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## Consultation on Green Paper on a 2030 framework for climate and energy policies

The Umweltdachverband in consensus with the EEB views the 2030 framework for climate and energy policies as our last opportunity to prevent dangerous climate change by putting the EU on track on a cost-effective path to meeting long-term decarbonisation goals, improving innovation and competitiveness and tackling rising energy prices due to dependence on imported fossil fuels. The climate and energy policy must take into account that in the long run only renewable energies are available. Thus a reduction of the energy use by 50% is necessary for Europe to be able to provide the required energy in an ecological and social sound way.

Removing environmental harmful subsidies, the internalisation of external cost and to shift the tax burden from labour to energy and other environmental taxes must be at the core of future climate and energy policies.

Moreover, there is an urgent need to step up efforts both within the EU and globally to halt dangerous climate change. An ambitious EU climate and energy policy for 2030 that reflects the EU's fair share of the global effort will be its best leverage to ensure a successful global agreement on climate change in 2015.

Therefore the Umweltdachverband submits the following responses to the questions put to consultation.

#### 4.1 General

- *Which lessons from the 2020 framework and the present state of the EU energy system are most important when designing policies for 2030?*

The EU's 2020 climate and energy package has set up a framework for promoting greenhouse gas emissions, renewable energies and energy efficiency improvements in an integrated manner and is as such already having a positive impact.

Already in 2011, the EU had cut its emissions by 17.5% below 1990 levels and as the recent renewables progress report shows, the renewables target and policy framework has helped accelerate the increase in the share of renewables in the overall energy mix<sup>1</sup>. The EU energy savings policy was recently complemented with the Energy Efficiency Directive, which should bring the EU closer to meeting its 2020 savings target, although a considerable gap will still exist even with full implementation.

While the 2020 policy has provided a workable framework and put us in the right direction, it has been far from adequate:

#### - **The emissions reduction target is too low to help prevent climate change**

The 20% reduction target below 1990 levels falls far behind what the science says is necessary to curb dangerous global warming and is far from adequate considering the historical responsibility of developed nations.

The IPCC Fourth Assessment Report suggests that developed countries need to cut their emissions in the range of 25-40% by 2020 to have a 50% chance of limiting global warming below 2°C. However, the increasing signs of climate change, including the record Arctic sea ice melt last year, show that returning to the levels of carbon in the atmosphere that would limit global warming to 1.5°C would be more appropriate to avoid irreversible impacts of climate change.

Moreover, the target is not sufficient to put the EU on track to reducing its emissions by at least the upper-end of the 80-95% reduction target by 2050 in line with its historical responsibility, requiring very steep and more costly reductions in the later years.

#### - **Making the energy efficiency target binding**

The current non-binding target needs to be followed up by a legally binding one that will ensure the full energy savings potential in the EU will be met. The 2020 climate and energy package has clearly shown the merit of binding targets as progress towards the indicative energy efficiency target has lagged behind that of the two binding targets.

#### - **Insufficient sustainability guarantees**

The renewables framework with its sub-target for the transport sector did not include sufficient sustainability safeguards for energy from biomass which has led to serious negative effects for climate and biodiversity, put into question its contribution to emissions reductions within a time frame relevant to solving the climate change challenge and adverse effects in third countries, including displaced food production.

Storing carbon in vegetation and soils is one of the most effective and proven ways of taking carbon out of the atmosphere and should therefore, along with the rapid phase-out of fossil

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<sup>1</sup> European Commission: Renewable Energy Progress report, 27.3.2013.

fuels, be an important element of a comprehensive strategy to prevent irreversible climate change. Whether the production of biomass for energy contributes to that goal is dependent on conditions that are currently, in a majority of cases, not being met. As a result, some forms of bioenergy not only fail to make a positive contribution to tackling climate change but actually contribute to it, and furthermore have negative implications for biodiversity. Additional safeguards within the 2030 Climate and Energy package are therefore necessary to ensure that only sustainable bioenergy will be counted towards future targets and be eligible for the related support.

