

## EPPSA response to

### Green Paper: A 2030 framework for climate and energy policies

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#### **4. QUESTIONS**

##### **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 2030 framework should be as flexible as possible taking into account the different energy mixes of the Members States (MS) which therefore includes all the different types of energy generation technologies. Indeed, when designing the framework, important aspects to be taken into account are:

- on one side, the 2050 scenarios projected by the European Commission's 2050 Roadmap where it is clearly stated and demonstrated that thermal power will be present to various degrees in all scenarios considered. Thus, there is a need to take measures that will implement efficient and flexible thermal power generation technologies after 2020) and,
- on the other side, not to forget to incorporate multiple scenarios with variable economic growth assumptions.

It is also very important to match the roadmaps with international predictions (IEA, WEO) and work out the main differences in goals compared to the BRICs (Brazil, Russia, India, China) countries and the US, so as to better examine the similarities and differences between the policies and trajectories of the EU vis-a-vis the rest of the world.

##### **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?*

CO<sub>2</sub> reduction should be achieved via an energy efficiency target on generation side. Using Best Available Techniques (BATs) as laid out in the BAT conclusions of the Large Combustion Plant Best Reference Document (LCP BREF) Review Process is a guarantee for a resource efficient Europe. Implementing BAT in a legally binding Energy Efficiency target in power generation is a "low hanging fruit". It is important not to limit technological development – the reduction target (Green House Gases - GHG) can be achieved through the combination of several technologies and measures. A clear need for more coherence is needed:

- If BATs are derived and legally implemented, a consideration for power generation efficiency target resulting from this BAT conclusion should be applied.

One should never forget that GHG emissions reduction is the final aim! All technologies which can contribute must be taken into consideration when defining the details. This means that important contributions from biomass and Carbon Capture and Storage (CCS) cannot be neglected.

EPPSA believes that all targets should be legally binding in order to deliver planning security on an EU basis.

Most of the GHG emissions in the future and specifically its level increase will result from the BRICs countries. A framework for 2030 should include an EU strategy and set of actions that go beyond EU borders for getting commitment and targets from these countries and the creation of a global level playing field.

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

The 2020 targets have not incorporated the weak economic development in the EU and the effects of the economic crisis. Therefore any future targets should refer to a basic assumption for economic growth and should include correction formula for cases of deviation from this assumption.

Overlapping and on occasion mutually inconsistent targets, instruments and, in particular, support mechanisms (i.e., subsidies) as implemented differently by different Member States with the aim of more equitable effort-sharing, have unnecessarily increased the complexity of the system at costs far higher than reasonable, and put the entire system at risk.

- *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 CO<sub>2</sub> reductions for passenger cars and light commercial vehicles?*

The Industrial Emissions Directive (IED) and the Energy Efficiency Directive (EED) already provide targets and mechanisms for several sectors and industries, and a global agreement on targets for air and marine transportation should be considered (e.g.: when considering the transport of biomass from the US to the EU – the CO<sub>2</sub> emitted is not taken into account). Ensuring proper implementation (IED) or strengthening (EED) of current legislation is more important than adding more targets and instruments, given widely-acknowledged issues of coherence between multiple targets at multiple levels.

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

Innovation is helping to achieve EU targets at a lower cost and competitiveness is key to the EU and the economic development.

By specifically supporting all low carbon technologies (efficiency increase in existing power generation, CCS, biomass (co)firing...) and by allowing them to demonstrate their abilities and advantages vis-a-vis one another, the Innovation Union will be strengthened.

Viable technologies should prove themselves by economic success, and therefore the strengthening of markets and competition among technologies should be a key guiding principle for establishing the 2030 framework.

A specific action to reflect the changing degree of maturity of technologies could be a continuous reality check of targets against implementation measures through progress monitoring and continuous public and private investment in technologies, as opposed to static support to old and inefficient technologies (e.g. the import of solar panels far less efficient than BAT).

- *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?*

Security of supply is safeguarded by fast and flexible thermal power plants, and their vital role should not be neglected. Thus, the required availability of such plants, including nuclear, should be monitored. Furthermore, application of BAT (as well as efficiency improvements and CCS deployment) can contribute to significant CO<sub>2</sub> emissions reduction at the moment. However, a suitable market re-design is necessary, as such plants, though required, are not incentivised properly (if at all) by the current system.

#### **4.3. Instruments**

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

There should be more cohesion when linking different EU initiatives; for example, the SET Plan includes ‘advanced fossil fuel production’ as a strategic energy technology, and rightly so, yet this was not automatically included in the activity areas covered by the Horizon 2020 proposal.

Another crucial example is the linking of the EU flagship initiative ‘Resource Efficient Europe’ with the Seville Process and the BREF Review. Implementing BAT as described and prescribed in the BAT conclusions of, inter alia, the LCP BREF Review Process is a guarantee for a resource efficient Europe.

In addition, policy instruments on the EU level as well as on national levels should be coordinated, reviewed, and where necessary revised, with the aim of regaining a functioning market with minimum regulation.

