national support schemes to cross-border projects
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	A new phase of European integration is needed through the creation of a European energy community (see proposal of Notre Europe: July 2010), which would allow improved regulation of the energy market based on solidarity and transparency. This would entail a European energy strategy based on 5 key objectives: 1) universal access to afford energy, 2) sustainable production, transmission and consumption of energy, 3) security of supply, 4) improved energy efficiency, 5) Transparent and fair prices. Investment sources should be channelled through the EIB (with the use of €-bonds to raise capital in the financial markets), and the Commission should consider ways to lift barriers to infrastructure investment (ensuring that long term investment is prioritised over short-term shareholder returns) in the energy sector. (for further details on financing see chapter 7 of ETUC resolution: http://etuc.org/a/7952).

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	See the proposals of Notre Europe on the development of regional energy integration (July 2010).
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)
C.1.1. Please provide explanations and specific examples where available	In articles 13 and 14, there is a clear lack of consultation with social partners at all levels (local, regional, national and European) which is fundamental in order to ensure effective responses to questions of employment, working conditions, qualifications and training. This should be highlighted. A joint Eurelectric, EPSU and EMCEF report (February 2011: http://www.epsu.org/a/7356) on the employment impact of decarbonisation of electricity includes more detailed recommendations.
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	

D.1.1. Please specify which obstacles and the nature and degree of them for each	There is insufficient coordination between the Commission and member states on the implementation of the directive, particularly as concerned the cooperation measures and coherent national support systems. A democratically controlled European Energy Agency must be established to promote a coherent European energy policy through coordination, support and monitoring. Increased policy coherence is especially crucial in the areas of grid investments, R&D and innovation, energy import contracts, investments in production infrastructures, and energy services dedicated to improving energy efficiency and energy savings. Such an institution should have involvement of the social partners, representatives of low income households, environmental organizations for example in the Board or through an advisory council. A full evaluation of the internal market for electricity and gas is needed. The ETUC supports the idea of a regulated and social European energy market economy, but rejects the proposals of the Commission to move forward with further liberalization without being clear what the implications are for employment, investment, prices and reductions of greenhouse gas emissions. The social partners should be involved in all stages of this evaluation as well as in the definition of further steps.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access

D.2.1. Please explain why	The ETUC reaffirms the position laid down in the Spring Alliance Manifesto to establish "a regulatory and financial framework to promote the development of smart grid capacity to save energy and for the optimal integration of renewable energy, decentralised production and combined heat and power". The ETUC also advocates a strong role for public ownership of electricity networks. In addition to enhanced investments in central and decentralized grids, increased investment is also required in energy storage, to allow the grid to cope with fluctuations stemming from the increased feed-in of renewable energy in the grid. Adjustment of electricity production between national markets must be promoted to use the most sustainable production capacity during peak demand. Smart meters, associated to smart grids, are often presented as a necessary tool to foster energy savings in private households. For the ETUC, consumers should not bear the costs of this investment either directly or indirectly, and measures should guarantee protection of consumers' privacy. A thorough assessment of the impact of smart meters is needed. The ETUC calls for measures to prevent negative social impacts of rising energy prices, the priority being to reduce energy needs by investing in energy efficiency of social housing and affordable low-energy alternatives for vulnerable consumers.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Accelerate infrastructure development and interconnection Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)

Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of suitable information Lack of public support Lack of capacity (installers, other)
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	The use of renewable energies in heating is clearly linked to policies of energy efficiency. The ETUC here reiterates the demand for binding targets at EU and national level. Binding targets on the renovation of building stock (public and private) are crucial to stimulate this take-up. The example of the German Alliance for Employment and Environment demonstrates the cost effectiveness of these policies (with every euro invested returning 5 euros according to the KfW). The renovation of aging district heating (particularly in eastern and central Europe) is a clear opportunity for job creation and uptake of renewables.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of infrastructure
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail Water

G.2.1. Please explain your answer	From the ETUC's perspective, a Trans-European Transport Network must be created, to promote projects aiming at climate protection, such as combined road-rail transport and waterway connections. A new tax on heavy tonnage maritime shipments and kerosene used in civil aviation provide an opportunity for funding the aforementioned projects. The provision of collective transport through public companies must be prioritized to guarantee broad access and quality for consumers, as well as to reduce energy bills of lower income households. Public investments into new grid technologies are necessary in order to guarantee that electrified road and rail transport contributes effectively to emission reduction. These ambitious measures in the transport sector must be included in EU legislation through a directive on sustainable mobility.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	The energy community with South East Europe/Balkans already exists and offers a model. Increasing international energy networks must ensure the respect of human and labour rights as a precondition. Moreover, a new colonialism through energy infrastructure must be avoided (particularly as regards to investment in the Sahara). European support must be extended to ensure local economic and social development as well as access to renewable energy for local residents in the countries concerned.

I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Yes - see the proposals of Notre Europe for regional networks as a basis for a European energy community.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Industrial manufacturing and supply chain

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	As already stated, the creation of a European Energy Agency to ensure coherent policy across different policy fields. Agreeing with the Commission's position articulated in a communication on the SET Plan that public intervention is "fully justified to achieve public policy goals and help overcome market failures", the ETUC calls for an increase of public funding at the European, national and sectoral level. It can be implemented by strengthened member states' commitments to spend 3% of GDP on research and development, with at least one third of this amount coming from public sources. Furthermore, a European fund [39] should be created to promote R+D and to improve technology transfer policies fostering development and diffusion of technologies. Technology platforms at the European level and intensified cooperation between industries and research centres are examples of instruments to improve the effectiveness of R+D. Trade union participation should be guaranteed. The conclusions of such European cooperative R&D platforms should be better implemented and adequately resourced. In order to increase R+D efforts, the allocation of emission allowances should be linked to businesses' R+D expenditure on green technologies.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Dans le cadre de politiques industrielles et énergétiques nationales et européennes, des défis technologiques sont à relever : • Améliorer des techniques de productions existantes et futures : agro- carburants, biomasse, séquestration et stockage du CO2, énergie solaire, etc. • Amélioration de l'efficience énergétique dans : l'habitat, les transports, les processus industriels, etc. • Développer des réseaux intelligents.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Octavian Capatina, str Titulescu 165/13, Cluj Napoca, 400407, Romania, oct.capa@gnail.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Romania
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate Yes, a combination of EU and sectoral level targets is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	PRIMUL/PRIMO/PRIMA/FRIST The first to do is the EFFICIENCY of all kind of energy . Here is the INTELLIGENT approaches of energy. EU targets, EU energetic policy must begun with efficiency.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Better financing possibilities Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	Financial support for those renewable technology that are green from A to Z.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)

Please specify how to make support schemes more market-oriented	GC instead of Feed in tariff
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	The differences between Member State are too big so the benchmarks must be different from state to state; But finally the financial support must be aligned.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Every sector must be treated individually for more efficiency
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	In Romania there are too many local and central authorities imply in PERMITS. Many stupid "procedure" are imported from EU in a corrupt state (from an insignificant clerk to president)
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	

D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Pace of technology development Lack of standards
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail
G.2.1. Please explain your answer	Of course Rail and EV are the sector most promising

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	Bio-fuels must not destroy more as resolve in overall nature

I. REGIONAL AND INTERNATIONAL DIMENSIONS

I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	NOT ONLY IN NETWORKS BUT IN STORAGE FACILITIES TOO!!!! I. A strong grid line from Black See to Atlantic should mitigate the peak consume, as well as other 3 line from south to north (from Greece to Finland, from Sicilia to Sweden, from Gibraltar to Holland) II. Strong storage facilities (water pumped) and compressed air
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	ALL TIME: R&D in the ENERGY CONSUMER EFFICIENCY inclusive R&D hypo-energetical industrial technology (c) FIRST: A new vision about so called "Smart grid" . See my paper "A new approach of the energy systems " on Energetica 11//2011, Bucuresti 2011 SECOND: R&D in the renewable technology THIRD: 1) must be done the cross grid lines described up (east-west and south-north) and 2) build large storage facilities After that partners beyond the borders
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Sure such experience must be applied in Black See, Baltic See and Mediterana See

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Industrial manufacturing and supply chain
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	R&D in the ENERGY CONSUMER EFFICIENCY inclusive R&D hypo-energetical industrial technology (c) A new vision about so called "Smart grid" . See my paper "A new approach of the energy systems " on Energetica 11//2011, Bucuresti 2011
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Passive houses Hypo energetic industrial processes
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Could be better if the support must be fulfilled by results at a certain deadline

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Riccardo Pasquali, GeoServ, rpasquali@geoservsolutions.com, www.geoservsolutions.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Ireland
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	Well established Technologies such as wind and biomass should receive proportionally less subsidies based on their existing market share. Other technologies that have the potential to deliver 24/7 baseline power or heating and cooling solutions such as geothermal and who require high capital investment should be receive greater subsidies to allow them to achieve a greater market share as well as more grant funding and supports to help decrease the development costs. Innovative and developing technologies such as wave and tidal that have a high potential for deployment and replicability across many EU member states should benefit from enhanced financial incentives and supports to increase market share and make technology deployment more competitive.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes
Please specify how to make support schemes more market-oriented	Assess existing energy markets, provide a better assessment of the environmental conditions and suitability at national level for the deployment of given technologies. Feasibility studies compiled by member states to estimate the deployment of given renewable energy technologies have often grossly underestimated or poorly described technology deployment potential, resulting in underestimated forecasts and in some cases the lack of any binding target by the National Rene-able Energy Action Plans. If technology deployment is poorly understood, the level of support for individual technologies at Member State level is not going to be adequate.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)

Please explain how this could be achieved and which support structure you consider most suitable	Yes, the support scheme structure should be broadly aligned across the EU to proportionally reflect the costs associated with the deployment of a given technology, it's market share across the EU and its potential to cost effective baseline energy. However the actual tariffs should be benchmarked against the local heating/cooling and electricity markets and construction costs. In other words, technologies should have a preferential support structure across the EU to reflect market share and development cost base don potential energy production but a specific tariff should be set by each M. S. to reflect local market conditions.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Support schemes in member states should be implemented separately as the electricity, heating/cooling and transport markets are very different. Each M. S. should have specific support mechanisms to support electricity, heating/cooling and transport but the overall structure of the individual technology support should be agreed at EU level.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of information on support schemes or other Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Increased availability of storage Enable renewable generators to offer balancing services to TSOs

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness Lack of suitable information Lack of public support Lack of capacity (installers, other)
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Geothermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of infrastructure Lack of awareness

G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Poul Erik Morthorst and Lena Kitzing, Technical University of Denmark, Management Engineering, Risø
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	University
3. Please indicate your country	Denmark
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Market incentives for the investment in renewable energy technologies are not expected to become sufficient for the very ambitious RES development required for the full transformation of the electricity system, even with an existing and functioning ETS (at current target emission levels).
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities

B. FINANCIAL SUPPORT

B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes Open up national support schemes to cross-border projects
Please specify how to make support schemes more market-oriented	With the increasing deployment of renewable energies, also the system integration becomes an increasingly severe issue (f.ex. in relation to production decisions, balancing, system services). The use of market-oriented support schemes will help to directly integrate the renewable production into the market, and will make it possible for the producers to make system-efficient decisions by passing price incentives through. A well-designed and functioning market-oriented support scheme can enhance the efficiency of support spendings.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	A gradual alignment could be achieved by fostering the development of 'best practices' in the national support schemes, so that a convergence appears from 'bottom-up' development. This will be mostly related to cooperation of member states on the design of support schemes and regional cooperation concepts. Non-binding common benchmarks (as mentioned in question B.3.) will serve as guidance for member states in the further improvement of their national support schemes.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Our answers are only directed towards electricity. - No comments to the relation to heat and transport.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)

Please specify which support schemes you consider most distorting	Feed-in tariffs, featuring guaranteed prices and a virtual separation of renewable energies from the rest of the market, are seen as more distorting than feed-in premiums, paid as add-on to the market price, and as tradeable green certificate schemes. For all instruments, the severeness of distortion depends on the specific design and implementation.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Balancing rules Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	The price risk should mostly be imposed on mature technologies. Balancing risk should be primarily imposed on large projects with business operators. They should be individually responsible for the scheduling and balancing of their production.
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	Dedicated arrangements to award availability do not necessarily have to be capacity payments. Other mechanisms might be favourable. Development of demand response should include infrastructure development incentives (such as installation of smart meters) and market participation incentives (development of an appropriate market set-up, price signals to customers, etc.).
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)
Please specify which instruments incentivising investment	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Electrification together with higher share of renewables in electricity production

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	The rules need to become more specific and there needs to be more guidance on 'best practices'. Non-binding benchmarks would help to guide Member States in their cooperation.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	The promotion should be specific, and directed to third-country use. The support should be separate from the internal support systems.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	If a cooperation is pursued, the it would be important to ensure an appropriate development in the host country before importing electricity to the EU. Cooperation could be organised in form of statistical transfers it is can be ensured that the host country has set up an adequate renewables target system.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Yes, it should be fostered. In the long run, lower cost of support schemes and more efficient markets can be expected. The cooperation could be a role model for other areas.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)

Please specify which drawbacks	In some cases, technologies could be brought into the broad market a bit too early, before being fully reliable, leading to some set-backs in the commercialisation.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Yes, by using monetary incentives for major milestones.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Dr. Elena Lacatus
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Romania
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, an indicative and non-legally binding target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Open up national support schemes to cross-border projects

Please specify how to make support schemes more market-oriented	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States Member States should open their support schemes to renewable generation from third countries
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	
Please explain how it could be achieved for third countries	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	

D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Enable renewable generators to offer balancing services to TSOs

