

# Renewable Energy Strategy

## A. GENERAL POLICY APPROACH

<p>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?</p>	<p>Yes, a mandatory target at EU level is appropriate Yes, a combination of EU and sectoral level targets is appropriate</p>
<p>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)</p>	<p>Les externalités positives des énergies renouvelables sont difficilement intégrées dans les prix car il n'existe pas nécessairement de marché ou de conditions pour donner une valeur à ces externalités. Les objectifs d'utilisation obligatoires sont un moyen efficace de promouvoir les énergies renouvelables et ils doivent être fixés de manière appropriée par secteur d'utilisation. Le secteur des transports doit en particulier apporter une contribution effective à la réduction des gaz à effet de serre et à la sécurité énergétique. Dès lors, l'objectif global d'utilisation des EnR doit être relevé au-delà de 20% après 2020, et en particulier celui sur les transports, qui pourrait d'être au moins 15% en 2025. Le renforcement des objectifs doit s'inspirer pour partie de la roadmap 2050. L'évaluation du nouvel objectif doit prendre aussi en compte l'efficacité énergétique et les capacités de production de l'Union européenne.</p>
<p>A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:</p>	<p>Enhanced focus on R&amp;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 Other (please specify)</p>

Please specify which other policy elements?

Les politiques de lutte contre le changement climatique et l'indépendance énergétique doivent être prise en compte sur un même plan. la fiscalité des énergies doit faciliter l'atteinte de ces deux objectifs. par ailleurs : les politiques commerciales de l'UE doivent être équilibrées et permettre à l'industrie européenne de se développer. Elles doivent veiller à éviter la création de distorsion de concurrence (importations sans droits, subventionnées, concessions commerciales) L'UE doit promouvoir des mesures cohérentes avec les objectifs de développement réel de la consommation d'énergies renouvelables, en particulier dans les transports, qui ne créent pas des distorsions de concurrence artificielles, des effets d'aubaine et qui donnent une information fiable aux consommateurs sur les taux d'incorporation. Pour ces raisons, la disposition sur le compte double inscrite dans les directives 2009/28 et 2030 doit être abrogée. Les déchets et résidus mentionnés dans ces directives bénéficient déjà d'un avantage au titre de l'évaluation de leurs émissions de Gaz à effet de serre. Le compte double contrevient à l'objectif de réduction de la consommation d'énergies fossile, et retarde l'amélioration de l'indépendance énergétique ;

## 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

l'UE doit encourager les Etats membres à développer la production de biogaz et ses différentes valorisations (électricité chaleur, cogénération, injection,...) via des mécanismes financiers appropriés. La méthanisation et la biomasse permettent la production décentralisée de l'énergie, renforçant l'autonomie et la sécurité énergétique. la méthanisation permet aussi une valorisation des effluents d'élevage.

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

la proposition de nouvelle directive taxation des énergies reflète la nécessité d'harmoniser les critères des politiques fiscales et les niveaux de taxation par secteurs. Cela permet d'éviter ou de limiter des effets d'aubaine par arbitrage artificiel entre des marchés situés dans des Etats membres différents. Cela vaut également pour un secteur économique particulier. Ainsi, la fiscalité des biocarburants et des carburants devrait être au moins alignée sur le plan énergétique. Les biocarburants devraient pouvoir bénéficier d'un vrai soutien via une moindre taxation de leur énergie (renouvelable) que celle du pétrole.

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?

### 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

Les procédures d'accès aux réseaux de gaz naturel et d'électricité doit être facilitée et simplifiée pour les petits producteurs, en particulier agricoles. Les coûts administratifs sont souvent très importants

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

Toutes les EnR doivent avoir un accès équivalent et non discriminatoire aux réseaux électriques ou gaziers

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	Les réseaux électriques et de gaz naturel doivent être adaptés pour faciliter le raccordement des unités de production d'énergies renouvelables, et l'injection de ces EnR dans les réseaux, et en particulier pour accepter les flux remontants.
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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
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## 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)
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E.2. How can it be ensured that market arrangements reward flexibility?	
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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
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## 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
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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
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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 d'EnR pourrait être couplée à un objectif de performance énergétique globale des bâtiments.
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## 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 Lack of suitable information
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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
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G.2.1. Please explain your answer

Biofuels should be standardised further by developing standards for B10 and E20 as soon as possible, due to the length to bring new engines and new cars onto the market.. The Commission shall then mandate the CEN from 2012 to elaborate an E20 standard before 2016 in order to give car manufacturers enough information to develop new engines, and to adapt legislation in time.. Furthermore, the Commission shall eliminate the biofuel blendwall risk through the implementation of the obligation for carmakers that all new petrol based vehicles sold onto the market after 2015 can run safely at any rate of bioethanol until 85% of ethanol. The Commission shall introduce in the car emission regulation (at the tailpipe) that CO2 for renewable energy emitted at the tailpipe should be counted at zero and not as an equivalent of the CO2 of petrol origin. Then, this will allow the carmakers to count the biofuels into their CO2 target reduction towards 95g

## 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

La Commission doit supprimer la disposition du compte double qui donne un faux signal d'incorporation de bioénergies aux consommateurs et penalise l'amélioration de l'indépendance énergétique. Cette disposition doit s'appliquer au coefficient d'électricité renouvelable également.

## 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?

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?

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?

Research into fully converting plant processing; capitalizing on synergies between the starch and sugar industries for fermentation applications, towards efficient biorefineries delivering biofuels but also new high valuable biobased chemical products;

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

## 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) Voluntary targets have proven to be ineffective. There are simple cost effective technologies which provide a direct source reduction of GHG emissions in buildings. New targets can be easily applied to new construction at the building permit stage. On-site generation of both electricity and thermal energy can be gradually increased from 20% to higher levels in keeping with proposed programs. Any target, however, must not be restrictive as to renewable energy technologies. Currently the European Union defines solar heating as solar hot water and excludes solar air heating. This is not acceptable and restricts or eliminates proven solar air heating technologies from being used to accomplish the objectives.

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? 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? 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). Each sector is different and member states may have specific reasons for either supporting or not supporting certain technologies and they should be free to do so as long as the outcome meets the overall objectives of the EU.

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  
Lack of commonly agreed technical specifications

C.1.1. Please provide explanations and specific examples where available

Solar thermal collectors eligible for incentives in Europe must have a Solar Keymark but to get Solar Keymark, the collector must be tested to a European test standard. Currently there is no test standard for solar air collectors and thus solar air systems are not eligible. Even worse, the EU has defined solar thermal to only be solar water systems and ignores what happens in other parts of the world where solar air heating is becoming the standard for heating of buildings. The EU and its member countries do not accept test standards or test results from outside the EU. Solar Keymark is a registered trademark of the ESTIF and appears to be designed to promote European technologies to the exclusion of all others. Perhaps EU should look to the International Energy Agency solar heating and cooling program and accept technologies that have been verified and demonstrated at the IEA level rather than only European technologies.

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

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?

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  
Other (please specify)

Please specify which other pathways

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?

Currently the European Union restricts solar heating to solar hot water and excludes solar air heating. This is why solar space heating has not occurred in the same manner as solar water heating. Eliminating restrictions on solar and other renewable energy technologies will promote the use of better and less expensive systems. Better integration of solar into buildings is also needed where the building surface can generate the necessary energy to heat and cool the building. This is similar to progression of building codes increasing insulation and better windows. Older buildings passively ventilate air from outside to inside. Newer buildings require mandatory fresh-air ventilation due to their tightness. In both instances, outside ambient air must be heated to the indoor set-point. Solar air heating is the simplest and most cost effective way of heating air. However, this must be endorsed by the EU as it has been by countries around the world.

## 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

Biomass is still burning of a fuel. If biomass is to be included, it must be from a waste source and not take away from food producing land.

## 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?

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?

Most countries in Europe must heat their buildings in winter. A cooperation with Southern Mediterranean may be okay for electricity but will do nothing for space heating or process heating. EU needs a separate policy for space heating and cooling of its buildings.

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

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?

Include solar air heating and cooling technologies, not just ones that are sponsored by ESTIF.

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?

Building integrated solar technologies in new construction are less expensive than in retrofit and easy to mandate at the permit stage. Solar air heating for commercial industrial and institutional buildings is widely used around the world but is conspicuously absent from any programs within the EU. If reducing GHG is a real priority, solar air heating must be used.

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?

This is hard to monitor. A better approach may be to look at the work being done at IEA-SHC and learn from its successes and failures.

# Renewable Energy Strategy

## 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: 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? 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?	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?	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?	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 ...)

## 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	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?	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?	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

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? 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? 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?

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

## 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: 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?

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?

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?	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:	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?	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 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?	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
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  
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?

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

only neighbouring countries

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  
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? 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

## A. GENERAL POLICY APPROACH

<p>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?</p>	<p>Yes, a combination of EU and sectoral level targets is appropriate</p>
<p>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)</p>	<p>Without firm and binding targets at EU level there is not enough certainty in the legislation to enable appropriate investment to deliver the desired GHG reductions. Also, such binding targets provide for a common framework between member states and confidence among the people.</p>
<p>A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:</p>	<p>Enhanced focus on R&amp;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)</p>
<p>Please specify which other policy elements?</p>	<p>There should be an increasing emphasis on the balance between reward and penalty which relates directly to the Carbon or CO<sub>2</sub> equivalent emissions of all form of renewable energy. This should included life cycle embedded carbon in addition to the direct incremental carbon impacts.</p>

## B. FINANCIAL SUPPORT

<p>B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?</p>	<p>Yes</p>
<p>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?</p>	<p>Making support schemes more market-oriented (please specify how)</p>
<p>Please specify how to make support schemes more market-oriented</p>	<p>Many of the support mechanism provide support necessary to deliver investment but once the cost of investment becomes fully ammortised the support required may be lower. For example, in the case of a new build project which is funded by project finance, once the debt is repaid, the level of support required for the remainder of the asset life may be less.</p>
<p>B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?</p>	<p>No, support levels should be entirely up to Member States</p>

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).	For example, renewable transport fuels compete in a global market, whereas biomass is affected by the differing locally available resources for each nation. Some nations may have limited coastline and limited tidal effects compared to others.
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 distortion is a question of degree. For example, in the UK the support for tidal is substantial but actual capacity that is likely to be delivered will be low whilst the technology evolves. In other areas, energy diversity and security play a role and nation specific factors are in play. The distortion is a good thing provided it is a balanced set of considerations that are applied.