#### - **Insufficient targets in the Effort Sharing Decision**

Despite capping emissions from nearly 60% of the EU's GHG emissions, the Effort Sharing cap was set to drive 10% reductions only. By contrast, the ETS, covering approximately 40% of EU emissions, does 2/3 of the heavy lifting for the 2020 GHG target. There is therefore still huge untapped potential and non-ETS sectors can shoulder a higher proportion of reductions, at high levels of cost efficiency or cost savings, to support a more ambitious GHG target.

#### 4.2 Targets

- *Which targets for 2030 would be most effective in driving the objectives of climate and energy policy? At what level should they apply (EU, Member States, or sectoral), and to what extent should they be legally binding?*

The current framework of three targets on greenhouse gas emission reductions, energy savings and renewable energy should be maintained as it allows for targeted measures for each of these crucial components of a low-carbon strategy. Moreover, the targets are mutually reinforcing, and should therefore be designed to be consistent with each other.

From the perspective of nature conservation and environment protection it is necessary to set the targets for the year 2030 as following:

- Reduction of GHG-emissions by 40 to 55 % to maintain the ability to reach a reduction of 80 to 95 % by 2050
- A 30 to 50% end-use energy reduction target in line with the most detailed bottom-up modelling available (Fraunhofer ISI 2012), which suggests that the EU has a cost-effective potential to reduce end-use energy by 41% by 2030 compared to the PRIMES 2009 reference
- A 45 % share of renewable energies, depending on the success of end-use energy reduction and the availability of ecologically sound renewables.

Crucially, the targets must be put forward as a package and be legally binding at national level to drive the national policies and institutional arrangements that can improve investor certainty and are necessary to ensure that the targets are achieved. As noted earlier, member states have been less successful in making progress towards their non-binding energy efficiency targets than the other two 2020 targets, which goes to show the value of making a target binding.

The emissions reduction target must be set at a level that puts the EU on a cost-effective track to not only achieving emissions reductions in the upper end of the 80-95% target agreed for 2050 but to going beyond. This is required for the EU to act according to its historical responsibility to halt dangerous climate change.

A variety of burden sharing models exist to split the GHG target in an equitable way. Some new models have the potential to lower the overall cost of ambitious reductions at EU level.

Moving towards a 'bottom up' approach - such as sharing effort by taking account of location of most cost effective abatement potential has potential to lower the cost of necessary reductions at EU level considerably. Such an approach would require new financing mechanisms to assist Member States with higher amount of most cost effective potential yet less ability to pay.

Additionally, the current suite of flexibilities in the Effort Sharing Decision serves as a disincentive for domestic action. While there is a place for some flexibility mechanisms post 2020 to encourage cooperation or investment across borders, Member States should not be permitted to purchase cheap international credits instead of meeting their required reductions under the Effort Sharing Decision. An improved Effort Sharing Decision, or alternative non-ETS emissions framework must be a corner stone of the post 2020 framework. This will require reform of the Effort Sharing Decision or proposing a new framework that covers non-ETS sectors giving effect to national obligations to meet the GHG target. The role of national policies and measures is very important - both to go beyond the minimum ambition provided by limited EU sectoral policies, and reflecting the fact that there are many gaps in EU climate policy at sectoral level.

Any further steps towards unconventional fossil fuels must take the global warming potential of methane leakage into consideration.

The pursuit of technology neutrality must under any circumstances not leave out other crucial aspects like safety, long term availability, confinement costs, and must not lead to an equal treatment of CCS or nuclear energy with renewable energies.

Finally it is essential that the current sectoral target for renewables in transport, which for all intents and purposes has been a target for unsustainable biofuels, is not superseded by a new one post-2020.

- *Have there been inconsistencies in the current 2020 targets and if so how can the coherence of potential 2030 targets be better ensured?*

A number of inconsistencies have become evident over the implementation of the package: The 2020 emissions reduction target was set too low to reach a cost-efficient pathway to reducing emissions by at least the top-end of the 80-95% range of the 2050 target. This also resulted in the EU ETS cap being set too low, which, together with generous free allocation and the financial crisis, drove the carbon price too low to incentivise the development of renewable energy or energy saving measures.

It is crucial to ensure that this mistake is not repeated with the 2030 targets and that those are set at an appropriate level to ensure more effort for earlier years, making reductions in later years cheaper.