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk – producers of renewable energy should operate without any aid Producers of renewable energy should bear greater responsibility for system costs
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness Lack of capacity (installers, other)
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of awareness Limits of availability of sustainably produced biofuels
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for goods Rail
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness Industrial manufacturing and supply chain
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Not successful
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	NIJAZ DELEUT, NGO ECO CENTER "CHARLES DARWIN", deleuts@hi.t-com.hr
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Other (please specify)
Which other country?	Croatia, and Bosnia&Herzegovina
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	THE END OF THE KYOTO PROTOCOL? DURBAN...? Rio+20...?
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Better financing possibilities Continue to ensure sustainability and scalability Other (please specify)
Please specify which other policy elements?	Innovation, too.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Accelerate convergence of national support schemes Open up national support schemes to cross-border projects Phase out support schemes over time (please specify for which technologies if applicable)
Please specify for which technologies (if applicable) to phase out support schemes over time	Fossil fuel, all, in general.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Not relevant at the end.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes Member States need to open their support schemes to renewable generation from other Member States Member States should open their support schemes to renewable generation from third countries
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	Regional Partnerships, Cooperation, GREEN FIELD INVESTMENT, etc.
Please explain how it could be achieved for third countries	CROSS-BORDER PARTNERSHIP.
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	23 ADMINISTRATIVE DOCUMENT IN CROATIA, THERE IS NO QUALIFIED WORK FORCE FOR SOLAR AND WIND INSTALATION, INSPECTIONS, MONITORING, etc.
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	State aid, and monopolism of the Eurent electrical Co., lack of the political will, coruption, etc.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	THIS IS THE NEW BEGINING (WITH NEW OR EMERGING SCIENCES/TECHNOLOGIES), THERE ARE OPPORTUNITIES FOR THE NEXT 50 YEARS
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should bear greater responsibility for system costs Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Favourable regulatory treatment of storage operators
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness Lack of suitable information Lack of public support Lack of capacity (installers, other)
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	DIFFERENTED - REGIONAL - APPROACH, I.E. SOUTH FROM NORTH, EAST FROM THE WEST

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of infrastructure Limits of availability of sustainably produced biofuels
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail Water Air
G.2.1. Please explain your answer	INDIVIDUALITY IS SOMETHING CONSIDERED TO BE PART OF OUR CULTURE (EUROPEAN)

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	BIODIVERSITY, AGAINST MONOCULTURAL PRACTIC IN AGRICULTURE (CAP), CONSERVATION OF HABITATS AND ENDANGERED SPECIES

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	CROSS-BORDER PARTNERSHIP, UNION FOR THE MEDITERRANEAN, RUSSIAN FEDERATION (OR NEW ASIAN UNION?)
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	THEY HAVE ENOUGH, ALREADY.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	IN PARALLEL WE MUS DEVELOP BOTH POLICIES, TAKE THEM OPENLY AND TRANSPARENTLY.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	YES, GOOD LACK TO YOU. YES, FOR THE UNION OF THE MEDITERRANEAN COUNTRIES.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	System integration Industrial manufacturing and supply chain
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	WITHOUT MONEY SUPPORT, IT WAN'T BE EASY!
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Biotech, Nanotech, Geo-engineering, etc.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Very successful, no drawbacks
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Yes, all the time in all projects.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Leonardo Barreto, leonardo.barreto-gomez@energyagency.at
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Austria
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Better financing possibilities

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	techniogies that are not yet competitive still require support.

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Accelerate convergence of national support schemes Open up national support schemes to cross-border projects
Please specify how to make support schemes more market-oriented	Feed-in premiums for technologies that are mature enough aggregating small-scale RES generators, for instance through their bundling into a virtual power plant
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	electricity is more suitable for coordination across MS
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	joint projects
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Curtailment regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access Priority dispatch and obligation on TSO to counteract curtailment
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Enable renewable generators to offer balancing services to TSOs

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	responsibility centrally organized
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Favourable regulatory treatment of storage operators Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	

E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)
Please specify which instruments incentivising investment	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	synergies betwen RES and EE must be exploited in this sector. Subsidies should give incentivesto the use of both.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Limits of availability of sustainably produced biofuels
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers
G.2.1. Please explain your answer	synergies between electric cars and RES need to be exploited

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	coopertation mechanisms need to be further developed.
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)

Please specify how and with whom, i.e. only neighbouring countries or more widely	neighboring countries first and then more widely.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	electricity transmission bottlenecks should be solved to provide incentives for international cooperation
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	priorities should be on development of solar energy in the mediterranean
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	cooperation should be fostered in combination with development of storage applicability to other regions in the Eu may be limited

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	electricity and hydrogen storage
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	yes, performance should be monitored and further assistance granted according to achieved results

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Lovas András (lovasandras@vipmail.hu)
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Hungary
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables Better financing possibilities

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)
Please specify how to make support schemes more market-oriented	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	

D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage Enable renewable generators to offer balancing services to TSOs

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Building regulations etc. Lack of suitable information
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Geothermal Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Pace of technology development
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Water
G.2.1. Please explain your answer	

H. SUSTAINABILITY

H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Mike Muldoon. - pauric.muldoon@gmail.com - Kingscourt
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Ireland
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Existing and future renewable energy programmes which impact on the environment (mainly wind farming) are unlawful, in so far as they are contrary to the provisios of the Aarhus Convention. I want to make it clear that this questionaire is not and cannot be a substitute for the full and complete compliance with the provision of the convention in relation to the principle of proportionallity, pubic participation and access to the courts at low cost and all the other participation enshrined in the cionvention. With regard to point (b) we are highlighting Article 11 of Regulation 1367/2006, which is not in compliance with the Aarhus Convention and its provisions for Access to Justice, which relate to the public concerned. In addition we are highlighting the recent findings and recommendations of the UNECE Aarhus Convention Compliance Committee in Communication ACCC/C/2008/32, which recommended "that all relevant EU institutions within their competences take the steps to overcome the shortcomings reflected in the jurisprudence of the EU Courts in providing the public concerned with access to justice in environmental matters. Irelands planning regulations have not be changed to take account of the fact that the size of wind turbines has increased from 65 meters hub height to 85 meters. The set back distance is still 500 meters. Planning has been granter in my area where such a turbine is withing 480 meters of 2 dwelling houses.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)
Please specify which other policy elements?	Wind energy is a mature technology and it has never worked. I can produce a letter from the Irish Minister for energy stating that 1) He does not know is the existing 1,450 mega watts of wind energy installed in the Republic of Ireland is making any saving of the burning or fuel or saving on co2 emissions. I estimate that Ireland's wind farms are using Grid (fossil fuel) power amounting to 500,000 mega watt hours per year. The Minister states that this is not metered and is provided free of charge to wind farms. The experience in Denmark is that no conventional plant has been shut down notwithstanding that they installed up to 6,000 mega watts of wind farms. Therefore there is no point in increasing Irelands or Europes renewable energy capacity. Ireland's Eirgird plans to increase its thermal generation by 48% from 2009 to 2016 at a time that wind farms capacity is due to increase. Tghis proves that renewable energy is ill though out and based on political rather than sciantific considerations.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	All support for renewable energy including wind energy should be suspended and no more contracts entered into. However I see no difficulty in investment in research and development. For example the Peat buring power station at Lanesborough is pumping millions opf litres of bioling hot water into the river Shannon per day. This heat is wasted when it could be used for consummer benefit and industries and horticultural purposes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Phase out support schemes over time (please specify for which technologies if applicable)
Please specify for which technologies (if applicable) to phase out support schemes over time	Phase out or stop subsidies to wind farms and spend the money on conservation and research. Several studies show that wind farms do not work, Struart and Young and Citivas are just 2 of many
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	N/A
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Electricity is a complicated force of nature and some goverments have been fooled by vested interests in to believing that One mega watt of wind power is equal to one mega watt aof thermal plant saved. This is false, wind requires back up capacity of near to 100%. Transport is more easily understood, and there is less misinformation about it. However electric cars simple move the co2 emissions to the power station and bio fuels require fossil fuel to produce and transport.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)

Please specify which support schemes you consider most distorting	Wind energy is erratic and no one has yet stated how much wind power can be accommodated on the grid. Wind is a passenger, the priority dispatch rule and the subsidy scheme is driving up the cost of electricity and makign these countries less competitive. See recent comments by ministers in France and Spain. see comments of Johanaton Bonham of Johnston Mathie UK. he says subsidies are unsustainable.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	renewable technology requires a huge amount of administration which produces nothing but drives up the cost of electrical power. Power bills are now being used in Greece to collect other non related taxes. The Irish energy and communication minister said he would yuse electricity bills to collect TV and internet licence fees. This means that electrical power is no longer a commodity but a device to collect taxes. People will do without and generate thier own.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	Power costs are rising and industries must resort to generating their own. I know of one industry who have done just that.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	it is ridiculous to pay for curtailed power. The single electricity market, pays conventional generators for cortailed power. They should be paid a set standard rate and carry the cost of curtailed power themselves. this mechanism allows wind generators to say they are just receiving equal payment.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Other (please specify)

Please specify which other rules	Priority dispatch forcxes conventional suppliers to take wind whether they want it or not. It is simply a divice to drive up the cost of wind. Irish UCD economist Colm McCarthy and the Irish academy of engeneers have concurred with this and said priority dispatch shoudl be stopped.
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Other (please specify)
Please specify which other measures	none of these. Concentrate on conserving energy. If all supplies of gas oil and coal are halted in nthe morning, none of Ireland's wind farms can provide power, in fact they will have to receive power in calm conditions. Load factor is below 25% for 2010 and 2011.

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk – producers of renewable energy should operate without any aid
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	N/A

F. RENEWABLES IN HEATING AND COOLING

F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Other (please specify)
Please specify which other barriers	This area needs to be totally researched from a scientific viewpoint. Stop listening to vested interests and allow critics have a say. Spain was forced to stop subsidies to solar energy.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Other (please specify)
Please specify which other pathways	Wind isolated from the grid could be used to heat buildings directly by means of storage heaters. Some saving could be made on fuel this way.
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	No. The emphasis should eb ionn the demand side.

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Other (please specify)
Please specify which other barriers	No research from universities and experts with experience in this field. It just do something whether it works or not.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers
G.2.1. Please explain your answer	Road transport might be able to be converted to natural gas fuel.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement
H.1.1. Please explain	No figures on teh actual saving of fossil fuel are available,

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	N/A
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	Wind farms has crippled Spain. A 24 billion deficit exists between electricity charges and the cost. This is adding to Spains debt.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	The Aarhus convention is being ignored. This UN law is designed to empower local people faced with projects that impact on teh environment. My right under the convention are being ignored and trampled on. This is unlawful whether in Irealnd Spain or Africa.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Complyu with ath Aarhus. This wuestionaire is not a subsitute.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Other (please specify)
Please specify which other key challenges	renewable energy cannot ever replace existing fossil and nuclear technology. A full examination is required and the process shoudl be open to the public. Ireland failed to rarify the Aarhus convention but it is binding through the EU.
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Help industries install their own generators which will cut down on losses through resistence and remove the need for grid power on a 24 hour basis,
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Not successful
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	YES ' The mneasure of wind powr shoudl be the amount of fossil fuel saved in total be conventional generators. At present, they only count actual generation plant , not reserve and athey take no account of heat disapation when conventional palnt must cycle 200 to 300 times per day.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Susan Davies, Scottish Natural Heritage, susan.davies@snh.gov.uk
2. Are you responding to this questionnaire on behalf of /as:	Public Authority
3. Please indicate your country	United Kingdom
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	

B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	

F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	In the 2010 report on sustainability requirements for solid biomass, the EC did not propose binding EU criteria, on the basis that risks relating to domestic biomass were low. We agree that the deployment of local bioenergy supply chains at a scale appropriate to local supply can be considered low risk to the environment. However as the biomass power sector develops, it is clear that the level of demand cannot be met from domestic resources sustainably and materials will have to be imported in large quantities. In the UK, imports of bioenergy feedstocks alone are likely to increase the total imports of materials of biological origin by over 50% by 2020. Therefore there is a need for a change in policy. The Commission should aim to propose criteria relating to the prevention of direct land use change on highly biodiverse and carbon rich habitats, sustainable forest management attached to woodfuel and requirements related to indirect land use change (iLUC). Bioenergy is adding pressure on land globally and there is already evidence for the need to have requirements for iLUC associated with biofuels. The UK government has introduced land use criteria for solid biomass that will be mandatory from 2013 and will consider approaches on sustainable forest management and iLUC. However there could be merit in having an EU led policy. As a main trading block, the EU's engagement might exert influence in promoting a sustainable approach towards the development of solid biomass for energy

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	prof. Sergiu Ivanov, University of Craiova, Romania. e-mail: sivanov@em.ucv.ro
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Romania
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, an indicative and non-legally binding target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Targets must be fixed, but as recommendations, not mandatory. EU must follow the fulfilling of the recommendations.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Better financing possibilities

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Open up national support schemes to cross-border projects
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology

B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	By EU-wide policy and regulations in this area, mandatory for all members
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	The most accessible technologies must be mainly encouraged. Let's start with the end users. They can contribute not only to the energy economy by renewables conversion, but also to the renewable generation.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of information on support schemes or other
C.1.1. Please provide explanations and specific examples where available	The bureaucracy (at least in Romania) is the most important impediment. I even heard as public information that the energy transporters will slow down (see block) the authorizations for new wind installations. The reason "Romania does not need as much wind energy". I know that more intermittent sources rise technical problems, but is their job to manage them.
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules

D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Producers of renewable energy should bear greater responsibility for system costs
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Favourable regulatory treatment of storage operators
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness Lack of suitable information Lack of public support
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Geothermal Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Other (please specify)
Please specify which other barriers	Availability (still) of the classical sources. Also, interests to keep these in the first line.

G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods
G.2.1. Please explain your answer	Road transport is the most simple to be adapted.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Attention must be paid to the possible dependency which could occur.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Yes, such cooperation must be generalised and applied to other types of sources. More intermittent generators located in different conditions interconnected could smooth the generation curve and reduce the storage capacities.