### 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?	<ul style="list-style-type: none"> <li>Length and complexity of administrative procedures relating to authorisation/certification/licensing</li> <li>Lack of commonly agreed technical specifications</li> <li>Lack of information on support schemes or other</li> <li>Lack of credible and certified training and qualification</li> </ul>
C.1.1. Please provide explanations and specific examples where available	Where EU criteria are core to compliance then a common approach would provide significant improvement. For example, in deploying the Renewable Energy Directive criteria for sustainability should not be too cumbersome to administrate and should have common technical standards. Equally, support should be in place to develop underlying capacity in the supply chain for trained individuals capable of deploying their new skills to ease the burden of compliance.
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?

Obligation for network operator to develop network  
Priority or guaranteed access

D.2.1. Please explain why

It is important for funding is to demonstrate a guaranteed access to the market and to have efficient access. Also, availability of network is a starting point for achieving a deliverable project.

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?

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

## 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

For delivery of heating and cooling to a community rather than a single dwelling or business, there are significant barriers to retrofitting of such supply. These include; lack of understanding, lack of support for developers to evolve such systems ahead of the necessary source of energy coming forward; lack of support for communities who would be required to make a technology and therefore long term cost choice when set against existing natural gas (or other fossil) supplies.

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	All have potential to deliver a component of the potential market and maintaining diversity and not making technology choices where the market can deliver the best result is important.
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 should be a key factor but this should not be entirely driven by a CHP benchmark because maximum efficiency conversion to dedicated electricity has a role to play. This is especially true in the case of larger capacity systems.

## 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 bioenergy market is required to provide and deliver life cycle compliance with the criteria. This should be applied with equal and directly comparable rigor to the fossil sector to ensure the whole industry is working towards the same goal.

## 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

Europe is only one part of the global economy so it makes complete sense to work with third countries to develop potential. These can be either nations directly adjoining the EU, parts of the supply chains or nations strongly committed to development of renewables.

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?

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

### A. GENERAL POLICY APPROACH

<p>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?</p>	<p>Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate</p>
<p>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)</p>	<p>Specific targets within each sector are necessary as this helps concentrate efforts in a clear method.</p>
<p>A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:</p>	<p>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</p>

### B. FINANCIAL SUPPORT

<p>B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?</p>	<p>Yes</p>
<p>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?</p>	<p>Making support schemes more market-oriented (please specify how)</p>
<p>Please specify how to make support schemes more market-oriented</p>	<p>Biomethane used within vehicles needs support to develop the market. Natural Gas Vehicles (NGV) are a proven technology and now with the use of a renewable fuel (biomethane) they can be used for all types of vehicles (large and small).</p>
<p>B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?</p>	<p>N/A</p>
<p>B.4. Should the structure of financial support be gradually aligned EU-wide?</p>	
<p>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).</p>	
<p>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?</p>	

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

It is essential that all energy is included - not just electricity! The support that Electricity receives is completely distorting not only competition but also the market as a whole. Supports, incentives and grants are in place for electricity right across the supply chain from wind turbines to research to electric vehicles and boilers. Renewable energy strategy needs to take a fair and equitable approach and treat all forms of renewable equally (including biomethane).

### 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?

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? 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? Other (please specify)

Please specify which other pathways Biomethane

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 passengers  
Road for goods

G.2.1. Please explain your answer Biomethane as a renewable fuel can be used immediately within Natural Gas Vehicles to help reduce emissions and reduce dependency on oil.

## 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

## A. GENERAL POLICY APPROACH

<p>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?</p>	<p>Yes, a combination of EU and sectoral level targets is appropriate</p>
<p>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)</p>	<p>The industry as well as other main contributors to the global emission situation need a clear guide in a long term period; therefore a common policy is needed for the key industry sectors but also a comprehensive vision for national governments, regions and municipalities in order to secure a joined action with transparent conditions for all actors involved</p>
<p>A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:</p>	<p>Enhanced focus on R&amp;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)</p>
<p>Please specify which other policy elements?</p>	<p>fostering new technologies such as deep geothermal systems with a huge potential but currently including great risks that hinder it from getting private investors involved and thus achieve widespread use</p>

## B. FINANCIAL SUPPORT

<p>B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?</p>	<p>For selected technologies/circumstances/markets (please specify)</p>
<p>Please specify which technologies/circumstances/markets</p>	<p>biogas, photovoltaics and other controversial renewables should be excluded or at least limited, whereas geothermal should get the green</p>
<p>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?</p>	<p>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)</p>
<p>Please specify for which technologies (if applicable) to phase out support schemes over time</p>	<p>see B.1</p>

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?	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 commonly agreed technical specifications
C.1.1. Please provide explanations and specific examples where available	private companies (usually using fossil fuels) may easily negatively affect any RES project that uses public money in a way they assault the potential investor on using state aid which is not in compliance with the EU law and free competition; procedures one has to go through can cause huge delays and end up with stopping further implementation of any project; this is usually the same case in planning and zoning permit procedures
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 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:	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
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 awareness Other (please specify)
Please specify which other barriers	policies and public perception favouring conventional technologies i.e. combustion engine
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	passenger transport will probably be the last mode of transport that will use renewables providing the fuel cell technologies will not fully replace current oil based fuels and will not give the drivers the same freedom to move

### 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?

No (explain why)

Please explain why

do not see any good reason for these measures

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

<p>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?</p>	<p>Technology performance and cost-competitiveness</p>
<p>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?</p>	
<p>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?</p>	<p>geothermal energy - industry will be willing to invest once enough successful projects and insurance schemes have been implemented</p>
<p>J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?</p>	<p>N/A</p>
<p>J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?</p>	

# Renewable Energy Strategy

## 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) unless the green energy is promoted new and clean technologies cannot emerge

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? 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 solar, wind, hydro

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 necessarily. I was rather thinking of different price structure and levels over the EU therefore having the same level all over eu sound unrealistic to me. if yo referred to the sectors, then yes differences should be applied. e.g. heating should be one of the key sectors where major saving can abe achieved relatively quickly.

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)

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

especially the environmental impact of green investment.

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

in romania access to grid regardless one refers to a producer or consumer it is v costly and time consuming

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

in romania the electricity company is forcing the consumer/energy producer to pay for the connection, for the grid upgrade etc and then to donate the investment in their favor. it is like the public transportation company asks you to buy the bus, donate it to them and then they provide transportation to you charging the regular price.

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  
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?

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?

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  
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

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 general framework is implemented, but the application is nok.

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 north-africa and turkey for solar and wind

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 this is a business decision, so ....

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? ok

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? apparently 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

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?

fuel cells

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

slow development of cost effectiveness equipment manufacturers

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

## A. GENERAL POLICY APPROACH

<p>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?</p>	<p>Yes, a mandatory target at EU level is appropriate</p>
<p>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)</p>	<p>Consapevoli dell'esperienza passata e del difficile avvio del sistema, ancora oggi da definire nello specifico, introdotto dal D. Lgs 28/2011 di recepimento della Direttiva Europea 28/2009 si ritiene necessaria la definizione di obiettivi vincolanti per il periodo successivo al 2020 evitando fenomeni di corsa incontrollata alla costruzione di impianti a fonte rinnovabile ma curando con adeguati strumenti l'ulteriore sviluppo che sarà necessario dopo il 2020 delle tecnologie ritenute più efficaci.</p>
<p>A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:</p>	<p>Enhanced focus on R&amp;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)</p>
<p>Please specify which other policy elements?</p>	<p>Si ritiene fondamentale investire sulla R&amp;D in quanto la tecnologia è fondamentale per lo sviluppo delle fonti rinnovabili e per il loro contributo al settore elettrico in generale. Alla base di tutto, però, è necessario che il quadro regolatorio in cui le FER si sviluppano porti stabilità a tutto il sistema permettendogli una crescita omogenea e finalizzata alla crescita di tutta la filiera rinnovabile. Lo snellimento delle procedure autorizzative è ad oggi una delle principali barriere per la crescita omogenea di tali fonti, così come i costi relativi alle connessioni alla rete elettrica.</p>

## B. FINANCIAL SUPPORT

<p>B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?</p>	<p>For selected technologies/circumstances/markets (please specify)</p>
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Please specify which technologies/circumstances/markets	In realtà questo dipenderà molto dal risultato raggiunto al 2020, e, solo come considerazione generale si può affermare che le tecnologie che avranno raggiunto la grid parity potrebbero non necessitare di incentivi. Fermo restando la necessaria riduzione dei costi che affliggono i produttori RES.
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	Per sistema di incentivi più orientati ad un sistema di “mercato”, si intende in senso generale. Ovvero il passaggio da un incentivo diretto, ad un incentivo in termini fiscali oppure incentrato sui risultati raggiunti potrebbe essere una valida alternativa.
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	B3 Un benchmark europeo sarebbe perseguibile se i parametri fossero i medesimi in tutta europa, soprattutto lato costi. Ma sia i costi sia il prezzo dell'energia sono caratterizzati da delta rilevanti tra i diversi Paesi europei, e pertanto difficilmente confrontabili. Già livellando i costi a cui sono soggetti i progetti italiani (vd. Costi allacciamento, costi di progetto collegati alle procedure burocratiche, costi per la rete etc) sarebbe attuabile un confronto europea. Ma ad oggi il confronto deve necessariamente essere fatto su scala nazionale. B4 Sì, solo se, come detto sopra, anche il parametro costi venisse prontamente adeguato.
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 sistemi incentivanti devono essere coerenti con la politica intrapresa dalla EC ma fintanto che i sistemi nazionali non saranno confrontabili gli schemi incentivanti devono seguire un indirizzo interno basato sulla struttura “elettrica” del paese membro.
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

In linea generale i sistemi di incentivo alterano la concorrenza. Il presupposto però è che la concorrenza, come da definizione economica, sussista e che il mercato sia nella sua realtà veramente liberalizzato, in assenza quindi di monopoli o di concorrenza monopolistica.

### 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

Le lungaggini burocratiche del sistema italiano hanno fatto sì di allontanare molti investitori dal sistema FER, generando una alea di incertezza del progetto da sviluppare. Questo ha danneggiato enormemente l'imprenditoria italiana che non dispone di capitali autonomi in grado di autofinanziare i progetti FER.

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  
Balancing rules

D.1.1. Please specify which obstacles and the nature and degree of them for each

Gli ordini di dispacciamento verso le FER e soprattutto verso l'eolico devono essere portati all'annullamento e la rete elettrica deve essere prontamente adeguata. Allo stato attuale delle cose è difficile prevedere la situazione al 2020, pertanto permane il fattore "connessione" quale elemento maggiormente critico inerente lo sviluppo delle FER.