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

The end result of CO<sub>2</sub> emission reduction is unaffected by the origin of the reduction, i.e. CO<sub>2</sub> avoided is CO<sub>2</sub> avoided, whether it is achieved through deployment of CCS, improved combustion efficiency (or simply BAT application), biomass combustion, or hydropower. Therefore, any specific measure at either EU or national level should not prescribe which technology is used to meet reduction targets; by removing subsidies to specific technologies, the most cost-efficient way of reducing CO<sub>2</sub> emissions will be implemented.

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

Investment is encouraged and mobilised by appropriate incentives; this is currently lacking in the energy-only market, as market forces have become distorted due to the presence of different support schemes for different technologies in different Member States. To correct for this, Member States are implementing or have implemented strategic reserves or other forms of capacity mechanisms, yet these often extending the lifetime of older plants without incentivising their improvement. On the EU level, a single capacity mechanism design is needed to prevent further fragmentation of the internal energy market. Optimally, this design should incentivise newer, more efficient, flexible, and part-load efficient thermal power generation.

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

Efficiency targets in thermal power generation should be pushed forward, as the transition towards a progressively decarbonised economy will not be possible without this technology.

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

EU research and innovation policies should support Research & Development (R&D) in flexible and efficient thermal power plants. If the right level of incentives for R&D brings flexibility of thermal power plant to a higher level, this flexibility would enable more intermittent energy sources to be included in the system.

(e.g.: developing components, materials with improved fatigue behaviour, combustions systems optimised for reduced emissions at part-load, flue gas parts for temperatures below acid dew points, etc.)

#### **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?*

EU-wide capacity mechanisms supporting flexible and efficient back-up power should be envisaged. An increase in R&D support is needed in order to avoid brain drain from the EU which would result in a loss of technological leadership (e.g. R&D is necessary in order to develop the new and flexible plants which are necessary to replace the over-aged full MCR plants. This is already an ongoing process but should be strengthened)

- *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?*

Carbon leakage is not necessarily relevant for the power industry in Europe.

However the non-market costs in the electricity price due to the high subsidies for Renewable Energy Sources (RES) are very high.

Market model revision for the electricity market is needed urgently.

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

An energy-only electricity market cannot deliver the necessary revenues to drive innovation and safeguard security of supply. Market revision is necessary for the EU's electricity sector.

Added financial support for some low carbon energy sources are the drivers of energy cost increases. If there is level playing field (no subsidies for any technology and binding GHG targets or a CO<sub>2</sub> tax) then the costs will decrease (e.g.: the numerous national subsidies ruin the market and disincentivise innovation).

- *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?*

X

- *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)?*

Do not hinder the progress of projects which are in development and which are expected to reach commercial operation date (COD) around the same time as a change in policy.

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

The EU should better protect European industries Intellectual Property Rights (IPRs) which are often disregarded during the tendering procedure for new power plants. Incentives for technology development are sought through benchmarking technology specifications and support innovation for all electricity generation technologies.

- *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?*

X

- *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?*

In line with the recent EC Communication on Energy Technologies & Innovation (COM (2013) 253), decision makers need to look at the whole energy system when setting priorities. The integration aspect and impact on the whole energy system should be emphasised, and a level playing field should be created for such technologies.

A smart design of capacity mechanisms which incentivises investments in BAT thermal power plants (flexible, efficient, part-load efficient) would lead to lower emissions of CO<sub>2</sub>, SO<sub>x</sub>, NO<sub>x</sub>, and Particulate Matter (PM), while at the same time promoting resource efficiency and securing grid stability. Furthermore, it would promote innovation, avoid brain drain, create sustainable jobs, and perpetuate the EU's technological leadership. Overall, such a design of capacity mechanisms would ensure a balanced energy mix, which in turn would promote security of supply through diversification of generation technologies.

#### 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?*

X

- *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?*

X

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

The EU should not look for additional financial instruments, but make sure that the ones in place function properly and deliver the expected added value.

Limiting the budget for energy-related activities in Horizon 2020 can have dramatic consequences for European industry and knowledge centres, thereby limiting European competitiveness and growth.

In any case, existing financing instruments or arrangements should, inter alia, support the introduction of Clean Coal Technologies and similar BAT technologies – *with emphasis on BAT* – to countries like BRICs. As the majority of future CO<sub>2</sub> emissions and fossil fuel consumption increases will occur in these countries, ensuring that the thermal power plants they build are BAT will have significant added value; indeed, supporting change in these countries may have more impact than fine-tuning the advanced European system. The vehicles for this could be the EBRD or the EIB.

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*The European Power Plant Suppliers Association (EPPSA) is the voice, at European level, of companies supplying power plants, components and services. EPPSA members, located throughout Europe, represent a leading sector of technology with more than 100 000 employees and annual revenue of over €30 billion. EPPSA actively promotes technologies for highly efficient and sustainable power generation in a carbon constrained world. EPPSA believes increased investment in Research, Development and Demonstration is a key factor in driving EU competitiveness as well as ensuring affordable near zero emission power supplies.*

*Virtually all power plants in the EU are built by members of EPPSA, or equipped with their components.*

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**Disclaimer:**

*This response was elaborated by EPPSA and reflects a consolidated view of its members. Individual EPPSA members may adopt different positions on certain topics from their corporate standpoint.*

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