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Encouraging the manufacturers.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Geothermal due to its availability and versatility.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Not necessary. When a research is started, it is not guaranteed that the results will be the estimated ones. This why is a research and not a technological implementation. On other hand, the resources can not be spilled for nothing. A middle way should be desirable.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Michael de Jong, Sliabh Ban Community Group, eapireland@hotmail.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Ireland
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	A better cost benefit analysis of renewable energy strategies needs to occur so the EC can prioritise the cheapest, most efficient and most reliable strategies
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	No
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	

B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Wind Energy - too unreliable and expensive. The cost of stop-starting other energy sources to fill the 70 percent of time when wind energy is not being produced is too expensive.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)
C.1.1. Please provide explanations and specific examples where available	Need better participative strategies for local communities impacted by renewable energy schemes. (The Aarhus convention). Renewable stategies should only be implemented with agreement of local communities, not by imposition be developers and planning authorities
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	Participative decision-making processess need to be by agreement not be legislative imposition.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	None of the above
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk – producers of renewable energy should operate without any aid Producers of renewable energy should bear greater responsibility for system costs
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for goods
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)
Please specify which criteria	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes

I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Not successful
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	yes

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Peter Adams, peteradams@ukip.org
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	United Kingdom
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	The Principle of Proportionality is binding in both the development of EU legislation and State Aid for environmental protection. To comply it has to be demonstrated (a) what greenhouse gas tonnages are to be reduced; (b) the cost basis for implementation and the alternative implementation strategies considered and (c) the environmental objectives involved, namely the environmental degradation which is to be avoided. Neither the NREAPs nor the EU's documentation for Directive 2009/28/EC demonstrate (a) or (b). Directive 2001/77/EC required by the end of 2005 a report which should: "Consider the progress made in reflecting the external costs of electricity produced from non-renewable energy sources and the impact of public support granted to electricity production". This cannot be found. In DG Clima's analysis in March 2010 of a possible initiative to step up beyond 20% greenhouse gas savings: "Explain how the options respect the proportionality principle? Climate change is a transboundary environmental problem. Achieving GHG reductions targets in the EU requires a balanced distribution of efforts between countries and sectors in order to ensure that the environmental objectives are met, but also the common market is not unduly hampered". Neither is there an answer to (C). Furthermore, the Commission has failed to comply with the decision of the EU Ombudsman in Complaint 2587/2009/JF. The renewable programme is a breach of the most fundamental principle of EU law.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)

Please specify which other policy elements?	"The long-term perspective of investors" and the EU's ambition to move towards a reduction of 80-95% of GHG emissions in a 2050 perspective is the focus of this consultation and resulting measures. The Lisbon Treaty is clear in that the "Union shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance. Each institution shall act within the limits of the powers conferred on it in the Treaties. The institutions of the Union shall apply the principle of proportionality". Massive costs and environmental impacts are occurring and the Commission and the Member States have failed to demonstrate, how the renewable energy programme and the focus of this consultation, are in compliance with the terms of the Lisbon Treaty above. The citizen's interest does not lie with a 95% reduction in GHG emissions and establishing a long term perspective for investors in technology sectors. Furthermore, there has been a complete failure to verify the emission savings and environmental performance of renewable installations installed to date and engineering analysis is clearly showing how ineffective intermittent generators, such as wind and solar, are in delivering reliable energy and effective environmental protection.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	No
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes

B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)
C.1.1. Please provide explanations and specific examples where available	The Lisbon Treaty requires that: “Decisions shall be taken as openly and as closely as possible to the citizen. The Commission shall carry out broad consultations with parties concerned in order to ensure that the Union's actions are coherent and transparent”. The EU has ratified the United Nations Economic Commission for Europe’s (UNECE) Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. A Strategic Environmental Assessment (SEA) is mandatory under Directive 2001/42/EC for all programmes leading to future development consent of wind farms and other renewable infrastructure. Communication ACCC/C/2010/54 at the Aarhus Convention Compliance Committee has shown that the Units Heads of DG Environment and DG Energy in June 2010 directed the Member States that no SEA was required for the NREAP if it did not include specific mandatory measures. Note: The renewable targets and the NREAPs are mandatory. The Compliance Committee have concluded that public participation was required for the NREAP and have formally requested: “Could you please explain why the Commission says that it is not responsible for the actions of the Member State in this case?” The Commission is acting without ‘proper authority’ in the manner in which it is implementing this programme, in that it has deliberately bypassed legally binding procedures related to environmental assessment and democratic accountability.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	The Commission has failed to comply with both the terms of the Lisbon Treaty above and its obligations under the Aarhus Convention with both the structure and the implementation of Directive 2009/28/EC. With regard to implementing a programme of this nature, Article 7 of the Convention is clear in requires that the public affected be provided with the necessary information, so that they can participate effectively during the preparation of the plan or programme within a transparent and fair framework, when all options are open and effective public participation can take place. EU legislation implements this through the more detailed process of Strategic Environmental Assessment. Furthermore the Commission's legal team in their opening statement to the Aarhus Convention Compliance Committee meeting on Communication ACCC/C/2010/54, in that in terms of the National Renewable Energy Action Plan, sated that the Irish public were only entitled under the terms of the Convention to information on threats to the environment. They were not entitled to information on comparative costs or effectiveness of the renewable technologies. Under the Treaty of Lisbon, the citizen has a Right to good administration, a Right to effective remedy and to a fair trial and a Right to have damages made good. The Right to have damages made good applies to institutions and bodies of the EU and Member States when they are implementing Union law.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above

D.1.1. Please specify which obstacles and the nature and degree of them for each	Europe's population has stabilised and in some areas is in decline, while Europe's industry is more efficient, so electrical power consumption figures are stabilising. Yet to support a renewable programme with completely unknown figures related to environmental performance, impacts and financial costs, an enormous network development is to be initiated to facilitate unreliable and intermittent renewable generation, as regards the Republic of Ireland, a doubling of the high voltage grid by an extra 5,000 km. The EU Commission's 'Priority Interconnection Plan' COM (2006) 846 is very critical of 'time consuming public consultation procedures'. Yet this plan has an investment of €30 billion in infrastructure by the EU by 2013, with an estimated €700 – €800 million annually to be spent on connecting more renewable sources. In Com (2011) 658 on a proposal for regulation of a pan-European energy infrastructure, this states in relation to proportionality that the proposal does not go beyond what is necessary to achieve the objectives perused. This is not correct, the renewable programme has by-passed both proper environmental, technical and financial assessment and legally binding measures related to public participation. It is certainly not proportionate in terms of achieving demonstrated environmental protection objectives. Now the citizen is expected to carry the burden of this grid expansion, with massive and unnecessary financial and environmental impacts.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Other (please specify)

Please specify which other rules	Both the internal and external costs associated with any grid expansion to facilitate renewable energy need to be assessed and compared with the 'do nothing scenario', given that the existing grid functions without any of this development. With regards to the EU's binding climate change and renewable energy targets, it is necessary to point out Principle 10 of the United Nation's Rio Declaration, namely; "Environmental issues are best handled with participation of all concerned citizens, at the relevant level". These binding targets were decided solely on political considerations, in which there was neither any environmental assessment nor public participation with concerned citizens. These massive grid expansions to facilitate intermittent renewable generation are being forced upon a population, who have neither been informed nor provided with an opportunity to participate in these key decisions. Clearly renewable energy should only be provided with access to the grid, when it demonstrates that it is superior and more effective than current generation capacity. At no stage have the necessary assessments in this regard been completed to justify the preferential treatment provided to such generation. Indeed, ever indication is that the renewable energy being promoted solely for political reasons is not providing any significant environmental benefits, which anyhow could have been achieved with far lower cost and environmental impacts by other means.

D.2.1. Please explain why	As regards grid related rules there is already a huge backlash developing from the general public as more and more grid expansions are developed to facilitate intermittent and ineffective renewable generation, such as wind energy. As the Commission is aware from Communication ACCC/C/2010/54 it approved €110 million in funding for the Ireland to UK electrical connector, even though the sole purpose of this project was to facilitate more wind energy on the Irish grid, a policy, which had by-passed the legally required public participation. In relation to the EU's European Investment Bank, this has supplied €300 million in loans to the interconnector project and a further €235 million to the State owned ESB to develop further networks to facilitate wind energy in Ireland. All related to a programme which has by-passed legally required public participation procedures. Now the citizen is expected to pay back this money for infrastructure, which is not need and for which he was provided with no proper environmental information or the opportunity to participate in the decision-making. Given that Europe is already heavily indebt it is simply unacceptable that such practices should be occurring driven by EU Institutions, which have deliberately by-passed the legally binding rules which are applicable to them. Proper accountability and adherence to democratic procedures is not optional with regard to grid development.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Other (please specify)

Please specify which other measures	The integration of solar power in Germany has caused a huge financial burden to be placed on the citizen for no real environmental benefit. Now in 2012 an estimated €100 billion subvention cost for what only delivers 3% of Germany's electricity supply in a highly irregular and ineffective manner. Indeed the development of renewable electricity in German has essentially doubled generation costs. Indeed all countries, which have undergone renewable expansions, are seeing massive cost rises for the consumer coupled with a failure to demonstrate any significant decrease in fuel usage or emissions. Once again this clearly demonstrates the failure to assess this policy before implementation and the manner in which the input from the technical sector has been deliberately ignored. Europe's industry cannot remain competitive given these massive costs, which are seemingly now to be raised even further with dysfunctional and ineffective system integration costs for renewable power inputs, which have no demonstrated or legal reason to be there in the first place.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk – producers of renewable energy should operate without any aid
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Other (please specify)

Please specify which other barriers	The uptake of renewables in heating and cooling is being driven, both at EU and Member State level by polices, which have not been properly assessed and whose implementation is related to political expediency and not environmental protection. Indeed the promotion of wood biomass for domestic heating is not only leading to the destruction of natural wood resources, but as the moisture content of such fuel, particular in Northern Europe, is high; it is leading to increased particulate emissions and urban pollution. As regards the renewable Directive, the external costs of existing heating and cooling arrangements are unknown, yet we are to subsidise renewables for which no external cost assessment is available. This type of policy will only lead to unsustainable businesses, which are totally dependent on subsidy bubbles to survive and have little or no viable long term future. The Common Agriculture Policy had its inception in such rash political based decision making, in which market based economics was replaced by a political structure. This agricultural policy resulted in an enormous cost burden for the European citizen and lead to practices, which were unsustainable from both a financial and environmental perspective. Clearly it can be seen that the EU has not learnt anything from this debacle and is now rapidly implementing politically agreed targets, which have by-passed legally required assessment and public participation requirements.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Other (please specify)

Please specify which other pathways	The completely counter productive nature of the EU's energy policies can be seen in the manner in which wood biomass in domestic heating is being promoted, with all its associated environmental impacts, particularly the significant impact on human health, while the most environmentally effective form of renewable heat, that of electrically driven heat pumps, is being put out of business by soaring electricity costs. Yet at no stage was this considered in a proper assessment as part of policy development. As Der Spiegel reported in March 2011 in relation to German's Eco-Trap: "Not everything that looks green serves the environment. The ecological principle of proceeding with care doesn't seem to apply to environmental policy. The more, the better, seems to be the principle. No one is calculating whether all the billions being invested in protecting the environment are actually being spent wisely. Ordinary citizens can't judge it and many experts have no interest in shedding any light on this aspect because their livelihoods are at stake. A large amount of money flows into studies, risk assessments and providing seals of approval. In many cases, a closer look at environmental measures reveals that they're expensive and don't have much effect".

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	It is likely that global energy prices will rise in line with both population increase and a general improvement in living standards. Market forces will then dictate that consumers will use energy more efficiently. However, what the EU is proposing is a massive intrusion on the Citizen's rights, in that he should be denied access to certain energy sources and forced to use other highly ineffective sources, on the basis of political decisions, which have by-passed proper assessment and legally binding public participation procedures. In particular given that the EU has completely failed to assess and quantify the external costs of carbon dioxide emissions, it has no legal right to restrict the citizen's access to such fuels and introduce massive financial support programmes for those, which may well carry the tag renewable, but in reality do not deliver any environmental benefits, which could not have been achieved at a fraction of the cost by a rational and science based evaluation. While energy efficiency and environmental protection in the heating and sector should be promoted, this should be based strictly on the principles of the Lisbon treaty, namely a highly competitive social market economy and a high level of protection and an improvement in the quality of the environment. The current promotion of renewable energy does not fulfil those requirements.

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Other (please specify)

Please specify which other barriers	With regard to the 10% target for transport fuel, this was a completely political target bereft of any environmental assessment. Indeed the April 2007 consultation by the Commission was simply a 'Vox Pop' based on four questions: "How should a biofuel sustainability system be designed? How should overall effects on land use be monitored? How should the use of second-generation biofuels be encouraged? What further action is needed to make it possible to achieve a 10% biofuel share?" In no uncertain terms this fulfil the legal requirements in relation to public participation in decision making. The current situation is that the introduction of E10 biofuel into Germany has been a complete disaster. The Commission is also well aware in that it has been sued, accused of violating European transparency laws. Client Earth, Friends of the Earth Europe, Fern and Corporate Europe Observatory filed the lawsuit following the Commission's refusal to provide access to information in decisions related to the sustainability of Europe's Biofuels policy. The 10% target should therefore be reviewed and subject to the proper technical, environmental and financial assessment, in conjunction with proper public participation, which was mandatory for such a biofuel programme in the first place.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail

G.2.1. Please explain your answer	Many European rail networks are electrified and in a number of Member States, particularly Germany, rail costs are soaring as electrical generation costs have effectively doubled due to renewable energy inputs, which are massively ineffective in terms of environmental protection. This is in effect making what is an extremely effective form of transportation, particularly for social groups who would not have ready access to a car, uncompetitive. Yet clearly this impact has never been assessed and quantified in the development of these policies, in which to quote Mark Twain, it is being driven by an administrative structure where; "people's beliefs and convictions are in almost every case gotten at second-hand, and without examination, from authorities who have not themselves examined the questions at issue but have taken them at second-hand from other non-examiners, whose opinions about them were not worth a brass farthing". One can only wonder, if people who have been placed in a position of responsibility of development of Europe's energy policy, even attempt to understand the impacts of these policies, as certainly there is no documented evidence to demonstrate they do.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement
H.1.1. Please explain	The sums of money which have been made available by Europe's biofuel policies are colossal, and are only matched by the potential for environmental devastation. With a rising global population, which in many cases can't feed itself, to divert food grade products into fuel tanks, when other options are available, is simply obscene. Furthermore, Biofuels have not provided the environmental benefits, which were claimed for them, to which must be added the fact again that there was no proper environmental assessment of the policy before it was introduced. This policy should be stopped before it does more damage both in Europe and elsewhere.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A

I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	N/A
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	As already answered in Section D, existing grid networks are perfectly adequate for todays and future needs. They may need replacement in relation to the age of the components, but they do not need to be expanded.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	N/A
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	In relation to COM (2011) 539 on "The EU Energy Policy: Engaging with partners beyond our borders" and the Mediterranean Solar Plan, this plan is widely speculative, particularly given the complete failure of solar power to deliver either cost effective or reliable electricity. Europe is already collapsing under a burden of financial debt and it is appalling to see that the EU Commission wants to increase this burden based on speculative and ill conceived projects in neighbouring countries. Spain has already had to slash its completely overgenerous solar subsidies and Germany simply cannot continue to support solar development any more, not to mention the fact that neither the citizen nor the environment benefited from these colossal expenditures. Yet again the Commission is solely creating a 'bubble economy' for equipment suppliers.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	In a similar manner offshore wind is a technology sector associated with massive costs (€4.3 million per MW installed) for an unreliable electricity supply, which in turn has massive environmental impacts, in particular associated with grid expansions. It is particularly distressing that the EU Commission cannot produce any objective documentation to support this technology sector. With regard to the Communication ACCC/C/2010/54 and Ombudsman Complaint 2587/2009/JF, on the 3rd Feb 2011 on the Irish State Broadcaster the EU Commissioner for Climate Action Connie Hedegaard stated in relation to offshore wind: “It actually pays off, it is sound economics”. When a formal reply for the supporting technical information was received, no background documentation was connected to the request; “as the Commissioner's statement did not refer to any particular project or development, nor was it based on any one or particular piece of documentation but on publicly available information and her general experience, knowledge and political views”. The only document being available coming from the European Environment Agency on “Europe’s onshore and offshore wind energy potential”. This in turn quotes the European Wind Energy Association as its technical source.