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	L'accesso alla rete e la priorità di dispacciamento sono regole attuali che vanno mantenute e rinforzate, mentre lo sviluppo della rete (tutte le tensioni: AAT, AT, MTe BT) è condizione fondamentale per la coesistenza di tutte le tecnologie elettriche, ed irrinunciabile per lo sviluppo delle FER, altrimenti discriminate per le loro stesse specificità.
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 Other (please specify)
Please specify which other measures	Sicuramente l'integrazione dei suddetti meccanismi permetterebbe la gestione dell'energia rinnovabile in maniera dinamica, ma questo può essere attuato con una rete in grado di essere gestita con tale fine. Si ritiene che in Italia Vi siano stati negli ultimi tempi degli sviluppi in tal senso. La possibilità di far partecipare gli impianti eolici ad alcuni servizi di rete è una delle possibilità sicuramente da valutare ritenendola assai più efficace rispetto agli ordini di modulazione attualmente previsti.

## 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?)
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Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?

Occorre necessariamente specificare che occorrerebbe prendere spunto da ognuno dei punti sopra specificati per trovare la soluzione idonea. Fatto sta che sicuramente il passaggio dell'energia sul mercato agevola sicuramente "il mercato" nella sua liquidità, ma non può essere un passaggio obbligato per tali tecnologie, la cui peculiarità, in moltissimi casi, sono le ridotte dimensioni dell'operatore per il quale "il mercato" è inavvicinabile. Mentre l'assenza di incentivi, è sicuramente un target da raggiungere, ma questo può essere preso in considerazione solo al raggiungimento della grid parity, che a sua volta può essere ottenuta con un livellamento verso il basso dei costi afferenti le infrastrutture elettriche. Ad oggi gli operatori soprattutto gli eolici sono responsabili verso i Gestori di rete (verso il sistema elettrico) per eventuali "mancanze" ad ordini di modulazione, ma solo una evoluzione di tale sistema può essere considerato utile, anche attraverso la fornitura di appositi servizi di rete.

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?

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

Per far funzionare tali meccanismi dovrebbero essere rese omogenei i vari sistemi tra gli Stati membri, armonizzando normativa e regolamentazione di settore.

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 cooperazione con paesi terzi, e l'interconnessione con gli stessi è necessaria ai fini dello sviluppo delle FER.

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

Come già evidenziato in altre sezioni del documento si ritiene assolutamente necessario lo sviluppo di tutta la rete dall'alta tensione alla bassa. Così come l'interconnessione sia con gli stati membri della CE sia con Paesi terzi. Certamente la priorità è verso la rete interna che ad oggi presenta carenze proprio in quelle zone dove l'eolico è maggiormente presente, e dove il Gestore di rete sta anche concentrando i suoi sforzi, e dove spesso incontra rallentamenti burocratici e amministrativi che ne impediscono lo sviluppo nei tempi stimati.

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

E' necessario implementare quanto previsto dalla Direttiva 2009/28 e prevedere poi il suo ulteriore sviluppo.

<p>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?</p>	<p>Una priorità è l'implementazione dei progetti di sviluppo (all'interno della politica Europea) delle fonti rinnovabili con i Paesi del bacino del Mediterraneo adeguatamente dimensionati alle esigenze dei Paesi destinatari.</p>
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<p>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?</p>	<p>Qualsiasi iniziativa che vanta un successo merita di essere replicata se adeguatamente contestualizzata al nuovo target.</p>
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## J. TECHNOLOGY DEVELOPMENT

<p>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?</p>	<p>Technology performance and cost-competitiveness System integration Industrial manufacturing and supply chain Other (please specify)</p>
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<p>Please specify which other key challenges</p>	<p>La riduzione di tutti i costi è una priorità, e questo arrecherà benefici in termini di prestazioni ed efficienza. La stabilità normativa del quadro regolatorio permetterebbe la rinascita di una industria (eolica) tutta italiana oramai persa in questo Paese, in cui però è rimasto molto forte il know-how e l'implementazione di tecnologia estera. Quindi per raggiungere ciò occorre investire in R&amp;D, ma senza la citata stabilità normativa è difficile che possa essere attuato su scala industriale.</p>
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<p>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?</p>	<p>Rendere stabile il quadro regolatorio permetterebbe il ritorno agli investimenti nel settore FER Italiano, e di conseguenza poter guardare con fiducia al 2020 e poi al 2050.</p>
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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 della generazione distribuita è sicuramente un target di sviluppo, ma a tal fine è necessario il parallelo sviluppo delle reti (MT eBT) dove questa necessariamente deve essere implementata.

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 attuali misure, a volte non coordinate tra loro, hanno causato una crescita incontrollata di alcune tecnologie a scapito di altre maggiormente efficienti. La continua rivisitazione dei sistemi incentivanti ha poi portato ad uno sviluppo continuamente interrotto delle FER, mentre queste necessitano di un quadro normativo stabile e indirizzato alla crescita delle stesse.

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

## 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) Security of supply in Europe should be based on an availability of renewable primary sources of energy EU wide, otherwise some EU countries could suffer similar crises to the Natural Gas one a couple of years ago. All the others suffer indirectly by paying a higher price due to the pressure on the prices. It is should also paced the Research, Development and innovation an affordable price of renewable, and of course supply security.

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 In those countries were the renewable NON COMERCIAL technologies did not reach a reasonable target it is advisable to have some support. NEVERTHELESS the supporting scheme might be paid by either the administration or the citizenship instead of the industrial customers to which the energy price curb their competitiveness. These schemes correspond to general policy decisions.

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)

<p>Please specify how to make support schemes more market-oriented</p>	<p>WHEN A technology is mature enough whatever support system should involve a revision clause which allows to adjust the support scheme to the market without long term compromise that would be charged on the shoulders of the rest of the players. Feed-in tariff should include a clear decreasing calendar in addition to the previous clause. The schemes should include a revision clause at least every 5 years based on the actual operative cost, in order to avoid long term subsidies of technologies which have already reach a commercial phase.</p>
<p>Please specify for which technologies (if applicable) to phase out support schemes over time</p>	<p>WHEN A technology is mature enough whatever support system should involve a revision clause which allows to adjust the support scheme to the market without long term compromise that would be charged on the shoulders of the rest of the players. Feed-in tariff should include a clear decreasing calendar in addition to the previous clause. The schemes should include a revision clause at least every 5 years based on the actual operative cost, in order to avoid long term subsidies of technologies which have already reach a commercial phase.</p>
<p>B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?</p>	<p>Yes, with benchmark values for support level per technology per Member State</p>
<p>B.4. Should the structure of financial support be gradually aligned EU-wide?</p>	<p>No</p>
<p>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).</p>	<p>It is important to keep coherence with an general renewable objective as primary energy input, but it should not define any limit by sector since it is very country specific - CONSIDERATION, as geography, sun, wind, biowastes or crops availability for biofuels etc. Therefore quota based mechanisms, and/or supported by green certificates should be avoided. It should also avoid promoting CHP further than the level which does cover the real needs of the industry behind. In non industrial sector the CHP should constitute the core activity of the installation, but to efficiency support either the heating or the cooling needs of the main activity.</p>
<p>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?</p>	<p>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</p>
<p>B.7. Do national support schemes and differences between such schemes distort competition?</p>	<p>Yes, some support schemes are more distorting than others (please specify which you consider most distorting)</p>

Please specify which support schemes you consider most distorting

Even similar schemes are not s are not financed by the same agents EU-wide: From feed-in tariffs to green certificates. The latter is even more 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?

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?

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 ...)

### 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?

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?

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  
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 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  
Rail  
Water  
Air

G.2.1. Please explain your answer

If biofuels (or renewable electricity share) were available at a competitive price and with a sustainable production, no sector should be excluded as long as the biofuels fill the technical requirement of the fossil one. Therefore is very important to follow the standard development which should bring together classic fuels producers, biofuel producers and several members of the suitable consumer sector (automotive industry, airplane construction, distribution companies, etc)

## 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	Environmental and social KPI indicative that the production does not wipe off the production of food etc.
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 some neighbour countries few supra member state measures could be implemented in order to fully exploit the renewable potential of the border areas. Additionally, if the objective for renewable is based on reducing global warming, then it requires coordinated global actions.
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	TSO (transmission system operator) which works as a “private company” are willing to promote further investment in order to profit from a margin in the investment itself, which at its turn is not paid by it but the costumers. Only in very specific cases TSO should be allow to compromise investments for this purposes. Very expensive networks for few MWh should not be allowed. Investment in a reasonable maintenance of the current network should be the priority.
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

Some schemes have clearly promoted a huge increase of the renewable share, but without a reasonable correlation among cost and benefits. A scheme should not promote renewable increase sharing at whatever cost. Otherwise it happen as in some countries that the renewable business as originated a economic bubble in which even the right to develop a future renewable energy farm has been considered as a tradable asset, without a consideration about the cost it will generate to the system.

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 should be carefully assesses since research implies development risk and therefore it is not easy to define a target. Nevertheless, it is clear that research is a key factor to increase the renewable share in the future.

# Renewable Energy Strategy

## 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)	We need to promote renewables as a mean to CO2 (and other pollutants) emissions reductions. But absolute CO2 reductions targets are more important. So promoting renewables only makes sense if total consumptions levels simultaneously decrease. Demand-side policy is needed, e.g. in transportation : less cars and planes, more bikes, buses and trains.
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 Other (please specify)
Please specify which other policy elements?	Promoting renewables only makes sense if total consumptions levels simultaneously decrease. Demand-side policy is needed, e.g. in transportation : less cars and planes, more bikes, buses and trains.

## 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?	
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?

Costs/lack of financial support  
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?

Other (please specify)

Please specify which other pathways

link renewables development with demand-side reduction (better insulation)

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? Limits of availability of sustainably produced biofuels  
Other (please specify)

Please specify which other barriers

Transport needs "portable energy" which is not easy to make renewable at all. So specific renewable target for transportation IS NOT a good idea. We see the many problems that already has created with biofuels (hunger, increased CO2 emissions, landgrabing, etc.).

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

Electricity is the easiest to produce with true renewables, but it can't easily be stored onboard, so trains are the best option for renewables.

## 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

ILUC, social criteria, etc.

H.1.1. Please explain

truly sustainable biomass is needed, but it can only be available in limited quantities, so we need demand-side reductions

## 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? Successful but some drawbacks (please specify which)

Please specify which drawbacks

- biofuel policy is a mess... - the 10% ER target in transportation makes it more interesting to replace ICE cars by electric SUV than by bikes. This is stupid !