Just as with the ETS, the economic crisis has had a detrimental impact and further undermined the ambition, and therefore effectiveness, of the Effort Sharing Decision. In particular, the demand for surplus Effort Sharing allowances (AEAs) is expected to be low in light of EEA projections that the EU will over-reach its Effort Sharing 2020 target by 8% (with the implementation of existing and planned measures). It is vital that EU climate policy remains economy-wide in its scope, in order to avoid the risk of GHG 'lock in' in key sectors that are best addressed by national policies, and to go beyond the minimum requirements established by EU sectoral policies. Revisiting the potential of non-ETS sectors can offer a route through to higher ambition for the GHG target. Analysis of recent studies of mitigation potential reveal that raising the ambition in Effort Sharing sectors is an opportunity to aim far beyond the 40% milestone for the 2030 GHG target, and towards a target that is supported by science.

Moreover, energy savings have been undermined by a target that does not set a legally binding requirement. This should be corrected in the 2030 policy framework with energy savings treated as a crucial part of achieving the decarbonisation of our economy. The Green Paper implies that decisions on an energy savings target should wait until the review of the Energy Efficiency Directive in 2014. We believe this is the wrong approach. By contrast a robust 2030 target can set the direction for the implementation of the EED and help to ensure that the 2020 target is met.

In fact, too much focus was put on the emissions trading scheme and its ability to achieve both emissions savings as well as incentives to invest in renewables and energy savings. A good example is the NER 300 Programme, which co-funds renewables and carbon capture and storage projects with the proceeds from the sales of 300 million ETS allowances. The Commission originally estimated that the programme would raise around €4.5bn based on a carbon price of €15 per allowance. However, as the carbon price has slumped, a lot less is likely to be available, which has had an impact on the funding available for renewable energy projects.

- *Are targets for sub-sectors such as transport, agriculture, industry appropriate and, if so, which ones? For example, is a renewables target necessary for transport, given the targets for CO2 reductions for passenger cars and light commercial vehicles?*

Targets should be set first and foremost economy wide in order to ensure that they achieve the required emissions reductions while also maintaining flexibility for member states to decide how they want to achieve their national targets. This would allow more emissions cuts to happen in sectors where it is most cost-efficient within a given country.

However, it is clear that in some sectors specific policies can benefit from targets that help the EU meet its overall reduction targets. This is the case for example regarding the F-Gas Regulation or CO2 standards for cars and could long-term national targets for the renovation of buildings could make an important contribution towards decarbonisation by 2050.

Regarding the transport sector in particular, a specific volume target for renewables is no longer advisable. Instead, we favour the approach of the Fuel Quality Directive, provided that the greenhouse gas emissions reduction targets are linked to a more comprehensive system of sustainability safeguards including correct carbon accounting.

The amount of energy biomass can contribute to post-2020 targets should be capped and the level of the cap fixed on the basis of the EU's maximum sustainable potential of domestic biomass feedstock supply taking into consideration competing uses in other sectors. In addition, biomass that receives support and subsidies under EU law should be subject to comprehensive accounting of greenhouse gas emissions and deliver real emission savings. This should include life cycle emissions from all aspects of biomass cultivation, processing, transport and combustion, as well as emissions from land management and direct or indirect land use change. It is imperative that this methodology take carbon debt into account, and the need to make real cuts in carbon emissions today and in coming decades.

Moreover, the current sustainability criteria for biofuels and bio-liquids are inadequate, and no sustainability criteria are applied to biomass for electricity and heating/cooling at all. It is therefore crucial to introduce robust criteria that cover environmental and social impacts in order to ensure that biomass use for energy does not reduce the "carbon sink" capacity of land and associated ecosystems, nor have unduly negative effects on biodiversity.

- *How can targets reflect better the economic viability and the changing degree of maturity of technologies in the 2030 framework?*

Renewables and energy efficiency technologies have a proven track-record in reducing emissions as well as dependence on imported fossil fuels. They are by far the largest untapped indigenous source of energy in Europe and therefore present the biggest potential to rein in rising energy prices driven by fossil fuels and long overdue investments in energy infrastructure.