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Other (please specify)

Please specify which other key challenges	There has to be some very serious questions asked about the sums of taxpayers now being diverted into renewable energy research, in particular as there has been a complete lack of data made available as to the environmental effectiveness of this sector, despite it being a legal obligation to posses and update such environmental data. With regard to the Intelligent Energy Europe programme, both projects funded by the EU Commission in relation to wind energy, “Wind Energy - The Facts” and “GP Wind”, contain blatantly incorrect claims about the emissions and fuel savings for this intermittent source, in which the inefficiencies induced on the grid are ignored. Under Regulation 1367/2000, which imposes the requirements of the Aarhus Convention on Institutions of the EU, the EU Commission is refusing to confirm how it complies with its legal requirement in relation to the two programmes, it that it shall, insofar as is within its power, ensure that any information that is compiled by it, or on its behalf, is up-to-date, accurate and comparable. In particular with regard to Wind Energy – The Facts, the EU contributed 50% of the €773,662 used by the European Wind Energy Association to run a dissemination campaign. Yet at no stage has an independent and transparent technical analysis ever been completed of the EU’s colossal support for wind energy and its effectiveness.

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	The Treaty of Lisbon is clear, in that the Union "shall promote scientific and technological advance". Wind, solar photovoltaic and biofuels, which are cornerstones of the mission of the SET plan have not to date, and there are absolutely no indicators that that they will in the future, provided a reliable, cost effective and environmentally effective source of energy. They are not therefore connected with any scientific and technological advance. Neither is there transparency in the manner in which the SET plan is being implemented. Not only is there a complete failure to assess the environmental effectiveness of the above technologies, which are the only justification for their financial support framework, but as regards wind energy, the output is dominated by the European Wind Energy Association, instead of the critically required independent and transparent technical analysis of this sector, which is being provided with colossal support at the citizen's expense. Clearly there is every indication that the EU Commission providing funding for sectors in a manner which is not transparent and which is detrimental to the requirements of the Lisbon Treaty, to promote "a highly competitive social market economy, aiming at full employment and social progress".

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	The EU Commission needs to comply with its legal requirement under the Aarhus Convention to posses and update environmental information, which is relevant to its function. Note: Environmental information includes not only information on emissions and impact, but also cost benefit and other economic analysis. To date the Commission has failed, despite a legal requirement to do so, to both assess the renewable energy it is so actively supports and determine the external impacts of non-renewable sources. As it wrote in reply to UNECE in Communication ACCC/C/2010/54, "it is generally recognised that renewable energy, and wind energy in particular, is preferential from an environmental point of view to non-renewable energy". Its position is therefore based on 'public opinion' and not demonstrated legal compliance. While the Polluter Pays Principle allows external costs to be internalised, this must be based on a transparent and factual analysis, which to date has been bypassed. Energy policy going forward must be based on evidence based assessment rather than as SEC(2008) 85/3 of January 2008 stated, "In the opening months of 2007, the European Union stepped up its energy and climate change ambitions to new levels. The Commission put forward an integrated package of proposals calling for a quantum leap in the EU's commitment to change. A political consensus grew up in support of this approach".
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Not successful
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	The answer to this question has been covered in the replies above. The EU has implemented a massive renewables programme, putting mandatory targets on Member States, a colossal financial burden on the citizen and huge unwarranted environmental impacts on the landscape and biodiversity of Europe. At every stage of the process legally binding procedures related to assessment and public participation were bypassed. The EU can recognise the complete ineffectiveness of the programme and bring it to a halt or it can see this happen through the inevitable circumstances in which it is challenged in the European Courts and forced to ensure damages are made good. Currently it is clear in that the only defence it has in relation to non-compliance with procedures related to assessment and public participation, is that it is exempt as it is on a mission to save the world from the non threat of "climate change" which has been on going since the world began.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Laszlo Szabo, DataS Ltd, laszlo.szabo@datas.ro
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Romania
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc)

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Accelerate convergence of national support schemes
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology

B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access
D.2.1. Please explain why	

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …)

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers
G.2.1. Please explain your answer	

H. SUSTAINABILITY
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?
H.1.1. Please explain

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)

Please specify how they should be amended or which elements added	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Dragostin Cristian - Energy-Serv Romania- cristian.dragostin@energy-serv.ro
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	ESCO Company
3. Please indicate your country	Romania
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Better financing possibilities

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Open up national support schemes to cross-border projects
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology

B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	The approach of the current Directive to lay down a general framework for Member State action is fine

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time

E. MARKET INTEGRATION
E.1. In which of the following ways could renewable energy be made responsive to market signals?

E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	N/A

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Lack of awareness
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of infrastructure Lack of awareness
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	N/A
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Prof. Horia Liviu POPA DR.Ing. / PhD, ROSENC RomanianSustainableENergyCluster, horia.popa.2@gmail.co
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Romania
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Sustainable progress of Europe
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Better financing possibilities Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Accelerate convergence of national support schemes Open up national support schemes to cross-border projects
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	In correlation with EUROPEAN SUSTAINABLE PROGRESS STRATEGY 2100 HORIZON
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	No difference, INTEGRATION !
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	No, support schemes do not have a significant distorting impact on competition

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of information on support schemes or other Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase flexible back-up capacity (capacity payments …) Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Price risk – producers of renewable energy should operate without any aid
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Favourable regulatory treatment of storage operators
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Electricity markets should evolve into energy services markets, earning revenues from more than just electricity

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness Lack of suitable information Lack of public support Lack of capacity (installers, other)
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Solar thermal Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Strong INTEGRATION

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Limits of availability of sustainably produced biofuels
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Step by step integration

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Yes

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration Industrial manufacturing and supply chain
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Promote DISRUPTIVE INNOVATION (eg. free energy)
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	Limited promotio of energy disruptive innovation in Europe
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	yes, 5 year plans

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	DIOSAN LIVIA IOANA, THE MUSIC AND FINE ARTS HIGH SCHOOL ALBA IULIA, liviadiosan@gmail.com
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	vocational high school
3. Please indicate your country	Romania
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc)

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	Yes
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Open up national support schemes to cross-border projects

B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	Through compensation mechanisms amd mutual exchanges if the case.
B.7. Do national support schemes and differences between such schemes distort competition?	N/A

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Lack of information on support schemes or other
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Cost-sharing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Accelerate infrastructure development and interconnection

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Favourable regulatory treatment of storage operators
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness Lack of suitable information Lack of public support
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of infrastructure Lack of awareness Lack of suitable information
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for goods Rail
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	N/A

I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	N/A
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	

J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Bernward Löwenberg
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Germany
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Die gesamte Politik der erneuerbaren Energieen muß überprüft werden, da die Umstellung auf erneuerbaren Energien keine irgendwie das Klima beeinflussende Wirkung hat, die erneuerbaren Energien die Umwelt aber erheblich beeinträchtigen und teilweises sogar zerstören.(z.B.Landschafstbild durch Windräder, Verspiegelung der Landschaft durch Solaranlagen, Zerstörung landwirtschaftlicher Flächen durch einseitigen Anbau enrgieproduzierender Pflanzen wie Mais, Raps etc.). Die Energieversorgung in Europa wird so teuer, daß die Wettbewerbsfähigkeit der europäischen Wirtschaft erfheblich beeinträchtigt wird.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Other (please specify)

Please specify which other policy elements?	Beseitigung der Subventionierung der erbneuerbaren Energien! Verbot der Subventionierung durch Verpflichtung der Energieversorgungsunternehmen, den durch erneuerbare Energien produzierten Strom zu staatlich festgelegten Preisen auf Kosten der Verbraucher zu finanzieren. Subventionen dürfen - wenn überhaupt - nur aus dem Staatshaushalt kommen und müssen aus Steuern finanziert werden, damit Transparanz hergestellt ist.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	No
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)
Please specify how to make support schemes more market-oriented	Alle planwirtschaftliche Elemente müssen beseitigt werden. Der Staat kann die Energieversorgung nicht sicherstellen. Alle staatlichen Interventionen benötigen Pläne. Planwirtschaft hat bisher im wesentlichen in Desaster geführt (siehe sozialistische Staaten, vor allem die ehemalige DDR).
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	N/A
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	Im Prinzip gilt überall der Grundfehler, daß jede Subventionierung ducrh den Staat oder gar die EU zu Fehlentwicklungen, Verteuerung und schließlich Versorgungsproblemen führt.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing

C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk – producers of renewable energy should operate without any aid Producers of renewable energy should bear greater responsibility for system costs
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	Nachfrage Orientierung der Produktion und unterbrechbare Verträge
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Lack of awareness Lack of suitable information

F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Geothermal Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Das ist jedenfalls wünschenswert.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of awareness
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	N/A
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Die Zusammenarbeit mit diesen Ländern verstärkt nicht die Versorgungssicherheit mit Energie, da es sich im wesentlichen auf viele Jahre hin noch um "unsichere Staaten" handelt. Trotzdem sollte man an dieswem Ziel arbeiten, das allerdings nicht errichtwerden kann, wenn die dortige Sicherheits- und Rechtslage nicht zuverlässig den europäischen Maßstäben und Bedürfnissen entsprechen.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Es ist noch zu früh, solche Aussagen zu machen, da keine statistisch untermauerten langjährigen Erfahrungen vorliegen. Bis dahin sollt in Ruhe beobachtet und durch Zwischenbilanzen bewertet werde, wie die Entwicklung einzuschätzen ist.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	keine!
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	keine! Dassollte ganz der Industrie und der Nachfrage am Energiemarkt überlassen werden.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)

Please specify which drawbacks	Die staatlichen Maßnahmen haben zu einem großen Erfolg der erneuerbaren Energien geführt mit zum Teil schon evidenten Nachteilen wie Umweltschäden, sowohl in der dritten Welt (z.B. Urwaldrodungen zur Energiegewinnung durch Pflanzen), als auch in Europa (Landschaftszerstörung etc.), und auf die Dauer strangulierenden Kostensteigerungen für private und indsutrielle Verbraucher, die unsere Wettbewerbnsfähigkeit im globalen Wettbewerb beeinträchtigen.
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	Wenn das überghaupt nicht zu vermeiden, weil politischer Wille ist, müssen natürlich Zeitziele gesetzt werden

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	IWO - Institut für Wärme und Oeltechnik; wien@iwo-austria.at; martin.reichard@iwo-austria.at;
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	interest group for mineral oil
3. Please indicate your country	Austria
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)
Please specify which other policy elements?	No, like all other forms of energy renewable energies must develop according to the mechanism of supply and demand and should not rely on financial support

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	No
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)
Please specify how to make support schemes more market-oriented	To all question B: No support at all, not the right way to make renewable energy sources cost-competitive.

B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	N/A
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	N/A

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	N/A

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk – producers of renewable energy should operate without any aid Producers of renewable energy should bear greater responsibility for system costs
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Other (please specify)
Please specify which other barriers	Lack of ressources Lack of technical development Some renewables are not cost/market-competitive despite of financial support.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Solar thermal Other (please specify)
Please specify which other pathways	BTL 2nd generation
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Increases in energy efficency is more important and more effectiv than investigations in further use of renewable energy.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	

I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Thomas Jackson, EMAIL: ThomasandCatilina@yahoo.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Portugal
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	There needs to be mid to long term targets, with milestones at each decade (10 year, 20 year 30 year etc.) which must be ambitious but possible. Only with policy continuity can the overall reductions desired in 2050 be attained. Policy continuity in each of the various sectors provides the clarity and stability for governments and industry to plan and impliment with confidence.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Better financing possibilities

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)

Please specify which technologies/circumstances/markets	All conventional fuels such as oil, natural gas, coal and nuclear should have subsidies rerouted to proven, renewable energies, including energy efficiency measures. Proven technologies includes wind, solar hot water (residential as well as low temp. industrial) PV, and concentrated solar for electrical production, biogas, refuse gas recovery etc.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Accelerate convergence of national support schemes Phase out support schemes over time (please specify for which technologies if applicable)
Please specify for which technologies (if applicable) to phase out support schemes over time	See above
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	Without any doubt, a carbon tax would be the simplest to use and the most effective. It could be called something else to make it more acceptable.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	See D1 below

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	

C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Accelerate infrastructure development and interconnection

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)
Please specify which instruments incentivising investment	

F. RENEWABLES IN HEATING AND COOLING

F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Solar thermal Electrification together with higher share of renewables in electricity production
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of infrastructure
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Rail
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)
Please specify which criteria	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	No (please specify how they should be amended or which elements added)
Please specify how they should be amended or which elements added	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)

Please explain in which way and to which degree	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	

J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Not successful
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Philipp Mattle philipp.mattle@gmx.ch
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Other (please specify)
Which other country?	Switzerland
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	- GHG reduction in order to reduce the negative effects of global warming within europe (agriculture, water availability etc.) and internationally (climate fugitives) - Enhance the part of revenue ramaining within europe instead of spending it for petroleum and it's products to the middle est etc. - Reduce adverse health effects from coal-fired plants and potential risks from nuclear plants
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources Public procurement obligations in support of renewables

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	No

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how) Phase out support schemes over time (please specify for which technologies if applicable)
Please specify how to make support schemes more market-oriented	Taxing non renewable energies and other CO2-emissions
Please specify for which technologies (if applicable) to phase out support schemes over time	Solar PV, solar hot water, wind
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with benchmark values for support level per technology per Member State
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	Tax on CO2 and other non renewable energies such as nuclear power
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	No difference. The same CO2-Tax should apply for electicity, heating & cooling and transportation. The efficiency counts
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	Compensation mechanisms for reductions achieved in sunny or windy areas, as long as non renewable energy usage is replaced
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	Different prices paid per kWh can distort the competition between the different production modes, but are to a certain extent required, for instance to ensure rapid achievement of grid parity with solar PV

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Other (please specify)
C.1.1. Please provide explanations and specific examples where available	Lack communication of next steps in order to take the correct longterm changes for investment etc.