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

## A. GENERAL POLICY APPROACH

<p>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?</p>	<p>Yes, a combination of EU and sectoral level targets is appropriate</p>
<p>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)</p>	<p>The renewable energy targets should be linked with energy efficiency targets especially to newly built houses and public buildings. There has to be an overall target for the EU and also for every Member State taking into account the renewable energy potential and the measures can be taken by more efficient energy use.</p>
<p>A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:</p>	<p>Enhanced focus on R&amp;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</p>

## B. FINANCIAL SUPPORT

<p>B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?</p>	<p>For selected technologies/circumstances/markets (please specify)</p>
<p>Please specify which technologies/circumstances/markets</p>	<p>The semi-renewable technologies such as biomass should be cut off from the support system and should be given more emphasis on wind and solar energy systems meanwhile give innovation benefits on storage developments and predictability improvements.</p>
<p>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?</p>	<p>Open up national support schemes to cross-border projects</p>
<p>B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?</p>	<p>Yes, with benchmark values for support level per technology per Member State</p>
<p>B.4. Should the structure of financial support be gradually aligned EU-wide?</p>	<p>No</p>

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  
Lack of credible and certified training and qualification

C.1.1. Please provide explanations and specific examples where available

The licensing period is very complex. Authorization of a new power plant needs at least 5 different licence from different Authorities. In every licensing process there are dozens of special authorities involved besides the main authority which slows down the process. The grid connection contract is not well regulated. The network operator has too much freedom to determine the terms and conditions of the grid connection contracts which can lead to discrimination and bribery. There is not enough qualified personnel to install equipments.

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 grid connection contract is not well regulated. The new contract has to be made with the network operator. The regulations of the contracts are in the operating policies of the network operator which is not regulated well and clearly. The network operator has too much freedom to determine the terms and conditions of the grid connection contracts which can lead to discrimination and bribery. The legislation has to specify the terms of the contracts and not let the network operator to do that.
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	
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?	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 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?	If the promotion of energy efficiency can be more effective it can give a boost to the renewable targets. It is very important to provide aid to energy efficient investments linked with renewable promotions.

## 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 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	

## 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	Only neighbouring countries who are before accession.
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	The potential of the wind, solar and water power of these Mediterranean countries are high. The bad economy can get a boost with the help of other Member States in these countries by the investments in renewable energy producing which can help the integration of the less fortunate regions and also can help the EU to strengthen the overall energy security.
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 promotion of the renewables in these regions should be a high priority of the EU. It can help secure the regions energy security of supply and also can give a boost to the economy and employment of the region. The priorities should be the development of solar farms and wave or tidal power plants.

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?

# Renewable Energy Strategy

## 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)

## 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 benchmark values for support level per technology per Member State

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?	No, support schemes do not have a significant distorting impact on competition
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### 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
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C.1.1. Please provide explanations and specific examples where available
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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
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### 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
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D.1.1. Please specify which obstacles and the nature and degree of them for each
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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
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D.2.1. Please explain why
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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
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### 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)
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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
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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?

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

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  
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? N/A

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?

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 Successful but some drawbacks (please specify which) have been and which have been the main drawbacks?

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

## 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) Currently the European Union defines solar heating as solar hot water and excludes solar air heating. This is not acceptable and restricts or eliminates proven solar air heating technologies from being used to accomplish the objectives.

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? 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? 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). At first it is up to technological solution, and also renewable resources are tightly related to location as well

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

<p>C.1.1. Please provide explanations and specific examples where available</p>	<p>Solar thermal collectors eligible for incentives in Europe must have a Solar Keymark but to get Solar Keymark, the collector must be tested to a European test standard. Currently there is no test standard for solar air collectors and thus solar air systems are not eligible. Even worse, the EU has defined solar thermal to only be solar water systems and ignores what happens in other parts of the world where solar air heating is becoming the standard for heating of buildings. The EU and its member countries do not accept test standards or test results from outside the EU. Solar Keymark is a registered trademark of the ESTIF and appears to be designed to promote European technologies to the exclusion of all others. Perhaps EU should look to the International Energy Agency solar heating and cooling program and accept technologies that have been verified and demonstrated at the IEA level rather than only European technologies.</p>
<p>C.2. Which policy response to the problems identified above do you consider appropriate?</p>	<p>Other (please specify)</p>
<p>Please specify which would be in your view a workable solution to eliminate barriers</p>	<p>Involving international experts, producers and scientists, that are working in industry. Associations, chambers and all other institution we have enough, but we have more political institutions, than professional ones.</p>

## D. GRID INTEGRATION OF ELECTRICITY FROM RENEWABLE ENERGY SOURCES

<p>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?</p>	<p>None of the above</p>
<p>D.1.1. Please specify which obstacles and the nature and degree of them for each</p>	<p>It has to be cost efficient. We have regular price growth in field of energetics. It have to end up in cost effective technologies replacing fossil to renewable</p>
<p>D.2. Which renewables-specific grid related rules do you consider necessary and proportionate in a post-2020 perspective?</p>	<p>None of the above</p>
<p>D.2.1. Please explain why</p>	<p>Market is going to regulate, these demands. It could be effective when support to R&amp;D of new technologies will be more efficient.</p>
<p>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:</p>	<p>Increase flexible back-up capacity (capacity payments ...)</p>

## 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?	
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. 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?	Currently the European Union restricts solar heating to solar hot water and excludes solar air heating. This is why solar space heating has not occurred in the same manner as solar water heating. Eliminating restrictions on solar and other renewable energy technologies will promote the use of better and less expensive systems. Better integration of solar into buildings is also needed where the building surface can generate the necessary energy to heat and cool the building. This is similar to progression of building codes increasing insulation and better windows. Older buildings passively ventilate air from outside to inside. Newer buildings require mandatory fresh-air ventilation due to their tightness. In both instances, outside ambient air must be heated to the indoor set-point. Solar air heating is the simplest and most cost effective way of heating air. However, this must be endorsed by the EU as it has been by countries around the world.

## 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 goods Water Air
G.2.1. Please explain your answer	These are biggest pollution makers. Railway is slightly able to run on electricity, passenger sector as well.

## 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 has to be long term plan, not only 20/20/20. We are going to face that resources have to be balanced everywhere.

## 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 It is absolutely necessary as there are R&D around the world. We have to admit, that some testing Laboratories that costs significant amount of money are not needed everywhere to simulate or find proofs that technologies, can bring benefits or for working out normative.

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 At first targets have to be set up. If it is going to work as a sample afterwards, and benefits could be used in other member country

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

### 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

### 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 Due to varying degrees of technological development, it could well be that some technologies still require subsidies in the long run, however, the technologies must be financed through the market!

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

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? 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?	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?	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	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. 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?

## 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

The main barrier against a stronger uptake of renewable energy in transport is "costs". Currently, renewable energy is still considerably more expensive than standard thermal energy. Having substantial "green energy" premiums makes the product less appealing to customers. The advantage of being CO2 efficient must become cost efficient as well. The easiest way to do this in transport is to ensure that all modes of transport are charged the external costs of the fuel they use in particular for CO2 emissions. Renewable energy is overwhelmingly electric, about 80% of European rail traffic is undertaken using electric traction. There are no technical obstacles to a 100% electric railway network that could be powered entirely using renewable energy, but there are no incentives to pursue this. Indeed, electrified rail is the only mode of transport which pays for CO2 costs due to the inclusion of electricity in the EU ETS; road transport, which is responsible for over 70% of CO2 emissions in the transport sector is unaffected by the ETS. Economic tools can be used to change behaviour and encourage a more environmentally-responsible approach including greater use of renewable energy, but as the example of the ETS shows, this is not happening 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

Renewable energy is overwhelmingly electric and there is no technical obstacle to a 100% electrified rail network: the technology is well developed using overhead catenary power lines or ground-level third rail, unlike the battery storage problems that have inhibited the development of electric cars.

## 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? 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 N/A 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

## 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  
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 Technologies that are costly compared to other sources, such as photovoltaics and fuel cells.

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?

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?

### 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?

### 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

The electricity networks need to transform gradually to more flexible structures to support the integration of renewable energy, especially those sources that are intermittent and non-controllable, such as wind and solar. The curtailment regime can then change, in order for all energy to be utilised.

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

Priority access and dispatch of renewable energy into the network is important in order to utilise the full potential of renewable energy. Otherwise, the network operators will be tempted to use more controllable but less sustainable sources.

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

## 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?

This is largely case-dependant.

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

Smart grids, demand side management/participation, demand and resource aggregation (e.g. distributed generation, electric vehicles).

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 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  
 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?	Interaction is good, in order to achieve a synergy.
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## 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 Lack of suitable information
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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
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G.2.1. Please explain your answer	Road transport for passengers can be more easily penetrated by lower range renewable-friendly technologies such as electric vehicles and fuel cell vehicles.
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## 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
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H.1.1. Please explain	Since biomass production can have an adverse impact in other more critical sectors such as the food sector, it needs to comply fully with sustainability criteria. The diversity of biomass sources can possibly ensure that there is no source monopoly which could potentially lead to polarisation.
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## 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?	
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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?	
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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)
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Please explain in which way and to which degree	Member states with more limited network capacity and interconnection should be prioritised to ensure even interconnection distribution.
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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
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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, such co-operation should be fostered. A co-ordinated approach should be followed to come up with a grid that benefits from the synergies of such a co-operation. This experience can be generalised but care should be taken when applied elsewhere, to comply with local needs and requirements.

## 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

- Emissions Trading Scheme does not seem to help the situation. - Feed-in tariffs should be applied more carefully to ensure full utilisation of resources.

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 necessarily, because it could lead technological development to overlook other aspects affecting sustainability (alike the impact of biofuels on food supply).