Different renewables and energy efficiency technologies will be at different stages of development depending on the member state and their specific climatic, market and resource conditions. An overall renewables target can capture all the different technologies and allow each member state to develop the technologies that best work in their circumstances. However, various support mechanisms such as feed-in tariffs and preferential market access can be set up to help new technologies mature.

The development of structurally weaker regions should especially focus on the aspect of energy security through use of regional resources (e.g. the generation of electricity from solar power is cheaper than the generation electricity of fossil fuel in southern Europe).

- *How should progress be assessed for other aspects of EU energy policy, such as security of supply, which may not be captured by the headline targets?*

Energy savings and renewable energies can significantly contribute to improving the EU's security of supply and reducing its energy trade deficit. It is crucial to invest in these two indigenous sources as oil prices are expected to continue to rise and the EU's dependence on oil and gas imports set to exceed 80% in 2035 according to the International Energy Agency's 2012 World Energy Outlook. One indicator of progress on increasing our security of supply could be the development of the EU's energy trade deficit, which currently stands at a staggering €423bn.

#### 4.3 Instruments

- *Are changes necessary to other policy instruments and how they interact with one another, including between the EU and national levels?*

If we are to ensure the maximum development of renewable energies and energy saving technologies, it is important to remove fossil fuel subsidies, which make it harder for these domestic energy sources to compete while driving global warming.

Most recently, the European Council of 22 May 2013 called for the revision of state aid rules "to allow for targeted interventions to facilitate energy and environmental investment" and for the phasing out of environmentally or economically harmful subsidies, including fossil fuels. This task should be completed without delay.

In addition to revision of state aid rules, the Commission should in its yearly Country Specific Recommendations as part of the European Semester process provide clear and concise recommendations as to how to shift the tax burden from labour to energy and other environmental taxes and put an end to the widespread use of energy tax exemptions.

The inability of the current EU-ETS to internalise the external cost of carbon intensive power generation from coal makes it necessary to apply more direct ways of ecological taxation and stricter regulative law.

Regarding the Ecodesign and Energy Labelling Directives, we suggest using the upcoming revisions to reinforce their consistency and maximise their complementary push and pull effects for market transformation. This could take the form of merging the two Directives. Ideally, this reinforced consistency could also encompass Ecolabel and Green Public Procurement (GPP) criteria with regard to energy efficiency. Ecolabel and GPP could act as benchmarks and

reference levels for energy efficient appliances, but this is only possible provided that calculation methods are aligned amongst all the instruments (Ecodesign, Energy Label, GPP and Ecolabel). At the moment, the way to calculate the energy efficiency criteria in Ecolabel and GPP are not the same as the way to calculate the energy efficiency requirements within Ecodesign and the energy class within Energy labelling. It would also be useful to align the life-cycle-based methodologies between all these instruments, so that the preparatory studies and analyses could benefit all the instruments at the same time, avoiding double work in terms of preparation and creating a more coordinated update of the respective thresholds and requirements.

We also suggest implementing a market monitoring mechanism for products placed on the market using or related to energy. A market monitoring instrument enables information in real time on what products are placed on the market and what their energy efficiency level is. Market monitoring at EU and national levels could provide several benefits: helping member states assess the part of their national energy savings linked to more energy efficient appliances, avoiding overlaps between product policy and building policy and the EED obligations, thus preventing double counting the same savings (e.g. replacement of heaters in a public building could be counted several times)

Furthermore, a market monitoring instrument would enable adapting regulations on appliances with much more reactivity and relevance with regard to the market situation. Today, regulations are too often based on obsolete data or assumptions lacking in supporting evidence. A market monitoring mechanism could provide accurate and up-to-date data when needed. Australia, for example, has a product register that eases their assessment of savings linked to products, their market surveillance work and the update of implementing measures.

- *How should specific measures at the EU and national level best be defined to optimise cost-efficiency of meeting climate and energy objectives?*

Mainstreaming climate change policy into the EU budget is a good first step to ensure more funding for clean technology. As mentioned earlier, removing fossil fuel subsidies would level the playing field and make renewable and energy savings technologies more competitive. In addition, the European Investment Bank's lending policies should be reviewed to divert billions invested in coal and gas towards clean technologies.