C.2. Which policy response to the problems identified above do you consider appropriate?	Strengthen rules to intrude more directly into Member States procedures in terms of roles of different actors (e.g. one-stop-shop), maximum time-frame or other

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Dedicated arrangements to reward availability of generation capacity
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	Wholesale markets would have to move to reflecting full costs

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness Lack of public support
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	With a high tax on CO2, both could be achieved, increasing renewables and efficiency

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Lack of standards Lack of awareness
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Rail Water
G.2.1. Please explain your answer	Transportation should be reduced as much as possible. Transport by air should be made by a tax on CO2 expensive enough, that only local unavaible goods with a short livetime are transported by air. Transport of asparagus for instance a few weeks before the season in europe around the globe by airplane is an absolute nonsens. Transportation on ground should be limited as much as possible and transferred to water and rail. Transportation for passengers should be done by rail an public transport as much as possible and the remaining by biofuels/electricity

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	Only sustainbly grown biomass should be used.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	No, the EU should first focus on developing its own renewable potential
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	Ensure that promising production capacity can be built at the best locations (considering the efficency in production and transportation)

I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Grid connection to very sunny areas of the north african dessert in order to promote the increased revenues from renewable energies to the locals and encourage them to stay within their states (climate- and economic fugitives)
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Yes.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Tax on CO2 for the whole of Europe
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Geothermal energy (mainly for electricity production, but also for heating)
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)

Please specify which drawbacks
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	David Morris
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	United Kingdom
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	To help battle the fight against climate change, to help offset the mindless destruction of natural environments in the pursuit of fossil fuel resources and to ensure that domestic energy generation if diversified further through an increased percentage of renewable energy development
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Public procurement obligations in support of renewables Continue to ensure sustainability and scalability

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	emerging technologies will obviously need support in order to attract private investment

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)
Please specify how to make support schemes more market-oriented	no idea - lets leave the policy makers to answer that one
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	N/A
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	yes
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing Lack of commonly agreed technical specifications Lack of credible and certified training and qualification
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Push for more standardisation and harmonisation on EU level or mutual recognition

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Increase availability of demand response (smart grids …) Accelerate infrastructure development and interconnection Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk - producers of renewable energy should be obliged to sell their production on the market and aid be granted exclusively as a) premiums or b) investment aid Producers of renewable energy should continue to be treated separately (no exposure to conventional market)
E.2. How can it be ensured that market arrangements reward flexibility?	Develop demand response to market signals (please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand)
Develop demand response to market signals : please specify, e.g. smart grids, smart meters, demand aggregation, interruptible demand	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	N/A

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Building regulations etc. Lack of awareness Lack of suitable information Lack of public support Lack of capacity (installers, other)
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Pace of technology development Lack of standards Lack of infrastructure Lack of awareness Lack of suitable information
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for goods Rail Air
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Bilateral agreements between Member States and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness Industrial manufacturing and supply chain
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Successful but some drawbacks (please specify which)
Please specify which drawbacks	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	David Whitehead, email foam1@mac.com
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Ireland
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	The Principle of Proportionality is binding in both the development of EU legislation and State Aid for environmental protection. To comply it has to be demonstrated (a) what greenhouse gas tonnages are to be reduced; (b) the cost basis for implementation and the alternative implementation strategies considered and (c) the environmental objectives involved, namely the environmental degradation which is to be avoided. Neither the NREAPs nor the EU's documentation for Directive 2009/28/EC demonstrate (a) or (b). Directive 2001/77/EC required by the end of 2005 a report which should: "Consider the progress made in reflecting the external costs of electricity produced from non-renewable energy sources and the impact of public support granted to electricity production". This cannot be found. In DG Clima's analysis in March 2010 of a possible initiative to step up beyond 20% greenhouse gas savings: "Explain how the options respect the proportionality principle? Climate change is a transboundary environmental problem. Achieving GHG reductions targets in the EU requires a balanced distribution of efforts between countries and sectors in order to ensure that the environmental objectives are met, but also the common market is not unduly hampered". Neither is there an answer to (C). Furthermore, the Commission has failed to comply with the decision of the EU Ombudsman in Complaint 2587/2009/JF. The renewable programme is a breach of the most fundamental principle of EU law.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)

Please specify which other policy elements?	"The long-term perspective of investors" and the EU's ambition to move towards a reduction of 80-95% of GHG emissions in a 2050 perspective is the focus of this consultation and resulting measures. The Lisbon Treaty is clear in that the "Union shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance. Each institution shall act within the limits of the powers conferred on it in the Treaties. The institutions of the Union shall apply the principle of proportionality". Massive costs and environmental impacts are occurring and the Commission and the Member States have failed to demonstrate, how the renewable energy programme and the focus of this consultation, are in compliance with the terms of the Lisbon Treaty above. The citizen's interest does not lie with a 95% reduction in GHG emissions and establishing a long term perspective for investors in technology sectors. Furthermore, there has been a complete failure to verify the emission savings and environmental performance of renewable installations installed to date and engineering analysis is clearly showing how ineffective intermittent generators, such as wind and solar, are in delivering reliable energy and effective environmental protection.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	No
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Phase out support schemes over time (please specify for which technologies if applicable)

Please specify for which technologies (if applicable) to phase out support schemes over time	ECJ judgement in case C-379/98 in relation to justifying state aid for wind generated renewable electricity was on the basis that it was "useful for protecting the environment in so far as it contributes to the reduction in emissions of greenhouse gases". "It should be noted that that policy is also designed to protect the health and life of humans, animals and plants". The Commission is aware it is subject to a Communication ACCC/C/2010/54 at the UNECE Aarhus Convention Compliance Committee in relation to the renewable energy programme in Ireland. This has demonstrated that the funding mechanisms are to ensure delivery of an EU obligation in relation to renewable energy and not part of a commitment, to contribute to any quantifiable environmental target related to quantified carbon dioxide savings. In approving this funding the EU failed to evaluate the environmental effectiveness of the programme or if the citizen's rights with regard to public participation in decision making had been complied with. The inefficiencies on the grid induced by wind energy were known in advance, but ignored. Emission savings claimed for in the funding application have not occurred. Any further installation of wind energy will not lead to emissions savings, yet a quadrupling is required by the NREAP. A similar situation has occurred in other Member States. Aid schemes approved by the EU for renewable energy are not protecting the environment and saving fossil energy resources.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	N/A
B.4. Should the structure of financial support be gradually aligned EU-wide?	N/A
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)
C.1.1. Please provide explanations and specific examples where available	The Lisbon Treaty requires that: “Decisions shall be taken as openly and as closely as possible to the citizen. The Commission shall carry out broad consultations with parties concerned in order to ensure that the Union's actions are coherent and transparent”. The EU has ratified the United Nations Economic Commission for Europe’s (UNECE) Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. A Strategic Environmental Assessment (SEA) is mandatory under Directive 2001/42/EC for all programmes leading to future development consent of wind farms and other renewable infrastructure. Communication ACCC/C/2010/54 at the Aarhus Convention Compliance Committee has shown that the Units Heads of DG Environment and DG Energy in June 2010 directed the Member States that no SEA was required for the NREAP if it did not include specific mandatory measures. Note: The renewable targets and the NREAPs are mandatory. The Compliance Committee have concluded that public participation was required for the NREAP and have formally requested: “Could you please explain why the Commission says that it is not responsible for the actions of the Member State in this case?” The Commission is acting without ‘proper authority’ in the manner in which it is implementing this programme, in that it has deliberately bypassed legally binding procedures related to environmental assessment and democratic accountability.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	The Commission has failed to comply with both the terms of the Lisbon Treaty above and its obligations under the Aarhus Convention with both the structure and the implementation of Directive 2009/28/EC. With regard to implementing a programme of this nature, Article 7 of the Convention is clear in requires that the public affected be provided with the necessary information, so that they can participate effectively during the preparation of the plan or programme within a transparent and fair framework, when all options are open and effective public participation can take place. EU legislation implements this through the more detailed process of Strategic Environmental Assessment. Furthermore the Commission's legal team in their opening statement to the Aarhus Convention Compliance Committee meeting on Communication ACCC/C/2010/54, in that in terms of the National Renewable Energy Action Plan, sated that the Irish public were only entitled under the terms of the Convention to information on threats to the environment. They were not entitled to information on comparative costs or effectiveness of the renewable technologies. Under the Treaty of Lisbon, the citizen has a Right to good administration, a Right to effective remedy and to a fair trial and a Right to have damages made good. The Right to have damages made good applies to institutions and bodies of the EU and Member States when they are implementing Union law.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above

D.1.1. Please specify which obstacles and the nature and degree of them for each	Europe's population has stabilised, while Europe's industry is more efficient, so electrical power consumption figures are stabilising. Yet to support a renewable programme with completely unknown figures related to environmental performance, impacts and financial costs, an enormous network development is to be initiated to facilitate unreliable and intermittent renewable generation, as regards the Republic of Ireland, a doubling of the high voltage grid by an extra 5,000 km. The EU Commission's 'Priority Interconnection Plan' COM (2006) 846 is very critical of 'time consuming public consultation procedures'. Yet this plan has an investment of €30 billion in infrastructure by the EU by 2013, with an estimated €700 – €800 million annually to be spent on connecting more renewable sources. In Com (2011) 658 on a proposal for regulation of a pan-European energy infrastructure, this states in relation to proportionality that the proposal does not go beyond what is necessary to achieve the objectives perused. This is not correct, the renewable programme has by-passed both proper environmental, technical and financial assessment and legally binding measures related to public participation. It is certainly not proportionate in terms of achieving demonstrated environmental protection objectives. Now the citizen is expected to carry the burden of this grid expansion, with massive and unnecessary financial and environmental impacts.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Other (please specify)

Please specify which other rules	Both the internal and external costs associated with any grid expansion to facilitate renewable energy need to be assessed and compared with the 'do nothing scenario', given that the existing grid functions without any of this development. With regards to the EU's binding climate change and renewable energy targets, it is necessary to point out Principle 10 of the United Nation's Rio Declaration, namely; "Environmental issues are best handled with participation of all concerned citizens, at the relevant level". These binding targets were decided solely on political considerations, in which there was neither any environmental assessment nor public participation with concerned citizens. These massive grid expansions to facilitate intermittent renewable generation are being forced upon a population, who have neither been informed nor provided with an opportunity to participate in these key decisions. Clearly renewable energy should only be provided with access to the grid, when it demonstrates that it is superior and more effective than current generation capacity. At no stage have the necessary assessments in this regard been completed to justify the preferential treatment provided to such generation. Indeed, ever indication is that the renewable energy being promoted solely for political reasons is not providing any significant environmental benefits, which anyhow could have been achieved with far lower cost and environmental impacts by other means.

D.2.1. Please explain why	As regards grid related rules there is already a huge backlash developing from the general public as more and more grid expansions are developed to facilitate intermittent and ineffective renewable generation, such as wind energy. As the Commission is aware from Communication ACCC/C/2010/54 it approved €110 million in funding for the Ireland to UK electrical connector, even though the sole purpose of this project was to facilitate more wind energy on the Irish grid, a policy, which had by-passed the legally required public participation. In relation to the EU's European Investment Bank, this has supplied €300 million in loans to the interconnector project and a further €235 million to the State owned ESB to develop further networks to facilitate wind energy in Ireland. All related to a programme which has by-passed legally required public participation procedures. Now the citizen is expected to pay back this money for infrastructure, which is not needed and for which he was provided with no proper environmental information or the opportunity to participate in the decision-making. Given that Europe is already heavily indebt it is simply unacceptable that such practices should be occurring driven by EU Institutions, which have deliberately by-passed the legally binding rules which are applicable to them. Proper accountability and adherence to democratic procedures is not optional with regard to grid development.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Other (please specify)

Please specify which other measures	The integration of solar power in Germany has caused a huge financial burden to be placed on the citizen for no real environmental benefit. Now in 2012 an estimated €100 billion subvention cost for what only delivers 3% of Germany's electricity supply in a highly irregular and ineffective manner. Indeed the development of renewable electricity in German has essentially doubled generation costs. Indeed all countries, which have undergone renewable expansions, are seeing massive cost rises for the consumer coupled with a failure to demonstrate any significant decrease in fuel usage or emissions. Once again this clearly demonstrates the failure to assess this policy before implementation and the manner in which the input from the technical sector has been deliberately ignored. Europe's industry cannot remain competitive given these massive costs, which are seemingly now to be raised even further with dysfunctional and ineffective system integration costs for renewable power inputs, which have no demonstrated or legal reason to be there in the first place.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Other (please specify)

Please specify which other barriers	The uptake of renewables in heating and cooling is being driven, both at EU and Member State level by polices, which have not been properly assessed and whose implementation is related to political expediency and not environmental protection. Indeed the promotion of wood biomass for domestic heating is not only leading to the destruction of natural wood resources, but as the moisture content of such fuel, particular in Northern Europe, is high; it is leading to increased particulate emissions and urban pollution. As regards the renewable Directive, the external costs of existing heating and cooling arrangements are unknown, yet we are to subsidise renewables for which no external cost assessment is available. This type of policy will only lead to unsustainable businesses, which are totally dependent on subsidy bubbles to survive and have little or no viable long term future. The Common Agriculture Policy had its inception in such rash political based decision making, in which market based economics was replaced by a political structure. This agricultural policy resulted in an enormous cost burden for the European citizen and lead to practices, which were unsustainable from both a financial and environmental perspective. Clearly it can be seen that the EU has not learnt anything from this debacle and is now rapidly implementing politically agreed targets, which have by-passed legally required assessment and public participation requirements.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Other (please specify)

Please specify which other pathways	The completely counter productive nature of the EU's energy policies can be seen in the manner in which wood biomass in domestic heating is being promoted, with all its associated environmental impacts, particularly the significant impact on human health, while the most environmentally effective form of renewable heat, that of electrically driven heat pumps, is being put out of business by soaring electricity costs. Yet at no stage was this considered in a proper assessment as part of policy development. As Der Spiegel reported in March 2011 in relation to German's Eco-Trap: "Not everything that looks green serves the environment. The ecological principle of proceeding with care doesn't seem to apply to environmental policy. The more, the better, seems to be the principle. No one is calculating whether all the billions being invested in protecting the environment are actually being spent wisely. Ordinary citizens can't judge it and many experts have no interest in shedding any light on this aspect because their livelihoods are at stake. A large amount of money flows into studies, risk assessments and providing seals of approval. In many cases, a closer look at environmental measures reveals that they're expensive and don't have much effect".