## Renewable Energy Strategy

### A. GENERAL POLICY APPROACH

<p>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?</p>	<p>Yes, sectoral targets (e.g. electricity, transport, heating and cooling) are appropriate Yes, a combination of EU and sectoral level targets is appropriate</p>
<p>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)</p>	<p>The sectorial targets are necessary, in particular divided in electricity, transport, heating and cooling, so each MS becomes more responsible. The need for these new binding targets, is a way to force European countries to adopt real political outlooks and efficient environmental permitting their greater energy independence. Set targets for different sectors is a further commitment of States to improve their environmental performance and to allow greater penetration of renewable energy in all areas related to energy supply chain.</p>
<p>A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:</p>	<p>Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc)</p>

### B. FINANCIAL SUPPORT

<p>B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?</p>	<p>For selected technologies/circumstances/markets (please specify)</p>
<p>Please specify which technologies/circumstances/markets</p>	<p>National incentives for certain technologies can serve until they reach grid parity. It will be useful to maintain support mechanisms post 2020 only for some technologies and in some circumstances, also in light of the goal reached by R&amp;D efforts that in future could develop new kind of technologies.</p>
<p>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?</p>	<p>Phase out support schemes over time (please specify for which technologies if applicable)</p>
<p>Please specify for which technologies (if applicable) to phase out support schemes over time</p>	<p>The elimination of the support schemes will be a necessary step when grid parity will be reached, and will not make sense to continue subsidizing technologies that can stand alone on the market. The aim of the incentive is to help new companies to invest where due to high costs of technologies they could not.</p>
<p>B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?</p>	<p>No, support levels should be entirely up to Member States</p>

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).	Would be fair to align the different support schemes in different European countries, unfortunately this does not seem feasible at the moment because within each state there are different individual topics: bureaucracy, market, more suitable areas for each type of RES, different wind, sun and hydro conditions. Nowadays it would be right to address more efforts on transport and financial heating and cooling issues, because in Italy are neglected issues.
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?	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	Length and complexity of administrative procedures. For Italy, the administrative procedures are an additional cost to operators, who may be forced to wait in some cases 2 or 3 years before getting permission. The deadline for the conclusion of the procedure should not exceed 180 days.
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
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	The priority access to the network for renewable energy plants should be ensured, as a prerequisite for the development of plants. This guarantee must however be accompanied by a greater development of the national electricity grid and development for the creation of European networks.
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:	<p>Increase flexible back-up capacity (capacity payments ...)</p> <p>Increase availability of demand response (smart grids ...)</p> <p>Accelerate infrastructure development and interconnection</p>

### 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	Develop demand response to market signals with smart grids development and demand aggregation.
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 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?	<p>Biomass</p> <p>Solar thermal</p>
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 essential to encourage a greater integration and joint use.

### 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
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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?	Yes, sustainability criteria should apply to both all biomass and fossil fuels
H.1.1. Please explain	Sustainability criteria should be strengthened so that the use of biomass is respectful of environmental parameters and the final environmental report is actually in place.

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	Yes, by mean of bilateral agreements between MS and third countries.
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?	The priority of the European Community should be to encourage all initiatives or projects involving renewable energy sources. We are supporting the creation of new projects and increased cooperation with the countries of the South 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?

Offshore wind power is a great opportunity for development. Should be encouraged through easier access to the network with the creation of adequate infrastructures and culturally encouraged.

## 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?

Investment on R&D.

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?

Thermal solar and tidal energy.

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, it could be useful.

# Renewable Energy Strategy

## 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 No 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?

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

Wind turbine ROC subsidy is far too high for the amount of electricity 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

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?

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 policies 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 led 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? 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 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? 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. 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

### 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:	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 benchmark values for support level per technology per Member State
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
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?	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?	
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?	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 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? Costs  
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

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?

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

## 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	<p>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 cha</p>
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

<p>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).</p>	<p>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.</p>
<p>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?</p>	<p>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</p>
<p>B.7. Do national support schemes and differences between such schemes distort competition?</p>	<p>No, support schemes do not have a significant distorting impact on competition</p>

### C. ADMINISTRATIVE PROCEDURES

<p>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?</p>	<p>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</p>
<p>C.1.1. Please provide explanations and specific examples where available</p>	
<p>C.2. Which policy response to the problems identified above do you consider appropriate?</p>	<p>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</p>

### 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 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 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?)  
 Producers of renewable energy should continue to be treated separately (no exposure to conventional market)

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

In addition to the introduction of smart grids and especially smart 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

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  
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

## 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". High 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

## A. GENERAL POLICY APPROACH

<p>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?</p>	<p>Yes, an indicative and non-legally binding target at EU level is appropriate</p>
<p>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)</p>	<p>Further targets to reduce emissions and promote renewable sources should be codified in the form of non-binding framework rather than in the shape of mandatory goals. Thus, national peculiarities and requirements can be considered in the implementation of energy efficiency standards. In general, national measures can be put in practice more quickly and efficiently.</p>
<p>A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:</p>	<p>Enhanced focus on R&amp;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</p>

## B. FINANCIAL SUPPORT

<p>B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?</p>	<p>Yes</p>
<p>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?</p>	<p>Making support schemes more market-oriented (please specify how)</p>
<p>Please specify how to make support schemes more market-oriented</p>	<p>Encouragement of technology-neutral investments promotes greater cost-efficiency based on the marginal costs of the avoidance per unit carbon dioxide as well as the marginal costs of reduced energy consumption.</p>
<p>B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?</p>	<p>No, support levels should be entirely up to Member States</p>
<p>B.4. Should the structure of financial support be gradually aligned EU-wide?</p>	<p>No</p>
<p>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).</p>	

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
C.1.1. Please provide explanations and specific examples where available	The lack of standardisation of a uniform charging plug connector for electric cars prevents progress and innovation in the development of the e-mobility infrastructure. The resulting uncertainty regarding future development also creates obstacles for investment.
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:	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?	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
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?	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?	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 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
G.2.1. Please explain your answer	The most growth prospects relating to the use of renewable sources in transport we currently see in the field of private passenger traffic. Consumers have a growing environmental awareness and are interested in the possibility of a long-term saving of expenses in view of increasing fuel prices. The development and promotion of e-mobility is effectively communicated and marketed by producers and is generally regarded as innovative.

## 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
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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

Global efforts to reduce carbon dioxide emissions should be extended.

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

Leading criterion for prioritizing investments and support should be efficiency independent from any national interests and particular needs.

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

<p>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?</p>	<p>System integration</p>
<p>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?</p>	
<p>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?</p>	
<p>J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?</p>	<p>N/A</p>
<p>J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?</p>	<p>Any assistance should build on the principles of effectiveness and efficiency and depend on progressive development. Otherwise, an immense waste of subsidies and investment resources threatens.</p>

# Renewable Energy Strategy

## 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) Voluntary targets have proven to be ineffective. There are simple cost effective technologies which provide a direct source reduction of GHG emissions in buildings. New targets can be easily applied to new construction at the building permit stage. On-site generation of both electricity and thermal energy can be gradually increased from 20% to higher level in keeping with proposed programs. Any target, however, must not be restrictive as to renewable energy technologies. Currently the European Union defines solar heating as solar hot water and excludes solar air heating. This is not acceptable and restricts and eliminates proven solar air heating technologies from being used to accomplish the objectives.

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? 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? 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). Each sector is different and member states may have specific reasons for either supporting or not supporting certain technologies and they should be free to do so as the outcome meets the overall objectives of the EU

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  
Lack of commonly agreed technical specifications

C.1.1. Please provide explanations and specific examples where available  
Solar thermal collectors eligible for incentives in Europe must have a Solar Keymark but to get Solar Keymark, the collector must be tested to a European test standard. Currently there are no test standards for solar air collectors and thus solar air system are not eligible. Even worse, the EU has defined solar thermal to only be solar water systems and ignores what happens in the other part of the world where solar air heating is becoming the standard for heating of buildings. The EU and its member countries do not accept test standards or test results from outside the EU. Solar Keymark is a registered trademark of the ESTIF and appears to be designed to promote European technologies to the exclusion of all others. Perhaps EU should look to the International Energy Agency solar heating and cooling program and accept technologies that have been verified and demonstrated at the IEA level rather than only European technologies.

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

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?

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  
Other (please specify)

Please specify which other pathways

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?

Currently the European Union restricts solar heating to solar hot water and excludes solar air heating. This is way solar space heating has not occurred in the same manner as solar water heating. Eliminating restrictions on solar and other renewable energy technologies will promote the use of better and less expensive systems. Better integration of solar into buildings is also needed where the building surface can generate the necessary energy to heat and cool the building. This is similar to progression of building codes increasing insulation and better windows. Older buildings passively ventilate air from outside to inside. Newer buildings require mandatory fresh-air ventilation due to their tightness. In both instances, outside ambient air must be heated to the indoor set-point. Solar air heating is the simplest and most cost effective way of heating air. However, this must be endorsed by the EU as it has been by countries around the world.

## 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 Biomass is still burning of a fuel. If biomass is to be included, it must be from a waste source and not take away from food producing land.

## 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?

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? Most countries in Europe have to heat buildings in the winter. A cooperation with Southern Mediterranean may be ok for electricity but will do nothing for space heating or process heating. EU needs a separate policy for space heating and cooling of its buildings.

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

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?

Include solar air heating and cooling technologies, not just ones that are sponsored by ESTIF

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?

Building integrated solar technologies in new construction is less expensive than in retrofit and easy to mandate at a permit stage. Solar air heating for commercial, industrial and institutional buildings is widely used around the world but it conspicuously absent from any programs within the EU. If reducing GHG is a real priority, solar air heating must be used.

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?

This is hard to monitor. A better approach may be to look at the work being done at IEA-SHC and learn from its successes and failures.

# Renewable Energy Strategy

## 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

## 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? 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? 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? 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

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 ...)

## 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?

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  
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 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
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	solar Energy: North-Africa Biomass: Eastern Europe
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? 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? 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

### 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

### 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? 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

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 national possibilities for using renewables are very unequal and the needs of renewables are different from Finland (heat) to Italy (cooling); but there is a need of electricity everywhere!

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
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### 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
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C.1.1. Please provide explanations and specific examples where available
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C.2. Which policy response to the problems identified above do you consider appropriate?	N/A
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### 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
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D.1.1. Please specify which obstacles and the nature and degree of them for each
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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
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D.2.1. Please explain why
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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
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### 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?)
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Balancing risk, please specify how: responsibility on individual operator or centrally organised, same balancing rules for all operators or specific rules for variable generation?
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E.2. How can it be ensured that market arrangements reward flexibility?	Current market arrangements are sufficient to reward flexibility
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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 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  
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? 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

## 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?

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?

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

## 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?

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? 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?

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

## 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

## 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? 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? 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? 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?	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
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 ...)

### 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	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?	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? 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? 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? 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?

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

## 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 known that 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). As the Commission has failed to comply with the decision of the EU Ombudsman in Complaint 2587/2009/JF, the renewable programme is a therefore a breach of the most fundamental prin

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 a

## B. FINANCIAL SUPPORT

B.1. Do you consider that financial support will continue to No  
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 there was compliance with citizen’s rights with regard to public participation in decision making. The inefficiencies on the grid induced by wind energy were known in advance, but inexplicably ignored. Those emission savings claimed for in the funding application have not occurred. Although further installation of wind energy will not lead to emissions savings, a quadrupling is required by the NREAP. A similar situation has occurred in other Member States. Ai

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?