Regarding the Ecodesign and Energy Labelling, we think that these policies lack dynamism and ambition in setting long-term objectives that could benefit energy and climate policy after 2020. In fact, the Ecodesign requirements tend to sometimes "run after the market rather than challenging it" and the associated label can consequently be outdated quickly. The iconic example is the measures for televisions.

Long-term tiers with ambitious efficiency levels could be defined more systematically to create the visibility to trigger more innovations and quicker market transformation towards more efficient products. Germany has for example suggested a Top Performer approach that would grasp some of these opportunities. It is to be noticed that setting these ambitious long-term requirements is cost effective and does not harm EU competitiveness as the standards apply for all products entering the EU market (as concluded by several studies on the subject, Ecofys 2012, CSES 2012).

It should also be noted that the current way of consolidating the least life cycle cost (= the most economical options on a life cycle perspective) that limit the ambition of the improvements in Ecodesign may not be precise and fair, noticeably the learning curve and anticipatory effect by industry is neglected, leading to an overestimation of the real life-cycle costs in the future, and thus limiting artificially the possible ambition to set efficiency requirements

- *How can fragmentation of the internal energy market best be avoided particularly in relation to the need to encourage and mobilise investment?*

Investments in infrastructure should be geared towards ensuring an interconnected market that will allow renewable energy to be produced where it is most cost-effective and transported to where the demand is. A high share of renewable energy in the grid post-2020 will require a significant expansion of the current grid infrastructure.

- *Which measures could be envisaged to make further energy savings most cost-effectively?*

Energy efficiency investments mostly pay themselves back through saved energy as long as an appropriate timeframe is considered. In the buildings sector, for example, there is scope for a large contribution to energy savings and emissions reduction in the deep renovation of the existing building stock, which will continue to produce cost savings through the lifetime of the buildings. The Commission's analysis for the Low Carbon Roadmap 2050 shows that emissions from buildings can be reduced by 90% by 2050 by improving their energy performance, which is considered a larger than average contribution over the long-term.

However, tapping all the energy saving benefits will require the removal of both market and non-market barriers, such as split incentives, lack of information or financing. As a first step, an ambitious and binding 2030 energy savings target is required to give the right market signal. In addition, specific policies for some sectors can help unlock the potential.

As mentioned earlier on Ecodesign, adopting a Top performer approach to set long-term requirements to trigger innovation and optimise the calculation of least life-cycle costs could lead to some additional improvements in products.

- *How can EU research and innovation policies best support the achievement of the 2030 framework?*

For Ecodesign and Energy Labeling, there is a need for research on the driving forces for consumer choice on energy related goods. It is also necessary to determine testing methodologies reflecting more accurately the real usage patterns of products in order to be more precise in our estimation of savings and to orient industry innovation towards what would make more sense for consumers.

#### 4.4 Competitiveness and security of supply

- *Which elements of the framework for climate and energy policies could be strengthened to better promote job creation, growth and competitiveness?*

Energy savings and renewable energy have a high potential for both direct and indirect job creation across the whole value chain from manufacturing to installation, operation and maintenance. The European Commission estimates that energy efficiency and renewable energy sectors could create 5 million jobs by 2020<sup>2</sup>. It also notes that while increased investment in energy efficiency will boost job creation in the construction sector as well as in the manufacturing of construction materials, it will have only a limited impact on the reduction of jobs in the fossil fuels mining sectors.

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<sup>2</sup> European Commission Staff Working Document: Exploiting the Employment Potential of Green Growth. 18.4.2012.



Moreover, it was found that more ambitious renewables targets trigger investments in knowledge intensive generation technologies, which consequently provide skilled employment. This speaks for ambitious 2030 targets, which can create skilled domestic employment.

- *What evidence is there for carbon leakage under the current framework and can this be quantified? How could this problem be addressed in the 2030 framework?*

Considering the persisting low carbon price, there is little evidence of any actual carbon leakage. Meanwhile, the generous free allocation has left many energy intensive companies with surplus free allowance.

A CE Delft report from April argued that if the assumptions used by the European Commission in 2009 were updated to better reflect the current situation, only 33% of sectors would qualify for exemptions rather than the current 60%<sup>3</sup>.