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	It is likely that global energy prices will rise in line with both population increase and a general improvement in living standards. Market forces will then dictate that consumers will use energy more efficiently. However, what the EU is proposing is a massive intrusion on the Citizen's rights, in that he should be denied access to certain energy sources and forced to use other highly ineffective sources, on the basis of political decisions, which have by-passed proper assessment and legally binding public participation procedures. In particular given that the EU has completely failed to assess and quantify the external costs of carbon dioxide emissions, it has no legal right to restrict the citizen's access to such fuels and introduce massive financial support programmes for those, which may well carry the tag renewable, but in reality do not deliver any environmental benefits, which could not have been achieved at a fraction of the cost by a rational and science based evaluation. While energy efficiency and environmental protection in the heating and sector should be promoted, this should be based strictly on the principles of the Lisbon treaty, namely a highly competitive social market economy and a high level of protection and an improvement in the quality of the environment. The current promotion of renewable energy does not fulfil those requirements.

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Other (please specify)

Please specify which other barriers	With regard to the 10% target for transport fuel, this was a completely political target bereft of any environmental assessment. Indeed the April 2007 consultation by the Commission was simply a 'Vox Pop' based on four questions: "How should a biofuel sustainability system be designed? How should overall effects on land use be monitored? How should the use of second-generation biofuels be encouraged? What further action is needed to make it possible to achieve a 10% biofuel share?" In no uncertain terms this fulfil the legal requirements in relation to public participation in decision making. The current situation is that the introduction of E10 biofuel into Germany has been a complete disaster. The Commission is also well aware in that it has been sued, accused of violating European transparency laws. Client Earth, Friends of the Earth Europe, Fern and Corporate Europe Observatory filed the lawsuit following the Commission's refusal to provide access to information in decisions related to the sustainability of Europe's Biofuels policy. The 10% target should therefore be reviewed and subject to the proper technical, environmental and financial assessment, in conjunction with proper public participation, which was mandatory for such a biofuel programme in the first place.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail

G.2.1. Please explain your answer	Many European rail networks are electrified and in a number of Member States, particularly Germany, rail costs are soaring as electrical generation costs have effectively doubled due to renewable energy inputs, which are massively ineffective in terms of environmental protection. This is in effect making what is an extremely effective form of transportation, particularly for social groups who would not have ready access to a car, uncompetitive. Yet clearly this impact has never been assessed and quantified in the development of these policies, in which to quote Mark Twain, it is being driven by an administrative structure where; "people's beliefs and convictions are in almost every case gotten at second-hand, and without examination, from authorities who have not themselves examined the questions at issue but have taken them at second-hand from other non-examiners, whose opinions about them were not worth a brass farthing". One can only wonder, if people who have been placed in a position of responsibility of development of Europe's energy policy, even attempt to understand the impacts of these policies, as certainly there is no documented evidence to demonstrate they do

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement
H.1.1. Please explain	The sums of money which have been made available by Europe's biofuel policies are colossal, and are only matched by the potential for environmental devastation. With a rising global population, which in many cases can't feed itself, to divert food grade products into fuel tanks, when other options are available, is simply obscene. Furthermore, Biofuels have not provided the environmental benefits, which were claimed for them, to which must be added the fact again that there was no proper environmental assessment of the policy before it was introduced. This policy should be stopped before it does more damage both in Europe and elsewhere.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A

I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	N/A
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	As already answered in Section D, existing grid networks are perfectly adequate for todays and future needs. They may need replacement in relation to the age of the components, but they do not need to be expanded.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	N/A
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	In relation to COM (2011) 539 on "The EU Energy Policy: Engaging with partners beyond our borders" and the Mediterranean Solar Plan, this plan is widely speculative, particularly given the complete failure of solar power to deliver either cost effective or reliable electricity. Europe is already collapsing under a burden of financial debt and it is appalling to see that the EU Commission wants to increase this burden based on speculative and ill conceived projects in neighbouring countries. Spain has already had to slash its completely overgenerous solar subsidies and Germany simply cannot continue to support solar development any more, not to mention the fact that neither the citizen nor the environment benefited from these colossal expenditures. Yet again the Commission is solely creating a 'bubble economy' for equipment suppliers.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	In a similar manner offshore wind is a technology sector associated with massive costs (€4.3 million per MW installed) for an unreliable electricity supply, which in turn has massive environmental impacts, in particular associated with grid expansions. It is particularly distressing that the EU Commission cannot produce any objective documentation to support this technology sector. With regard to the Communication ACCC/C/2010/54 and Ombudsman Complaint 2587/2009/JF, on the 3rd Feb 2011 on the Irish State Broadcaster the EU Commissioner for Climate Action Connie Hedegaard stated in relation to offshore wind: “It actually pays off, it is sound economics”. When a formal reply for the supporting technical information was received, no background documentation was connected to the request; “as the Commissioner's statement did not refer to any particular project or development, nor was it based on any one or particular piece of documentation but on publicly available information and her general experience, knowledge and political views”. The only document being available coming from the European Environment Agency on “Europe’s onshore and offshore wind energy potential”. This in turn quotes the European Wind Energy Association as its technical source.

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Other (please specify)

Please specify which other key challenges	There has to be some very serious questions asked about the sums of taxpayers now being diverted into renewable energy research, in particular as there has been a complete lack of data made available as to the environmental effectiveness of this sector, despite it being a legal obligation to posses and update such environmental data. With regard to the Intelligent Energy Europe programme, both projects funded by the EU Commission in relation to wind energy, “Wind Energy - The Facts” and “GP Wind”, contain blatantly incorrect claims about the emissions and fuel savings for this intermittent source, in which the inefficiencies induced on the grid are ignored. Under Regulation 1367/2000, which imposes the requirements of the Aarhus Convention on Institutions of the EU, the EU Commission is refusing to confirm how it complies with its legal requirement in relation to the two programmes, it that it shall, insofar as is within its power, ensure that any information that is compiled by it, or on its behalf, is up-to-date, accurate and comparable. In particular with regard to Wind Energy – The Facts, the EU contributed 50% of the €773,662 used by the European Wind Energy Association to run a dissemination campaign. Yet at no stage has an independent and transparent technical analysis ever been completed of the EU’s colossal support for wind energy and its effectiveness.

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	The Treaty of Lisbon is clear, in that the Union "shall promote scientific and technological advance". Wind, solar photovoltaic and biofuels, which are cornerstones of the mission of the SET plan have not to date, and there are absolutely no indicators that that they will in the future, provided a reliable, cost effective and environmentally effective source of energy. They are not therefore connected with any scientific and technological advance. Neither is there transparency in the manner in which the SET plan is being implemented. Not only is there a complete failure to assess the environmental effectiveness of the above technologies, which are the only justification for their financial support framework, but as regards wind energy, the output is dominated by the European Wind Energy Association, instead of the critically required independent and transparent technical analysis of this sector, which is being provided with colossal support at the citizen's expense. Clearly there is every indication that the EU Commission providing funding for sectors in a manner which is not transparent and which is detrimental to the requirements of the Lisbon Treaty, to promote "a highly competitive social market economy, aiming at full employment and social progress".

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	The EU Commission needs to comply with its legal requirement under the Aarhus Convention to posses and update environmental information, which is relevant to its function. Note: Environmental information includes not only information on emissions and impact, but also cost benefit and other economic analysis. To date the Commission has failed, despite a legal requirement to do so, to both assess the renewable energy it is so actively supports and determine the external impacts of non-renewable sources. As it wrote in reply to UNECE in Communication ACCC/C/2010/54, "it is generally recognised that renewable energy, and wind energy in particular, is preferential from an environmental point of view to non-renewable energy". Its position is therefore based on 'public opinion' and not demonstrated legal compliance. While the Polluter Pays Principle allows external costs to be internalised, this must be based on a transparent and factual analysis, which to date has been bypassed. Energy policy going forward must be based on evidence based assessment rather than as SEC(2008) 85/3 of January 2008 stated, "In the opening months of 2007, the European Union stepped up its energy and climate change ambitions to new levels. The Commission put forward an integrated package of proposals calling for a quantum leap in the EU's commitment to change. A political consensus grew up in support of this approach".
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	The answer to this question has been clearly covered in the replies above. The EU has implemented a massive renewables programme, putting mandatory targets on Member States, a colossal financial burden on the citizen and huge unwarranted environmental impacts on the landscape and biodiversity of Europe. At every stage of the process legally binding procedures related to assessment and public participation were bypassed. The EU can recognise the complete ineffectiveness of the programme and bring it to a halt or it can see this happen through the inevitable circumstances in which it is challenged in the European Courts and forced to ensure damages are made good. Currently it is clear in that the only defence it has in relation to non-compliance with procedures related to assessment and public participation, is that it is exempt as it is on a mission to save the world.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Pat Swords BE CEng FIChemE CEnv MIEMA - pat.swords.chemeng@gmail.com
2. Are you responding to this questionnaire on behalf of /as:	Other (please specify)
Please specify which type of organisation you represent	Engineering Fellow and Chartered Environmentalist
3. Please indicate your country	Ireland
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary

A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	The Principle of Proportionality is binding in both the development of EU legislation and State Aid for environmental protection. To comply it has to be demonstrated (a) what greenhouse gas tonnages are to be reduced; (b) the cost basis for implementation and the alternative implementation strategies considered and (c) the environmental objectives involved, namely the environmental degradation which is to be avoided. Neither the NREAPs nor the EU's documentation for Directive 2009/28/EC demonstrate (a) or (b). Directive 2001/77/EC required by the end of 2005 a report which should: "Consider the progress made in reflecting the external costs of electricity produced from non-renewable energy sources and the impact of public support granted to electricity production". This cannot be found. In DG Clima's analysis in March 2010 of a possible initiative to step up beyond 20% greenhouse gas savings: "Explain how the options respect the proportionality principle? Climate change is a transboundary environmental problem. Achieving GHG reductions targets in the EU requires a balanced distribution of efforts between countries and sectors in order to ensure that the environmental objectives are met, but also the common market is not unduly hampered". Neither is there an answer to (C). Furthermore, the Commission has failed to comply with the decision of the EU Ombudsman in Complaint 2587/2009/JF. The renewable programme is a breach of the most fundamental principle of EU law.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Other (please specify)

Please specify which other policy elements?	"The long-term perspective of investors" and the EU's ambition to move towards a reduction of 80-95% of GHG emissions in a 2050 perspective is the focus of this consultation and resulting measures. The Lisbon Treaty is clear in that the "Union shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance. Each institution shall act within the limits of the powers conferred on it in the Treaties. The institutions of the Union shall apply the principle of proportionality". Massive costs and environmental impacts are occurring and the Commission and the Member States have failed to demonstrate, how the renewable energy programme and the focus of this consultation, are in compliance with the terms of the Lisbon Treaty above. The citizen's interest does not lie with a 95% reduction in GHG emissions and establishing a long term perspective for investors in technology sectors. Furthermore, there has been a complete failure to verify the emission savings and environmental performance of renewable installations installed to date and engineering analysis is clearly showing how ineffective intermittent generators, such as wind and solar, are in delivering reliable energy and effective environmental protection.

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	No
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Phase out support schemes over time (please specify for which technologies if applicable)

Please specify for which technologies (if applicable) to phase out support schemes over time	ECJ judgement in case C-379/98 in relation to justifying state aid for wind generated renewable electricity was on the basis that it was "useful for protecting the environment in so far as it contributes to the reduction in emissions of greenhouse gases". "It should be noted that that policy is also designed to protect the health and life of humans, animals and plants". The Commission is aware it is subject to a Communication ACCC/C/2010/54 at the UNECE Aarhus Convention Compliance Committee in relation to the renewable energy programme in Ireland. This has demonstrated that the funding mechanisms are to ensure delivery of an EU obligation in relation to renewable energy and not part of a commitment, to contribute to any quantifiable environmental target related to quantified carbon dioxide savings. In approving this funding the EU failed to evaluate the environmental effectiveness of the programme or if the citizen's rights with regard to public participation in decision making had been complied with. The inefficiencies on the grid induced by wind energy were known in advance, but ignored. Emission savings claimed for in the funding application have not occurred. Any further installation of wind energy will not lead to emissions savings, yet a quadrupling is required by the NREAP. A similar situation has occurred in other Member States. Aid schemes approved by the EU for renewable energy are not protecting the environment and saving fossil energy resources.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	N/A
B.4. Should the structure of financial support be gradually aligned EU-wide?	No
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	N/A

C. ADMINISTRATIVE PROCEDURES

C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Other (please specify)
C.1.1. Please provide explanations and specific examples where available	The Lisbon Treaty requires that: “Decisions shall be taken as openly and as closely as possible to the citizen. The Commission shall carry out broad consultations with parties concerned in order to ensure that the Union's actions are coherent and transparent”. The EU has ratified the United Nations Economic Commission for Europe’s (UNECE) Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. A Strategic Environmental Assessment (SEA) is mandatory under Directive 2001/42/EC for all programmes leading to future development consent of wind farms and other renewable infrastructure. Communication ACCC/C/2010/54 at the Aarhus Convention Compliance Committee has shown that the Units Heads of DG Environment and DG Energy in June 2010 directed the Member States that no SEA was required for the NREAP if it did not include specific mandatory measures. Note: The renewable targets and the NREAPs are mandatory. The Compliance Committee have concluded that public participation was required for the NREAP and have formally requested: “Could you please explain why the Commission says that it is not responsible for the actions of the Member State in this case?” The Commission is acting without ‘proper authority’ in the manner in which it is implementing this programme, in that it has deliberately bypassed legally binding procedures related to environmental assessment and democratic accountability.
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)

Please specify which would be in your view a workable solution to eliminate barriers	The Commission has failed to comply with both the terms of the Lisbon Treaty above and its obligations under the Aarhus Convention with both the structure and the implementation of Directive 2009/28/EC. With regard to implementing a programme of this nature, Article 7 of the Convention is clear in requires that the public affected be provided with the necessary information, so that they can participate effectively during the preparation of the plan or programme within a transparent and fair framework, when all options are open and effective public participation can take place. EU legislation implements this through the more detailed process of Strategic Environmental Assessment. Furthermore the Commission's legal team in their opening statement to the Aarhus Convention Compliance Committee meeting on Communication ACCC/C/2010/54, in that in terms of the National Renewable Energy Action Plan, sated that the Irish public were only entitled under the terms of the Convention to information on threats to the environment. They were not entitled to information on comparative costs or effectiveness of the renewable technologies. Under the Treaty of Lisbon, the citizen has a Right to good administration, a Right to effective remedy and to a fair trial and a Right to have damages made good. The Right to have damages made good applies to institutions and bodies of the EU and Member States when they are implementing Union law.