## 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 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, stated 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. In the Republic of Ireland, there is 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 incorrect, 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 citizens of member states are expected to carry the burden of grid expansions, 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 populations, who have often 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. Indications are that the renewable energy being promoted solely for political reasons, is not providing any significant environmental benefits, which clearly could have been achieved by other means for far lower costs and environmental impacts.

D.2.1. Please explain why

Regarding grid related rules, huge disquiet with a potential backlash is developing from the general public in member states as more and more grid expansions are developed to facilitate intermittent and ineffective renewable generation, particularly wind energy. E.g. Communication ACCC/C/2010/54 highlights the Commission's approval of €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 by-passing 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. Again related to a programme which has by-passed legally required public participation procedures. Irish citizens are expected to pay back this money for infrastructure, without a proven need and without provision of proper environmental information or the opportunity to participate in the decision-making. Given that Europe is already heavily indebted 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 German integration of solar power has inflicted a huge financial burdens on the population for no real environmental benefit - with the 2012 estimated €100 billion subvention costs for delivering a mere 3% of Germany's electricity supply, ineffectively. The development of renewable electricity in Germany 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. There is a clear demonstration of failure to assess this policy before implementation and the input from the technical sector has been inexplicably ignored. Given these massive costs, seemingly now to be raised even further with dysfunctional and ineffective system integration costs for renewable power inputs, Europe's industry cannot remain competitive.

## 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

Political expediency and not environmental protection is driving the uptake of renewables in heating and cooling both at EU and Member State level by policies which have not been properly assessed . There is a problem with the promotion of wood biomass for domestic heating leading to the destruction of natural wood resources. Particularly in Northern Europe, the moisture content is high and therefore leading to increased particulate emissions and urban pollution. Within 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. Dangerously, such a policy can only lead to unsustainable businesses, totally dependent on subsidy bubbles to survive and without a 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. The EU has apparently not learned from the similarly politically based decision making,

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 EU's energy policies are counter-productive when considering the promotion of wood biomass in domestic heating. There are significant associated environmental impacts, particularly those on human health, whilst the very environmentally effective form of renewable heat, from electrically driven heat pumps/geothermal energy, is suffering badly from soaring electricity costs. It was inexcusable for this aspect to be missing from a proper assessment as part of policy development. 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?

Global energy prices will clearly rise in line with increasing populations and possible improvements in living standards. Market forces will affect more efficient consumer's use of energy. Where however, there is a prevention of access to certain energy sources coupled with a compulsion to use other grossly ineffective sources, on the basis of political decisions having by-passed proper assessment and legally binding public participation procedures - the EU's proposals constitute a massive intrusion on the Citizen's rights. As the EU has completely failed to assess and quantify the external costs of carbon dioxide emissions, it therefore has no legal right to restrict anyone's access to such fuels whilst introducing massive financial support programmes for those carrying the 'renewable' label which in reality, deliver no environmental benefits which could not have been achieved at a vastly reduced cost by a rational and science based methodology. Whilst promotion of energy efficiency and environmental protection in the heating sector is desirable, the principles of the Lisbon treaty must be adhered to, namely a highly competitive social market economy embracing a high level of protection for, and an improvement in, the quality of the environment. Currently, the promotion of renewable energy fails to fulfil these 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

There was no environmental assessment for the 10% target for transport fuel, being a transparently political target. As the April 2007 consultation by the Commission was based on four questions i.e. "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?" it is hard to see how the legal requirements in relation to public participation in decision making were fulfilled. The introduction of E10 biofuel into Germany has been an unmitigated disaster. The Commission will be 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. There is an urgent need for the 10% target to be reviewed and subject to the proper technical, environmental and financial assessment, in conjunction with proper public participation, which was initially mandatory for such a biofuel programme.

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, rail costs are soaring as electrical generation costs have effectively doubled due to renewable energy inputs, which are also highly ineffective in terms of environmental protection. An extremely effective form of transportation is therefore being made ineffective, seriously affecting social groups without access to cars. Such an impact has never been assessed and quantified in the development of these policies. It is now imperative that those who have been placed in a position of responsibility of development of Europe's energy policy, reassess the impacts of these policies. Sadly, no documented evidence to demonstrate that they have ever been truly understood, exists - and it is clear that the speed of implementation may have compounded this lack.

## 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 monumental, with a matching potential for environmental devastation. With a rising global populations often experiencing famine, diverting food grade products into fuel tanks when other options are available, is an obscenity impossible to understand. Undeniably, Biofuels have not provided the environmental benefits which were claimed for them. Again another instance where there was no proper environmental assessment of the policy before it was introduced. This policy should be stopped to avoid more damage globally.

## 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 referred to in Section D, existing grid networks are perfectly adequate for future and current needs. Replacement in relation to the age of the components will be required, but expansion is unnecessary.

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 seen as 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, therefore for the EU Commission to increase this burden based on speculative and ill conceived projects in neighbouring countries, will be a decision bringing the Commission into disrepute. Spain has already had to slash its wildly overgenerous solar subsidies whilst Germany is unable to support solar development. It is undeniable that neither the citizen nor the environment benefited from these colossal expenditures. Creating a 'bubble economy' for equipment suppliers is not an action with which the Commission should be associated.

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?

Also undeniable is that offshore wind is a technology sector associated with massive costs (€4.3 million per MW installed) for an unreliable electricity supply encompassing serious environmental impacts, in particular associated with grid expansions. That the EU Commission is apparently unable to produce any objective documentation to support this technology sector is unacceptable. To further support the lack of documentation, on examining the Communication ACCC/C/2010/54 and Ombudsman Complaint 2587/2009/JF, on 3rd Feb 2011 on the Irish State Broadcaster the EU Commissioner for Climate Action Ms. Connie Hedegaard stated in relation to offshore wind: "It actually pays off, it is sound economics". When a formal reply to the request 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 (a trade 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

In view of the complete lack of data made available as to the environmental effectiveness of renewable energy research, very serious questions must now be asked about the sums of taxpayers now being diverted into this sector. Notably, it is a legal obligation to possess and update such environmental data. In respect of 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. Enquiries to W. Gillett of GP Wind Project relating to the question of 'whether measures are in place to comply with Article 5 of Regulation 1367/2006?' remain unanswered at the time of writing despite having been lodged on 12.01.12. In Scotland, the Government authority Forestry Commission(Scotland) appear to be by-passing EU legal requirements by claiming that compliance with Scottish regulations absolve them from such responsibilities. In particular wi

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 emphatic 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 remain no indicators that that they will in the future) provided a reliable, cost effective and environmentally effective source of energy. They are therefore unconnected to any scientific and technological advance. Also missing is 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 possess and update environmental information, which is relevant to its function. NB: 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 so actively supports and determine the external impacts of non-renewable sources. As written in its 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?

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

This question has been clearly covered in the replies above. To reiterate, the EU has implemented a massive renewables programme, putting mandatory targets on Member States, a colossal and unsustainable financial burden on populations and huge unwarranted environmental impacts on the landscape and biodiversity of Europe. During all stages of the process, legally binding procedures related to assessment and public participation, were bypassed. The EU Commission has recently exhibited a regrettable contempt for the UNECE Aarhus Convention with its approval of a massive financial programme in respect of even higher levels of wind energy in Ireland. There is now an urgent need for the EU to recognise failures of the programme. Only by halting the process will an inevitable challenge be avoided in the European Courts, and any subsequent damages consequently awarded. Currently there appears to be no defence for past non-compliance with assessment and public participation procedures. Any claimed exemptions due to the implementation of 'green credentials' are clearly in admissible.

# Renewable Energy Strategy

## 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 For selected technologies/circumstances/markets (please be necessary to support renewables post 2020 given their specify) expected greater penetration?

Please specify which technologies/circumstances/markets Yes Solar No for wind 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?

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? withdraw wind technologies because it is too expensive

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

### A. GENERAL POLICY APPROACH

<p>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?</p>	<p>No, targets for renewable energy sources are unnecessary</p>
<p>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)</p>	<p>Climate change is not a "done deal", there are many questions still about its veracity yet to be answered. Therefore to set any future "targets" is merely to put an unidentifiable cast before an animal that may - or may not - be a horse! Other policy elements are equally unidentifiable at a point that is 8 years prior to the 2020!</p>
<p>A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:</p>	<p>Other (please specify)</p>
<p>Please specify which other policy elements?</p>	<p>Citizen's interests do not lie with such a massive reduction in green house gas emissions.</p>

### B. FINANCIAL SUPPORT

<p>B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?</p>	<p>No</p>
<p>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?</p>	<p>Phase out support schemes over time (please specify for which technologies if applicable)</p>
<p>Please specify for which technologies (if applicable) to phase out support schemes over time</p>	<p>Financial support should be phased out very quickly as it is a false foundation on which to support an unquantifiable industry - unless nuclear is included as an option!</p>
<p>B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?</p>	<p>N/A</p>
<p>B.4. Should the structure of financial support be gradually aligned EU-wide?</p>	<p>No</p>
<p>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).</p>	<p>I see no difference between the sectors.</p>
<p>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?</p>	
<p>B.7. Do national support schemes and differences between such schemes distort competition?</p>	<p>Yes, all support schemes distort competition to a similar extent</p>

## 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

Extra grid connections and their expense to the general public and also the extra environmental damage that ensues are not justifiable for such a poor and intermittent source of energy as regards, particularly, that of wind power.

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

D.2.1. Please explain why

The "grid" should be left pretty much as is! The addition of inefficient wind power is no justification in itself to expand it. Considering the current recession it would be an expense much too far!

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

Solar power is an even poorer option than wind. Interconnectors from sunnier countries such as Spain are too expensive to really be worth consideration.

## 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

Main barrier again is excessive cost and destruction of natural resources. Biomass actually increases greenhouse gas emissions. All of this leads to a forcible reduction of consumer choice/access to certain energy sources. Many biofuels also take up valuable agricultural land and so effectively therefore defeat "sustainability"

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

Gas and nuclear.

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? Asked and answered.

## 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  
Road for goods  
Rail

G.2.1. Please explain your answer

There is a coming of freedom for people to choose the best mode of transport to suit them as individuals! Rail is best base transport for goods except where geography prevents this, then road takes over, rail too for long distance passenger where possible but as a matter of individual choice - needs to be cheaper! Subsidies for renewables however is counter productive where electrified rail networks are concerned!

## 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

Speaks for itself. Too burdensome, too costly. Biofuels, as has already been said, take up valuable food producing land. Bio fuels ALSO contribute just as much to greenhouse gases!