When discussing competitiveness, a much more significant and real concern comes from “low-carbon leakage” or the move of clean industries from Europe in the absence of proper incentives to encourage increased production.

- *What are the specific drivers in observed trends in energy costs and to what extent can the EU influence them?*

Ambitious targets for energy savings and renewable energies will encourage measures that will boost Europe’s competitiveness. Energy savings will reduce the costs of decarbonisation by making renewable energy and greenhouse gas targets cheaper to achieve and they will also contribute to reducing energy costs.

- *How should uncertainty about efforts and the level of commitments that other developed countries and economically important developing nations will make in the on-going international negotiations be taken into account?*

The EU as has a historical responsibility for emissions and it cannot wait for developing countries to move first following the principle of common but differentiated responsibilities. Moreover, the Durban climate conference in 2011 launched the negotiations for a new international climate agreement that is to be concluded in 2015 and to apply to all parties, which already offers sufficient certainty of future action.

An agreement on an ambitious 2030 climate and energy policy domestically is the EU’s best leverage to ensure a successful global agreement on climate change in 2015 with ambitious commitments also from its counterparts. All post-2020 targets will therefore need to reflect the EU’s fair share of the global effort and to be agreed well in time for 2015.

Moreover, it is in Europe’s best interest to act quickly and reap the early-mover advantages of advanced measures on energy saving and renewable technologies. It is by no means the only developed region to move forward with climate measures as nearly all G20 countries have taken on commitments to reduce emissions and other countries are investing in clean technologies.

Others are also moving, with China making renewable energy and energy savings key components of its 12<sup>th</sup> Five-Year Plan and setting up regional emissions trading schemes. UNEP’s Global Trends in Renewable Energy Investment report in June 2012 showed that China was the leading investor in renewable energy, followed by the US, and noted weakening policy support for renewables in many developed countries, in Europe particularly due to austerity measures.

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<sup>3</sup> CE DELFT: Carbon leakage and the future of the EU ETS market. 9.4.2013

Stronger targets and supporting policies are required if the EU is to maintain its leadership in the clean technology race.

- *How to increase regulatory certainty for business while building in flexibility to adapt to changing circumstances (e.g. progress in international climate negotiations and changes in energy markets)?*

A swift agreement on 2030 targets is the best way to build market certainty. Ambitious targets to support high penetration of renewable technologies and energy efficiency improvements will direct investments towards innovative and sustainable energy technologies. At the same time, an ambitious energy saving agenda that will help European companies save on their energy bills will give them a better chance of survival under any market conditions.

In the discussion of the economic viability of measures it must be taken into account that energy costs are only a small share of the production costs of companies. Further it is important to distinguish between energy costs and energy prices. The discussion regarding international competition and international negotiations must include the demand for common social and ecological standards.

- *How can the EU increase the innovation capacity of manufacturing industry? Is there a role for the revenues from the auctioning of allowances?*

The revenues from the auctioning of allowances should be used for climate action both within the EU to increase our ambition as well as to help developing countries reduce emissions and adapt to climate change. These revenues can therefore play a limited role in incentivizing new innovative sustainable technologies, which are not yet competitive or where market barriers mean that the investment would not otherwise be made.

- *How can the EU best exploit the development of indigenous conventional and unconventional energy sources within the EU to contribute to reduced energy prices and import dependency?*

Renewable energies and energy savings are Europe's largest untapped indigenous energy resources. They are also the only technologies that can help boost competitiveness, mitigate the impact of high energy prices and reduce emissions at the same time. Energy savings will consequently help reduce the EU's energy trade deficit, allowing the money to be re-invested in Europe.

By contrast, shale gas, which is being promoted as a cheap option in the wake of falling gas prices in the US, will not provide a safe and reliable energy source to boost Europe's energy independence. Apart from the fact that it comes with very high up front exploration costs, Europe has a high population density, different systems of landownership and very different geological conditions compared to the US, which call the feasibility of shale gas development into question. While it is unlikely to lead to real reductions in gas prices, the associated environmental impacts make it even less of an option.