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above

D.1.1. Please specify which obstacles and the nature and degree of them for each	Europe's population has stabilised, while Europe's industry is more efficient, so electrical power consumption figures are stabilising. Yet to support a renewable programme with completely unknown figures related to environmental performance, impacts and financial costs, an enormous network development is to be initiated to facilitate unreliable and intermittent renewable generation, as regards the Republic of Ireland, a doubling of the high voltage grid by an extra 5,000 km. The EU Commission's 'Priority Interconnection Plan' COM (2006) 846 is very critical of 'time consuming public consultation procedures'. Yet this plan has an investment of €30 billion in infrastructure by the EU by 2013, with an estimated €700 – €800 million annually to be spent on connecting more renewable sources. In Com (2011) 658 on a proposal for regulation of a pan-European energy infrastructure, this states in relation to proportionality that the proposal does not go beyond what is necessary to achieve the objectives perused. This is not correct, the renewable programme has by-passed both proper environmental, technical and financial assessment and legally binding measures related to public participation. It is certainly not proportionate in terms of achieving demonstrated environmental protection objectives. Now the citizen is expected to carry the burden of this grid expansion, with massive and unnecessary financial and environmental impacts.
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Other (please specify)

Please specify which other rules	Both the internal and external costs associated with any grid expansion to facilitate renewable energy need to be assessed and compared with the 'do nothing scenario', given that the existing grid functions without any of this development. With regards to the EU's binding climate change and renewable energy targets, it is necessary to point out Principle 10 of the United Nation's Rio Declaration, namely; "Environmental issues are best handled with participation of all concerned citizens, at the relevant level". These binding targets were decided solely on political considerations, in which there was neither any environmental assessment nor public participation with concerned citizens. These massive grid expansions to facilitate intermittent renewable generation are being forced upon a population, who have neither been informed nor provided with an opportunity to participate in these key decisions. Clearly renewable energy should only be provided with access to the grid, when it demonstrates that it is superior and more effective than current generation capacity. At no stage have the necessary assessments in this regard been completed to justify the preferential treatment provided to such generation. Indeed, ever indication is that the renewable energy being promoted solely for political reasons is not providing any significant environmental benefits, which anyhow could have been achieved with far lower cost and environmental impacts by other means.

D.2.1. Please explain why	As regards grid related rules there is already a huge backlash developing from the general public as more and more grid expansions are developed to facilitate intermittent and ineffective renewable generation, such as wind energy. As the Commission is aware from Communication ACCC/C/2010/54 it approved €110 million in funding for the Ireland to UK electrical connector, even though the sole purpose of this project was to facilitate more wind energy on the Irish grid, a policy, which had by-passed the legally required public participation. In relation to the EU's European Investment Bank, this has supplied €300 million in loans to the interconnector project and a further €235 million to the State owned ESB to develop further networks to facilitate wind energy in Ireland. All related to a programme which has by-passed legally required public participation procedures. Now the citizen is expected to pay back this money for infrastructure, which is not need and for which he was provided with no proper environmental information or the opportunity to participate in the decision-making. Given that Europe is already heavily indebt it is simply unacceptable that such practices should be occurring driven by EU Institutions, which have deliberately by-passed the legally binding rules which are applicable to them. Proper accountability and adherence to democratic procedures is not optional with regard to grid development.
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Other (please specify)

Please specify which other measures	The integration of solar power in Germany has caused a huge financial burden to be placed on the citizen for no real environmental benefit. Now in 2012 an estimated €100 billion subvention cost for what only delivers 3% of Germany's electricity supply in a highly irregular and ineffective manner. Indeed the development of renewable electricity in German has essentially doubled generation costs. Indeed all countries, which have undergone renewable expansions, are seeing massive cost rises for the consumer coupled with a failure to demonstrate any significant decrease in fuel usage or emissions. Once again this clearly demonstrates the failure to assess this policy before implementation and the manner in which the input from the technical sector has been deliberately ignored. Europe's industry cannot remain competitive given these massive costs, which are seemingly now to be raised even further with dysfunctional and ineffective system integration costs for renewable power inputs, which have no demonstrated or legal reason to be there in the first place.

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk – producers of renewable energy should operate without any aid
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Other (please specify)

Please specify which other barriers	The uptake of renewables in heating and cooling is being driven, both at EU and Member State level by polices, which have not been properly assessed and whose implementation is related to political expediency and not environmental protection. Indeed the promotion of wood biomass for domestic heating is not only leading to the destruction of natural wood resources, but as the moisture content of such fuel, particular in Northern Europe, is high; it is leading to increased particulate emissions and urban pollution. As regards the renewable Directive, the external costs of existing heating and cooling arrangements are unknown, yet we are to subsidise renewables for which no external cost assessment is available. This type of policy will only lead to unsustainable businesses, which are totally dependent on subsidy bubbles to survive and have little or no viable long term future. The Common Agriculture Policy had its inception in such rash political based decision making, in which market based economics was replaced by a political structure. This agricultural policy resulted in an enormous cost burden for the European citizen and lead to practices, which were unsustainable from both a financial and environmental perspective. Clearly it can be seen that the EU has not learnt anything from this debacle and is now rapidly implementing politically agreed targets, which have by-passed legally required assessment and public participation requirements.
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Other (please specify)

Please specify which other pathways	The completely counter productive nature of the EU's energy policies can be seen in the manner in which wood biomass in domestic heating is being promoted, with all its associated environmental impacts, particularly the significant impact on human health, while the most environmentally effective form of renewable heat, that of electrically driven heat pumps, is being put out of business by soaring electricity costs. Yet at no stage was this considered in a proper assessment as part of policy development. As Der Spiegel reported in March 2011 in relation to German's Eco-Trap: "Not everything that looks green serves the environment. The ecological principle of proceeding with care doesn't seem to apply to environmental policy. The more, the better, seems to be the principle. No one is calculating whether all the billions being invested in protecting the environment are actually being spent wisely. Ordinary citizens can't judge it and many experts have no interest in shedding any light on this aspect because their livelihoods are at stake. A large amount of money flows into studies, risk assessments and providing seals of approval. In many cases, a closer look at environmental measures reveals that they're expensive and don't have much effect".

F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	It is likely that global energy prices will rise in line with both population increase and a general improvement in living standards. Market forces will then dictate that consumers will use energy more efficiently. However, what the EU is proposing is a massive intrusion on the Citizen's rights, in that he should be denied access to certain energy sources and forced to use other highly ineffective sources, on the basis of political decisions, which have by-passed proper assessment and legally binding public participation procedures. In particular given that the EU has completely failed to assess and quantify the external costs of carbon dioxide emissions, it has no legal right to restrict the citizen's access to such fuels and introduce massive financial support programmes for those, which may well carry the tag renewable, but in reality do not deliver any environmental benefits, which could not have been achieved at a fraction of the cost by a rational and science based evaluation. While energy efficiency and environmental protection in the heating and sector should be promoted, this should be based strictly on the principles of the Lisbon treaty, namely a highly competitive social market economy and a high level of protection and an improvement in the quality of the environment. The current promotion of renewable energy does not fulfil those requirements.

G. RENEWABLES IN TRANSPORT

G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Other (please specify)

Please specify which other barriers	With regard to the 10% target for transport fuel, this was a completely political target bereft of any environmental assessment. Indeed the April 2007 consultation by the Commission was simply a 'Vox Pop' based on four questions: "How should a biofuel sustainability system be designed? How should overall effects on land use be monitored? How should the use of second-generation biofuels be encouraged? What further action is needed to make it possible to achieve a 10% biofuel share?" In no uncertain terms this fulfil the legal requirements in relation to public participation in decision making. The current situation is that the introduction of E10 biofuel into Germany has been a complete disaster. The Commission is also well aware in that it has been sued, accused of violating European transparency laws. Client Earth, Friends of the Earth Europe, Fern and Corporate Europe Observatory filed the lawsuit following the Commission's refusal to provide access to information in decisions related to the sustainability of Europe's Biofuels policy. The 10% target should therefore be reviewed and subject to the proper technical, environmental and financial assessment, in conjunction with proper public participation, which was mandatory for such a biofuel programme in the first place.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail

G.2.1. Please explain your answer	Many European rail networks are electrified and in a number of Member States, particularly Germany, rail costs are soaring as electrical generation costs have effectively doubled due to renewable energy inputs, which are massively ineffective in terms of environmental protection. This is in effect making what is an extremely effective form of transportation, particularly for social groups who would not have ready access to a car, uncompetitive. Yet clearly this impact has never been assessed and quantified in the development of these policies, in which to quote Mark Twain, it is being driven by an administrative structure where; "people's beliefs and convictions are in almost every case gotten at second-hand, and without examination, from authorities who have not themselves examined the questions at issue but have taken them at second-hand from other non-examiners, whose opinions about them were not worth a brass farthing". One can only wonder, if people who have been placed in a position of responsibility of development of Europe's energy policy, even attempt to understand the impacts of these policies, as certainly there is no documented evidence to demonstrate they do.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement
H.1.1. Please explain	The sums of money which have been made available by Europe's biofuel policies are colossal, and are only matched by the potential for environmental devastation. With a rising global population, which in many cases can't feed itself, to divert food grade products into fuel tanks, when other options are available, is simply obscene. Furthermore, Biofuels have not provided the environmental benefits, which were claimed for them, to which must be added the fact again that there was no proper environmental assessment of the policy before it was introduced. This policy should be stopped before it does more damage both in Europe and elsewhere.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	N/A

I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	N/A
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	No (explain why)
Please explain why	As already answered in Section D, existing grid networks are perfectly adequate for todays and future needs. They may need replacement in relation to the age of the components, but they do not need to be expanded.
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	N/A
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	In relation to COM (2011) 539 on "The EU Energy Policy: Engaging with partners beyond our borders" and the Mediterranean Solar Plan, this plan is widely speculative, particularly given the complete failure of solar power to deliver either cost effective or reliable electricity. Europe is already collapsing under a burden of financial debt and it is appalling to see that the EU Commission wants to increase this burden based on speculative and ill conceived projects in neighbouring countries. Spain has already had to slash its completely overgenerous solar subsidies and Germany simply cannot continue to support solar development any more, not to mention the fact that neither the citizen nor the environment benefited from these colossal expenditures. Yet again the Commission is solely creating a 'bubble economy' for equipment suppliers.

I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	In a similar manner offshore wind is a technology sector associated with massive costs (€4.3 million per MW installed) for an unreliable electricity supply, which in turn has massive environmental impacts, in particular associated with grid expansions. It is particularly distressing that the EU Commission cannot produce any objective documentation to support this technology sector. With regard to the Communication ACCC/C/2010/54 and Ombudsman Complaint 2587/2009/JF, on the 3rd Feb 2011 on the Irish State Broadcaster the EU Commissioner for Climate Action Connie Hedegaard stated in relation to offshore wind: “It actually pays off, it is sound economics”. When a formal reply for the supporting technical information was received, no background documentation was connected to the request; “as the Commissioner's statement did not refer to any particular project or development, nor was it based on any one or particular piece of documentation but on publicly available information and her general experience, knowledge and political views”. The only document being available coming from the European Environment Agency on “Europe’s onshore and offshore wind energy potential”. This in turn quotes the European Wind Energy Association as its technical source.

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Other (please specify)

Please specify which other key challenges	There has to be some very serious questions asked about the sums of taxpayers now being diverted into renewable energy research, in particular as there has been a complete lack of data made available as to the environmental effectiveness of this sector, despite it being a legal obligation to posses and update such environmental data. With regard to the Intelligent Energy Europe programme, both projects funded by the EU Commission in relation to wind energy, “Wind Energy - The Facts” and “GP Wind”, contain blatantly incorrect claims about the emissions and fuel savings for this intermittent source, in which the inefficiencies induced on the grid are ignored. Under Regulation 1367/2000, which imposes the requirements of the Aarhus Convention on Institutions of the EU, the EU Commission is refusing to confirm how it complies with its legal requirement in relation to the two programmes, it that it shall, insofar as is within its power, ensure that any information that is compiled by it, or on its behalf, is up-to-date, accurate and comparable. In particular with regard to "Wind Energy – The Facts", the EU contributed 50% of the €773,662 used by the European Wind Energy Association to run a dissemination campaign. Yet at no stage has an independent and transparent technical analysis ever been completed of the EU’s colossal support for wind energy and its effectiveness.

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	The Treaty of Lisbon is clear, in that the Union "shall promote scientific and technological advance". Wind, solar photovoltaic and biofuels, which are cornerstones of the mission of the SET plan have not to date, and there are absolutely no indicators that that they will in the future, provided a reliable, cost effective and environmentally effective source of energy. They are not therefore connected with any scientific and technological advance. Neither is there transparency in the manner in which the SET plan is being implemented. Not only is there a complete failure to assess the environmental effectiveness of the above technologies, which are the only justification for their financial support framework, but as regards wind energy, the output is dominated by the European Wind Energy Association, instead of the critically required independent and transparent technical analysis of this sector, which is being provided with colossal support at the citizen's expense. Clearly there is every indication that the EU Commission providing funding for sectors in a manner which is not transparent and which is detrimental to the requirements of the Lisbon Treaty, to promote "a highly competitive social market economy, aiming at full employment and social progress".