## 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	Already answered. Spain (etc.) is already having problems with wind and solar subsidisation as it is proving to be too costly (as everyone should have realised in the first place!) Adding even more cost, i.e. to increase networks, would have no mutual benefits and would be a case of throwing good money after bad! It would have few mutual benefits, only driving everyone deeper into recession.
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?	See above answer.
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?	Costs in this sector are enormously greater for very little extra return. Future infrastructure maintenance costs in this hostile environment are likely to be crippling.

## J. TECHNOLOGY DEVELOPMENT

<p>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?</p>	<p>Other (please specify)</p>
<p>Please specify which other key challenges</p>	<p>No taxpayer funded R&amp;D has ever provided any suitable results or "innovative technologies". We need to stop this kind of of funding altogether (unless aimed at nuclear!) and leave it to private enterprise who have a track record of doing much better than any government!</p>
<p>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?</p>	<p>see above answer</p>
<p>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?</p>	<p>see above answer</p>
<p>J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?</p>	<p>Not successful</p>
<p>J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?</p>	<p>Existing renewable energy program is criminally burdensome on ordinary citizens, ruining people's lives, damaging landscapes and causing even more environmental damage than it "cures". It is disenfranchising the citizenry, risks extinction of some bird and bat species and is de-stabilising economies. Enough is enough and IT IS TIME TO STOP!</p>

# Renewable Energy Strategy

## 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)	Without a binding target, only few countries will take action towards a restructuring of the energy system and market. If Europe really wants to take responsibility for the environment and also for the people of other continents, we need a real reduction in carbon emissions and this is only possible via Renewable Energies.
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?	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	I believe this can be applied to all technologies, as with the German EEG (Renewable Energies Law). Of course wind energy will work cost-effective faster than other 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?	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).	I think the transport sector is the hardest one to achieve 100% RE, but the heating and cooling sector is probably the one with highest CO2 emissions, so the financial support should also focus on renewing heating systems, isolating buildings etc.
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 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?	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?	Obligation for network operator to develop network Priority or guaranteed access
D.2.1. Please explain why	In Germany, the development of RE might be on a high level already, but in other Member States this is not yet the case. We have learned that network operators won't invest in the network if they don't have to.
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	smart grids, smart meters
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
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?	Both goes together

## 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?	Road for passengers Rail
G.2.1. Please explain your answer	The railway is electrified already, but it should be obliged to use RE; planes flying with biomass or other Renewable fuels is rather an improbable vision

## 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	The countries with highest insulation such as the mediterranean States need to develop their network towards decentralization most, as they should use a lot of PV
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?	Sounds good, but I don't know about the priorities. Well, the EU should focus on the development of its own resources/ potentials before building huge networks to 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?	Cooperation sure is sensible, it would be helpful if experience could be 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
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<p>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?</p>	
<p>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?</p>	<p>Geothermal energy as it can only be applied large-scale and needs investment from big actors (no private household could)</p>
<p>J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?</p>	<p>N/A</p>
<p>J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?</p>	<p>Not in general - research should also be done for the sake of itself - but considering certain Renewable technologies, results with a certain deadline should be useful</p>

# Renewable Energy Strategy

## 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) Legally binding targets are the best way to focus governments on task.

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  
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 Anaerobic digestion using farm products.

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 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 Common refit tariffs in all countries. Currently we have a ridiculous situation of biogas in Northern Ireland being supported at a higher level than Southern Ireland or the UK. This may result in organic material travelling many kilometres to avail of higher support with the consequent affect on carbon emissions by the fuel used.

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)	Operate similar rewire tariffs in all states, then states with natural advantages will produce correct power. Ireland is a natural wind energy producer and should be supplying more and Spain should be supplying more photovoltaic.. It is stupid to see underperforming methods in countries just because of tariff structure. Make the whole of EU one and then a GERMAN national may erect a wind turbine in Ireland or Scotland and be more efficient.
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	Northern Ireland with 4 ROCS + elec price (26.5 cents per kwh) for biogas distorts the Irish biogas industry at 15 cents per kwh. The UK at 22 cents is also lower.

### 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 Ireland it is extremely long to get tariffs agreements and planning permission.
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?	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: 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

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 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

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? All state owned building should be obliged to use renewable energy as an education to all private users.

## 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 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 Electric cars and Lorries driven by biogas should be encouraged.

## 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	Same tariffs in all countries. Make the subsidy be an EU subsidy , then all countries pay and benefit from the development of renewable.
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	Let electricity be generated in most efficient country regardless.
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?

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

## 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? 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 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).

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

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? 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? 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

smart grids, smart meters

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?

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?

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?

## 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  
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?

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?

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

### 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:	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?	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	Green certificates or other
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 and transport should be one market. Heating and cooling will be linked to local networks, but they should be further developed to regional networks.
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)	Open market
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?

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 ...)

## 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

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?	Geothermal Electrification together with higher share of renewables in electricity production
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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?
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### 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)
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Please specify which other barriers	Life Cycle analysis show that biofuels will be challenging to produce when local emissions and greenhouse gas emissions are summarized.
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G.2. What sectors of transport do you consider to be the most promising for further increasing the share of renewable energy?	Rail
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G.2.1. Please explain your answer
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### 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
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H.1.1. Please explain
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### 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)
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Please specify how they should be amended or which elements added	Need to align support mechanisms between countries
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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
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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)
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Please explain in which way and to which degree
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I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?	N/A
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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?

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

## 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) Without clear legal targets action will be slow and disjointed.

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? 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). Different technologies will have different regional costs depending on resource, climate, etc. Financial support should levels be enough to encourage installing viable/attractive renewable energy technology but also keeping costs low for consumers. Different sectors should have different support structures and consideration of life cycle assessment should be considered in terms of environmental impacts as technologies are implemented and developed in the years ahead.

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	To consent some technologies some countries demand construction/production quantities with the locality/region whereas others do not. Charges for grid upgrades can also be different between countries.

### 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	Grid access timeframes and associated charges for grid upgrades (and what is charges to a project and what may be socialised)) can cause significant uncertainty and delay and be significantly different between countries/regions.
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	Rules need to be fair between actors in market and stable over reasonable project lifetime (technology dependent). More clarity on allocation of grid upgrade costs, should they be project specific or socialised is a question that should be considered? Clarity of benefits needs to be considered, i.e. will emission reductions be allocated to country project is within or to country energy is sold (if renewable)?

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	Grid infrastructure modernisation/innovation and how such costs are paid for is key to long-term certainty and ability for EU to stay at the forefront of clean and low emission energy and security of supply at reasonable costs for consumer.
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

## 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?	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	Demand reduction, smart grid, smart domestic appliances, innovative demand management of suitable industries, seasonal and intra-seasonal planning, etc... Storage may be market lead or TSO lead but operation of storage should be to maximise carbon emission reductions and renewable generation energy supplied, while maintaining system stability and 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 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?	Passive building technology can reduce building energy consumption significantly. Very high energy efficiency standards should be mandatory for new buildings of deep retrofits. Biomass has natural storage characteristics as well as possibility to provide gas and/or liquid fuels. Interaction may need to be at the regional level and managed on a seasonal/annual basis, supply/demand forecasting over different timeframes and between different technologies should be considered for R&D.

## 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?	Rail Water
G.2.1. Please explain your answer	Transportation of non-perishable goods and regular transportation between population centres. Efficiency of transport metrics (i.e. kWh per tonne-kilometer, emissions per tonne-kilometer, etc) and life cycle assessment should be considered.

## 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	Efficiency of transport metrics (i.e. kWh per tonne-kilometer, emissions per tonne-kilometer, etc) and life cycle assessment should be considered. Displacing of emissions from cities is good but can this have dis-benefits for other areas?

## 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	R&D

<p>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?</p>	<p>Yes, cooperation with third countries should be further promoted (please specify how and with whom, i.e. only neighbouring countries or more widely)</p>
<p>Please specify how and with whom, i.e. only neighbouring countries or more widely</p>	<p>Global trade (both goods, services, and technologies) should continue and EU can encourage sustainable development with partner countries while both parties benefit from the trade.</p>
<p>I.3. Should investments in electricity networks in some Member States (i.e. Spain, Greece, Italy) be prioritized for this purpose?</p>	<p>No (explain why)</p>
<p>Please explain why</p>	<p>Grid penetration levels are still low, good long-term (+10years) strategy to keep in mind. Other areas should have funding priority in near term to increase diversity of renewable technologies in particular non-electricity renewables and interaction between electricity, heating/cooling, transport, etc.</p>
<p>I.4. Which measures do you consider appropriate and necessary in order to foster cooperation with third countries in this area?</p>	<p>Agreements between the EU and third countries</p>
<p>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?</p>	
<p>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?</p>	

## J. TECHNOLOGY DEVELOPMENT

<p>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?</p>	<p>System integration Industrial manufacturing and supply chain</p>
<p>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?</p>	<p>Life cycle assessment and detailed planning of production, transportation, and consumption of energy, people, and materials and public awareness/education of likely changes. Joined up thinking will be key.</p>
<p>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?</p>	<p>Canals</p>
<p>J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?</p>	<p>Successful but some drawbacks (please specify which)</p>
<p>Please specify which drawbacks</p>	<p>Slow pace of implementation and lack of transparency on costs</p>
<p>J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?</p>	<p>yes</p>

# Renewable Energy Strategy

## A. GENERAL POLICY APPROACH

<p>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?</p>	<p>Yes, an indicative and non-legally binding target at EU level is appropriate</p>
<p>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)</p>	<p>The cost to the economy should be bearable. Targets have to be adapted to what the economy can bear, and setting mandatory targets 20 or 40 years in the future is both foolish and unrealistic. On the other hand if you would focus on INNOVATION, instead of IMPLEMENTATION, the investment targets could be a mandatory percentage of GNP. Funding and financing IMPLEMENTATION, kills the need for INNOVATION, and is counterproductive to the targes. Why develop new technology if the OLD stuff is in high demand.</p>
<p>A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:</p>	<p>Enhanced focus on R&amp;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</p>

## B. FINANCIAL SUPPORT

<p>B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?</p>	<p>For selected technologies/circumstances/markets (please specify)</p>
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Please specify which technologies/circumstances/markets	Wind and Solar take most of the funding, whereas they both need full backup by fossil powerplants. Though funded as if replacing fossil power plants, they only replace fossil fuel. The input price of wind or solar, to be competitive, should match the FUEL price of a fossil power plant, not the total price. Other technologies, like Deep Geothermal (ICELAND etc.) provide 24/7 base load, and DO replace a fossil plant. However, they do not get any preferential pricing, investment funding, R&D funding. So more focus on DEPENDABLE technologies like nuclear-fussion and geothermal. Stop wasting money on wind and solar.
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	Wrong options: Stop IMPLEMENTATION of technologies without clear break-even target. And for wind and solar that is FUEL price, not feed-in price. Fund clear R&D projects with vision of electricity/heat prices CHEAPER THAN COAL. Act more like GOOGLE, SHELL, DOE and DOD. European innovation is ineffective and a joke, and considering the money wasted, a bloody shame.
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).	Climate and availability of natural resources, as well as R&D capabilities make every country specific. Some targets are easier to achieve for some states than for others. Funding through the EU, as proven by FP7 and previous programs, show the ineffective and inefficient attempt of trying to promote INNOVATION by bureaucrats and politicians. Stop all BlaBla projects and set up a MANHATTAN project on renewables.
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

Subsidizing IMPLEMENTATION of wind and solar draws investor money away from R&D, and continuous focus on wind and solar draws away focus on more dependable technology like geothermal and fusion. Not to mention IMPLEMENTATION allows some criminals to steal the funds, (example wind in Sicily, solar "night" power in Spain).