Possible negative effects of free trade agreements e.g. between the EU and the USA or Canada regarding the European targets for the reduction of GHG, the increase of energy efficiency or the development of renewables should be considered. The EU must maintain the sovereignty to ban the exploration of unconventional fossil fuels, the use of CCS and keep minimum standards for motor fuels.

- *How can the EU best improve security of energy supply internally by ensuring the full and effective functioning of the internal energy market (e.g. through the development of necessary interconnections), and externally by diversifying energy supply routes?*

Upgrading the grid infrastructure so that it can handle large amounts of intermittent, decentralised energy production will allow renewable energy projects to be carried out where they are most cost-efficient. Moreover, smart grids and demand response measures will further reduce the need for backup capacity.

While diversifying supply routes as well as sources can help mitigate some of the security of supply concerns, only replacing imports with energy savings and indigenous renewable energy will boost the economy and create jobs while cutting emissions. The EU should reconsider its investments in expensive fossil fuel infrastructure that will continue our energy dependency and instead invest this in reducing energy consumption and developing our sustainable renewable energy capacity.

#### 4.5 Capacity and distributional aspects

- *How should the new framework ensure an equitable distribution of effort among Member States? What concrete steps can be taken to reflect their different abilities to implement climate and energy measures?*

We support the concept of distributing the effort equitably among member states to safeguard an ambitious binding economy-wide target that can drive the full range of cost-effective policies. Those member states with the capacity to make further reductions will be able to do so while trading mechanisms can be used to tap into reduction potentials also in countries with fewer resources.

- *What mechanisms can be envisaged to promote cooperation and a fair effort sharing between Member States whilst seeking the most cost-effective delivery of new climate and energy objectives?*

The current burden sharing model is based primarily on ability to pay - measured as GDP per capita. Ultimately the choice of a burden-sharing model is a political decision. However, it is useful to note that a number of alternative options exist, and some have the potential to lower the overall cost at EU level. A recent IEEP analysis evaluated burden sharing based on geography of most cost efficient mitigation potential. The results from this 'bottom up' approach showed that 7 Member States (Bulgaria, Estonia, Latvia, Lithuania, Poland, Romania and Malta) hold the highest amounts of untapped low cost CO<sub>2</sub>e reduction potential.

A second option with potential to lower cost at EU level is to base burden sharing as proportional to current or projected emissions. A new burden sharing model based on either of these 'bottom up' approaches could be reflected in a variety of target structures. In summary, a bottom up approach to burden sharing has potential to optimise cost at EU level and therefore be a political route through to higher target ambition. In order to be politically acceptable, any such new burden sharing model would need to be supported by financing mechanisms that compensate MSs that may receive increased proportional effort compared to the 2020 split. . Such approaches should therefore be further explored and presented and included in the anticipated 2030 White Paper.

- *Are new financing instruments or arrangements required to support the new 2030 framework?*

A number of financing instruments already exist from the NER300 fund to ETS auctioning revenues and the SET Plan. In order to ensure that sufficient funds are available, however, renewable energies and energy efficiency measures should be given priority in EU funding considerations as future technologies while subsidies for environmentally harmful technologies should be phased out.

To support or compensate Member States for new new burden sharing models for the GHG target (and potentially other targets), and to help unlock investment in a range of mitigation technologies, new financing mechanisms will be required. Using structural funds in a more targeted way is one possible solution. A system of structural funds for decarbonisation purposes should be explored. Alternatively, a system of intra-EU climate financing (an EU Joint Implementation type scheme) whereby target structures require cross border flows of climate finance to less wealthy MSs with most cost effective mitigation potential is also ripe for exploring.

The SET Plan should be adapted to new targets. The centralization of renewable energy has to be questioned. Civil society rights during the transformation period of the energy system should be maintained.

Finally, there are smaller amounts of untapped financing opportunities that exist within the Effort Sharing Decision. While we cannot rely on trading as the primary means of ensuring reductions post 2020, the Effort Sharing Decision contains its own system of allowances (AEAs) that could be used to greater effect. While currently given for free, a portion of them could be sold or auctioned (monetised), with this pool of funding being then scaled up/leveraged by the EIB or EBRD and reinvested into best practice mitigation projects in a range of non-ETS sectors such as building retrofits, transport electrification, and aerobic digesters to reduce methane.