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	The EU Commission needs to comply with its legal requirement under the Aarhus Convention to posses and update environmental information, which is relevant to its function. Note: Environmental information includes not only information on emissions and impact, but also cost benefit and other economic analysis. To date the Commission has failed, despite a legal requirement to do so, to both assess the renewable energy it is so actively supports and determine the external impacts of non-renewable sources. As it wrote in reply to UNECE in Communication ACCC/C/2010/54, "it is generally recognised that renewable energy, and wind energy in particular, is preferential from an environmental point of view to non-renewable energy". Its position is therefore based on 'public opinion' and not demonstrated legal compliance. While the Polluter Pays Principle allows external costs to be internalised, this must be based on a transparent and factual analysis, which to date has been bypassed. Energy policy going forward must be based on evidence based assessment rather than as SEC(2008) 85/3 of January 2008 stated, "In the opening months of 2007, the European Union stepped up its energy and climate change ambitions to new levels. The Commission put forward an integrated package of proposals calling for a quantum leap in the EU's commitment to change. A political consensus grew up in support of this approach".
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	N/A
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	The answer to this question has been clearly covered in the replies above. The EU has implemented a massive renewables programme, putting mandatory targets on Member States, a colossal financial burden on the citizen and huge unwarranted environmental impacts on the landscape and biodiversity of Europe. At every stage of the process legally binding procedures related to assessment and public participation were bypassed. The EU can recognise the complete ineffectiveness of the programme and bring it to a halt or it can see this happen through the inevitable circumstances in which it is challenged in the European Courts and forced to ensure damages are made good. Currently it is clear in that the only defence it has in relation to non-compliance with procedures related to assessment and public participation, is that it is exempt as it is on a mission to save the world.

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Dr. Laurent ZIBELL
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	France
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	Terrestrial wind and photovoltaic solar energy should have reached maturity by 2020, so that support mechanisms should be less useful. On the other hand, mass long-term electricity storage remains a technical challenge deserving support.

B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Open up national support schemes to cross-border projects
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	Yes, with EU-wide benchmark values for support level per technology
B.4. Should the structure of financial support be gradually aligned EU-wide?	
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to open their support schemes to renewable generation from other Member States
Please explain how this could be achieved for other Member States (e.g. through convergence of national schemes, compensation mechanisms or other)	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Accelerate infrastructure development and interconnection Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	Balancing risk – producers of renewable energy should bear balancing responsibility towards TSOs (if so, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?)
Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?	Rules should be set up for renewable energy producers that have highly variable output (eg. wind, solar), so that they bear responsibility for the perturbations that they create in the network, and that the TSO needs to compensate.
E.2. How can it be ensured that market arrangements reward flexibility?	Favourable regulatory treatment of storage operators
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	The current wholesale market model based on short-run marginal cost pricing would have to be supplemented by instruments incentivising investment in generation capacities with a high capex/opex ratio (please specify which)
Please specify which instruments incentivising investment	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	As in other fields, the reduction in energy needs makes the target easier to be reached with renewable energy sources.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Lack of infrastructure Other (please specify)

Please specify which other barriers	Focus in the use of renewable energy for transport has so far been in the direction of "green cars" (whatever this may mean). A very productive path is the promotion of soft transport means (specifically bicycles), in urban / surburban environments. The technology is available: all that is needed is the appropriate cycling-friendly infrastructure.
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Rail
G.2.1. Please explain your answer	Passenger traffic using renewable energy should be understood as the usage of soft transport means (specifically the bicycle). The combination with rail transport (which can be supplied with renewable electricity) makes the whole function almost fully based on renewable energy sources.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	The usage of biomass as fuels is a potential nightmare for food markets world-wide. The pressure on arable land is currently increasing (higher population, less land, less water - due to global warming, more meat consumption...). This has the potential to lead to explosions in food prices, with disastrous consequences for the poor and vulnerable populations in the South. Famines in the late 19th century were caused by this (cf. "Late Victorian holocausts" on the Indian and Chinese famines of 1877 and 1899). The addition of pressure by agro-fuels will cause even more disastrous consequences. To give an idea, the energy content of a conventional car's fuel tank is approx. the energy intake of an human being for a whole YEAR. Conclusion: Agro-fuels should be abandoned.

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	N/A
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)

Please explain in which way and to which degree	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Mass, long-term storage of electricity should be given high priority, because it is THE condition for renewable energy to be usable as a majority source of electricity energy. If no such storage is available, then the supply will be unavailable for weeks (in cases of month-long winter anticyclones over the continent). To that end, a combination of: * electrolysis * methanation of CO2 using the H2 generated from the electrolysis * oxyfuel combustion of the resulting methane with the O2 generated from the electrolysis under the general chemical equation C02 + 2 H20 CH4 + 2 O2 and with a underground storage of water, CO2, CH4 and O2 is a highly relevant solution. It uses currently industrially available technologies, and meets all technical criteria for mass, long-term storage: no losses, infinite cycling, low-cost and broadly available chemical storage medium (methane + O2). The overall yield is 35%. I am at your disposal for further discussion of this issue. laurent_zibell@wanadoo.fr
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Peter Whiteside
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Spain
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	It is now quite clear from scientific research that the previously assumed basis for climate change mitigtion was flawed. Until the science of climate fluctuation and the possible role of man-induced climate affects has a sounder scientific basis related public policy initiatives should be held in abeyance.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Abolition of support mechanism or subsidies to other energy sources

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	No
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Phase out support schemes over time (please specify for which technologies if applicable)
Please specify for which technologies (if applicable) to phase out support schemes over time	Wind and solar
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	N/A

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	This question is not meaningful. "Electricity" includes "heating" and "cooling". The basic principal should be minimum interference with market forces and pricing in energy as in other matters.
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	The support schemes which support least economic energy generation (such as wind) are the most distorting to normal functioning of the energy market.

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION
E.1. In which of the following ways could renewable energy be made responsive to market signals?

E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	

I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Serafim Monteiro Goncalves
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Portugal
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	No, targets for renewable energy sources are unnecessary
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Renewables are only contributing for higher energy costs.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	No
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Phase out support schemes over time (please specify for which technologies if applicable)
Please specify for which technologies (if applicable) to phase out support schemes over time	wind, solar, wave
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	No

B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, some support schemes are more distorting than others (please specify which you consider most distorting)
Please specify which support schemes you consider most distorting	The ones that have more subsidy for amount of energy produced

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	
C.1.1. Please provide explanations and specific examples where available	
C.2. Which policy response to the problems identified above do you consider appropriate?	Other (please specify)
Please specify which would be in your view a workable solution to eliminate barriers	Stop subsidizing inefficient energy sources

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	None of the above
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	None of the above
D.2.1. Please explain why	
D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	

E. MARKET INTEGRATION

E.1. In which of the following ways could renewable energy be made responsive to market signals?	Price risk – producers of renewable energy should operate without any aid Producers of renewable energy should bear greater responsibility for system costs
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Demonstrating where it is cost competitive, with a good ROI.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	
G.2.1. Please explain your answer	

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement
H.1.1. Please explain	

I. REGIONAL AND INTERNATIONAL DIMENSIONS	
I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)

Please specify how and with whom, i.e. only neighbouring countries or more widely	Where it is cost-effective.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	Solar only makes sense it it is competitive. It is not, and probably will not be in 2020. Efforts should be put in R&D, and not mass installation of ineffective solutions.
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	Yes, it can be applied where it makes sense to apply it.

J. TECHNOLOGY DEVELOPMENT	
J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness
J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	

J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Nuclear energy Shale Gas
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Not successful
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	

Renewable Energy Strategy

IDENTIFICATION	
1. Please enter your name and, where relevant, the name of the organisation you represent. Please include also an e-mail address for contact purposes for use only if we need clarification about your responses.	Sarah Nilsson
2. Are you responding to this questionnaire on behalf of /as:	Individual
3. Please indicate your country	Sweden
4. How would you prefer your contribution to be published on the Commission website, if at all?	Under the name indicated (I consent to publication of all information in my contribution and I declare that none of it is under copyright restrictions that prevent publication)

A. GENERAL POLICY APPROACH	
A.1. Is there a role for new targets for renewable energy sources post-2020 assuming that any targets must be consistent with climate mitigation and energy efficiency policies and targets as is currently the case with the 20/20/20 targets in the Europe 2020 strategy?	Yes, a mandatory target at EU level is appropriate
A.1.1. Please explain the reasons for your answer (such as the scope and contribution from GHG targets/ETS, the need to address other environmental, security of supply or technological development benefits)	Mitigation of climate change is urgent and necessary to maintain good living conditions.
A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:	Enhanced focus on R&D to bring down the costs of renewables technologies Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc) Abolition of support mechanism or subsidies to other energy sources

B. FINANCIAL SUPPORT	
B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?	For selected technologies/circumstances/markets (please specify)
Please specify which technologies/circumstances/markets	Unless the environmental cost is internasied in the price.
B.2. If renewable energy sources require support post-2020, how do you think this can best be achieved with a view to achieving a cost-effective deployment?	Making support schemes more market-oriented (please specify how)

Please specify how to make support schemes more market-oriented	Today, renewable fuel must be produced in a sustainable way. While fossil fuels may be produced unsutainably.
B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?	No, support levels should be entirely up to Member States
B.4. Should the structure of financial support be gradually aligned EU-wide?	Yes (please explain how this could be achieved and which support structure you consider most suitable)
Please explain how this could be achieved and which support structure you consider most suitable	CO2 tax or CO2 trading is the most efficient way. Tax should be national, trading EU-wide.
B.5. With regard to questions B.3. and B.4. please specify if you see a difference between the different sectors (electricity, heating and cooling, transport).	
B.6. How do you see the relation between support schemes for renewable energy and the requirements of the internal electricity market for the period after 2020 against the background of a rising share of renewables?	Member States need to be able to continue to operate support schemes on a national level and retain control over who benefits from national schemes
B.7. Do national support schemes and differences between such schemes distort competition?	Yes, all support schemes distort competition to a similar extent

C. ADMINISTRATIVE PROCEDURES	
C.1. Which of the following issues relating to administrative procedures, information and training do you consider acting as a serious impediment to further growth of renewables following Member States' implementation of the provisions of the Directive?	Length and complexity of administrative procedures relating to authorisation/certification/licensing
C.1.1. Please provide explanations and specific examples where available	Sustainablitiy certificates for renewable fuels.
C.2. Which policy response to the problems identified above do you consider appropriate?	The approach of the current Directive to lay down a general framework for Member State action is fine

D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES	
D.1. Do you consider that any of the following national rules and framework conditions will still create obstacles to renewable energy production after 2020?	Grid connection rules Cost-sharing rules Balancing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	
D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?	Priority or guaranteed access
D.2.1. Please explain why	

D.3. With regard to system integration of wind and solar power, what measures do you consider most important to increase the flexibility reserve of the system:	Market-based measures: better use of interconnectors (implicit auctions), trading closer to real time Increased availability of storage

E. MARKET INTEGRATION	
E.1. In which of the following ways could renewable energy be made responsive to market signals?	
E.2. How can it be ensured that market arrangements reward flexibility?	
E.3. In how far do you think today's market design needs to be adapted to provide an appropriate framework for renewables	

F. RENEWABLES IN HEATING AND COOLING	
F.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in the heating and cooling market beyond 2020?	Costs/lack of financial support Lack of awareness
F.2. What pathways do you consider to be the most promising for further increasing the share of renewable energy in heating and cooling beyond 2020?	Biomass Geothermal Solar thermal
F.3. How do you see the interaction of promoting further use of renewable energy in heating and cooling and enhancing energy efficiency in this sector?	Goal: no heat/cold production without also electricity production.

G. RENEWABLES IN TRANSPORT	
G.1. What do you consider to be the main barriers against a stronger uptake of renewable energy in transport?	Costs Lack of infrastructure
G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Road for passengers Road for goods Rail
G.2.1. Please explain your answer	There are soon suitable renewables for these sectors.

H. SUSTAINABILITY	
H.1. Do you think that additional sustainability criteria are necessary in the post 2020 period?	No, the existing criteria are already burdensome to implement
H.1.1. Please explain	There are no sustainability criteria for any toher fuels, fossil for example. Either should sustainability criteria be used for all fuels or not at all.

I. REGIONAL AND INTERNATIONAL DIMENSIONS

I.1. Do you consider current rules for cooperation between Member States sufficient to fulfil their purpose, i.e. realisation of cost-efficient renewable potential in the EU?	Yes
I.2. Do you think the EU should further facilitate cooperation with third countries when it comes to the development of the potential for renewable energy?	Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)
Please specify how and with whom, i.e. only neighbouring countries or more widely	Africa, Sahara could support Europe with electricity.
I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?	Yes (explain in which way and to which degree)
Please explain in which way and to which degree	
I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	Agreements between the EU and third countries
I.5. In its Communication on security of supply and energy cooperation – "The EU Energy Policy: Engaging with Partners beyond our Borders", the European Commission proposes to promote cooperation on renewable energy projects with the Southern Mediterranean countries and to gradually build a renewed EU-Mediterranean energy partnership focus on electricity and renewable energy. How do you consider this should relate with the EU internal renewables policy? What should be the priorities?	
I.6. The possibility to explore regional cooperation and a coordinated, more strategic approach to grid connection for the rapidly growing volume of offshore wind generation in the North Sea is currently being explored in the framework of the North Sea Countries Offshore Grid Initiative (NSCOGI). Do you think such cooperation should be further fostered? What benefits do you think could arise from it? Do you consider that this experience could be generalised and applied elsewhere?	

J. TECHNOLOGY DEVELOPMENT

J.1. For a first set of renewable technologies, namely wind, solar, bio-energy, the SET Plan aims at a cost-competitive market roll out of renewable energy by 2020. It also aims at enabling integration of renewable energy into the electricity grid and smart cities and communities. In your view, what would be the remaining key challenges of these technologies to be addressed by research and innovation in view of the 2050 objectives?	Technology performance and cost-competitiveness System integration

J.2. Which additional measures and/or instruments should be developed to address these technologies and their remaining challenges and to ensure that the EU innovation fabric is geared to supporting the significant deployment up to 2050?	Structural funds or other funding shoul be directed towards this.
J.3. In your point of view, which technologies other than those covered by the current industrial initiatives should be given priority in the post-2020 perspective? Please justify with reference to the criteria mentioned above, i.e. large-scale availability and willingness of industry to engage in public private partnerships?	Gasification of biomass fro production of vehicle fuel.
J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?	Not successful
J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?	