### 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

All. Bureaucracy is killing or at best discouraging all innovation. And for IMPLEMENTATION it is not much better. But the problem is that the new technologies, today, are not economical, or at least not at a technical level the prices can be borne by the economy of most states. So IMPLEMENTATION on a large scale (other than field test) is USELESS. Until you understand, you will be throwing money in the money pit.

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

Set up a Department of Energy (like USA), and let them fund INNOVATION. Stop making more bureaucracy. Stop thinking more rules by non-technical people will drive 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?

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

Why grid connection if overcapacity already exists and increasing power lines is cost prohibitive. Cost-sharing for backup power (no wind, no sun) will be prohibitive, and it should be, as both technologies cannot guarantee power alone. Balancing; why should a gas power plant shut down, or reduce, when wind is available, without compensation. Curtailment: solar and wind suck down money, enough is enough. Too much uneconomic "renewables" can bring down the economy.

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	level playing field with every other energy supplier
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 ...) Other (please specify)
Please specify which other measures	If you want more than 10% wind or solar on the grid, net instability will demand fast backup by gas-power plants. This will show cost prohibitive, as wind/solar only produce against FUEL PRICE, of the total investment (windturbine AND backup gas power station).

### 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 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?	just dumping your load on the grid is irresponsible for grid stability, and lays all balancing and power matching responsibilities on the conventional power providers. non-dependable fluctuating power from solar/wind should be priced accordingly, meaning LOWER, or penalties should be given if contracted (predicted) power is not delivered, or too much is delivered (net instability, balancing need by others)
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?	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?	First and foremost: R&D !! The technologies are not ready for market implementation. So stop wasting money doing so. Set up a DOE and support company R&D and field tests. THEN afterwards support economic projects.
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### 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?	Rail
G.2.1. Please explain your answer	it is already electrified. others will need huge investment

### 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 energy stored in biomass per hectare is by far insufficient to provide energy to maintain present demand (unless each person has several square hectares available). setting up laws and rules do not change physical limits.

### 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	set up a DOE and use the funds to achieve a common goal. Stop dispersing and wasting money on bureaucracy and implementation beyond fieldtests.
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	set up a DOE, department of Energy, which sponsors R&D of promising technologies and supports field tests. include 3rd countries (china, india, brasil etc).
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

let them join an independent Body, like a DOE. Stop the bilateral, multilateral blabla multipage telephone-book-size agreements without any realistic perspective.

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?

haha, this questionnaire becomes more laughable as it continues.... missed out on the Libyan, Tunesian and Egyptian uprise? With anti-western, anti-technology, back-to-the-middle-age religious population and governments. Ah well, another waste of money, so you probably will spend on that too.

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?

indeed, the questions get more ridiculous. On the North Sea: if the wind blows, it blows everywhere, if it is quiet, it is quiet everywhere. Dreaming of some kind of averaging system is neglecting meteorological evidence. NSCOGI is another waste of money. Wake up and ask someone with a proper education.

## 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?

Come on , be realistic! You want it now (2020) and you want it BIG. Will not happen. Wind and solar are BIG, but not cost-competitive, and will not be until they reach price-parity with FUEL, which is very far away (not price-parity with FEED-IN tariffs!!). Increasing wind/solar only

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 and Fusion. But FORGET about 2020, it is not going to happen. Be realistic, not foolish.

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, cheaper than coal in 30 years.

# Renewable Energy Strategy

## 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)	At EU level it should be easier to manage the cross compliance / sustainability of renewables and 'nature & biodiversity' (e.g. Birds Directive, Habitats Directive). In Germany e.g. the change of land use due to ren. energies massively endangers species and habitats.
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 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?	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?	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 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
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 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 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	
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?

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  
Other (please specify)

Please specify which other barriers

lack of pressure on the motor companies to produce energy-saving engines (in combination with an adequate tax-system)

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  
Yes, additional criteria should be introduced to promote only the best performing biomass (please specify which)

Please specify which criteria

biofuels must not peril biodiversity

H.1.1. Please explain

see A.1.1.

## 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	especially in terms of solar power the African states have much better natural conditions (e.g. project "Desertec")
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 previous answer
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
<p>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?</p>	
<p>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?</p>	

## 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
<p>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?</p>	

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 N/A 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

## 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: 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? 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?

## 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?	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?	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	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?	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

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 electric / biofuel cars and rail transport of goods

## 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 Each member state should be treated fair and equal.

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

### 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 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 EU target sets the perspective and vision for the future regarding renewable energies and sectorial targets can link the overall renewable energy target to the realities in each sector.
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?	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	Assess the most environmentally-friendly and efficient technologies and focus support schemes on those technologies.
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
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?	Balancing rules
D.1.1. Please specify which obstacles and the nature and degree of them for each	Balancing is a key component for grid integration of E-RES production. This will generate extra costs and thus obstacles to renewable energy production.
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 ...) 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 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?)
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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 on individual operator
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
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 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 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 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 can indirectly increase the share of renewable energy through electricity consumption. Electricity can be produced from renewables.

## 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	only neighbouring countries
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 the Member States which contribute with their energy networks to the absorption of renewable energy from EU neighbouring countries.
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

<p>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?</p>	<p>System integration</p>
<p>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?</p>	<p>Thorough examination of renewable energy technologies and focused support on the most environmentally friendly ones.</p>
<p>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?</p>	
<p>J.4. How successful do you consider the existing measures have been and which have been the main drawbacks?</p>	<p>Successful but some drawbacks (please specify which)</p>
<p>Please specify which drawbacks</p>	<p>Enhanced discrepancies between Member States. Production of technologies and therefore most of the profits are concentrated in more developed Member States (e.g. Germany) while the renewable energy production incentive bill is payed by the less developed countries (e.g. Romania, Bulgaria).</p>
<p>J.5. Do you consider that assistance in technology development should be linked to a certain result to be achieved by a certain deadline?</p>	<p>No.</p>

# Renewable Energy Strategy

## 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 need to limit GHG emissions and renewable energy is ONLY one of the solutions how to do it. We should let the market decide what is the most optimal solution in terms of costs and end-user preference (for example efficiency and energy savings can play much bigger part in the whole GHG reductions exercise). Therefore strong policy on reducing GHG should be sufficient.

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 All support schemes should be only temporary as they tend to give preference to certain technologies and skew the optimal market based solution. If 20% share of renewables in 2020 is not enough for them to be market competitive, even under inclusion of their competitor in the EU ETS, we should stop supporting them and start looking for other solutions (more efficiency, energy savings, reduction in energy services, ...)

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 main difference between sectors is in the level of subsidies and taxation, combined with derogations from general schemes. Thus ALL SUBSIDIES as well as ALL DEROGATIONS from general principles of taxation should be abolished as soon as possible, thus enable the market to find optimal solution. All taxation should be technology neutral and consistent over all 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 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?

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?

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?

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?

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?

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 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  
Water  
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?	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?	
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?

no technology priority - all technologies should be treated the same way based on the same criteria (for example: lifecycle gCO2/kWh indicator)

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

## 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: 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 Distributed generation should be supported, because it contributes to energy efficiency producing energy close to the point of consumption.

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? 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

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? 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?

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

### 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: Enhanced focus on R&D to bring down the costs of renewables technologies  
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? 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 benchmark values for support level per technology per Member State

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, 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  
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 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?

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

Smart grids

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  
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  
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  
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

## 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?	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 Successful but some drawbacks (please specify which) have been and which have been the main drawbacks?

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

## 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

Facilitation policies (faster and easier permitting, improved access to the grid and further grid investments, availability of more sites for renewables, etc)

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	Wind project development in France last 7 to 9 years!
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?	Curtailement regime
D.1.1. Please specify which obstacles and the nature and degree of them for each	"Grenelle II" law in France strongly curtail wind development.
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 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

## 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  
Other (please specify)

Please specify which other pathways energy economy in buildings

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  
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? 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?

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? 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

### A. GENERAL POLICY APPROACH

<p>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?</p>	<p>Yes, an indicative and non-legally binding target at EU level is appropriate</p>
<p>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)</p>	<p>Renewable energy should play a part in how we produce energy but it must have been properly researched and be effective and reliable. At present this is not the case.</p>
<p>A.2. Are other policy elements necessary to promote renewable energy post-2020, such as:</p>	<p>Enhanced focus on R&amp;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  Continue to ensure sustainability and scalability</p>

### B. FINANCIAL SUPPORT

<p>B.1. Do you consider that financial support will continue to be necessary to support renewables post 2020 given their expected greater penetration?</p>	<p>No</p>
<p>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?</p>	<p>Phase out support schemes over time (please specify for which technologies if applicable)</p>
<p>Please specify for which technologies (if applicable) to phase out support schemes over time</p>	<p>If renewable energy is being presented as such a wonderful thing then the developers should be getting plenty of return from their money without the requirement for additional subsidies.</p>
<p>B.3. Do you think it would be useful to develop common approaches as regards Member States' financial support for renewables?</p>	<p>Yes, with benchmark values for support level per technology per Member State</p>
<p>B.4. Should the structure of financial support be gradually aligned EU-wide?</p>	<p>No</p>
<p>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).</p>	

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?

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

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 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 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

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  
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  
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

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?

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?

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

## 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)	only a mandatory target will force a real change in the energy industry
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	to be based on cost/benefit evaluation.
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?	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?	
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?

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 flexible back-up capacity (capacity payments ...)  
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

## 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?	It is strongly recommended that efficiency is promoted as a primary issue

## 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 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?	N/A
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?	Local renewables within EU will also bring benefits to EU economy

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?

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

targets in 2020 should have been higher

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