

EPPSA Response to European Commission Public Consultation Energy Roadmap 2050

Directorate General for Energy

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Background

The European Commission will put forward an Energy Roadmap 2050 in the second part 2011. It will follow the Roadmap for a Low-Carbon Economy by 2050 which will focus on reductions in greenhouse gas emissions across the EU economy, in the context of the European Council's target of an 80–95% reduction in EU greenhouse gas emissions below 1990 levels by 2050.

The Energy Roadmap 2050 will aim at presenting different pathways to reach the objectives in the sector. It will address the established objectives of EU energy policy – sustainability, energy security and competitiveness, and focus on how energy security and competitiveness can be improved throughout the transition to a low-carbon energy system.

Preamble

EPPSA, representing European power plant suppliers, both manufacturing components for and constructing turnkey power plants, enthusiastically supports the an Energy Roadmap 2050, particularly for continuously shaping an EU inclusive energy policy an ensure a smooth transition to a low-carbon energy system.

EPPSA commends the European Institutions for the work and progress achieved up to this point and welcomes the opportunity to provide industry feedback as well as to offer their expertise in a constructive dialogue with the institutions concerned.

Questionnaire

❖ Question 1

How can the credibility of work on the transition to a low-carbon energy system in 2050 be ensured? (for example regular updating of projections using energy system models, focus on developments in technologies, level of expertise needed in each sector, ...).

A transition is a rather ambitious goal. On the other hand, EPPSA believes that only by setting sector- and technology-specific roadmaps will industry be able to reach levels of certainty and confidence that enable a smooth transition. Industry is looking for steady and reliable directions at political level. Market and price volatility are very frequently the result of unclear political targets and a mismatch between EU and national ambitions.

A switch to a low-carbon energy system involves a change in patterns of behaviour, namely from the demand side, that is only possible through education and public information. This step needs therefore to focus not only on new technologies and markets, but also public awareness. The level of expertise will be more and more sector-specific. A volatile atmosphere in Europe will only represent a serious hurdle to precise European skills and know-how endangering European competitiveness.

❖ Question 2

Looking forward, EU energy policy may be increasingly influenced by developments in global energy supply and demand, international cooperation on climate and initiatives taken outside the EU. Which developments should be considered in the Energy Roadmap 2050? On which do you think a stronger EU line is necessary?

- **Further development of an international framework for cooperation on climate**
- Take-up by other countries of EU model for action on climate change
- Further development of international standards, trade and investments framework
- **Global energy efficiency and demand developments**
- Global nuclear renaissance
- Global development of renewable energy
- **Global development of carbon capture and storage (CCS)**
- Price development in global fossil fuel markets
- Development of energy resources in neighbouring countries and infrastructures linking them with the EU market
- Other

❖ Question 3

What societal challenges and opportunities do you think are likely in Europe over the next decades as a result of changes in the EU and global energy system? On which ones do you think a stronger EU line is needed?

- **Economic and employment gains in some parts of the energy sector, in some parts of the EU, losses in other**
- Increased importance of access to high-performance energy infrastructure (eg smart meters and grids)
- Increased reliance on electricity
- Creation of sustainable and publicly acceptable energy sources
- Public acceptance of new infrastructures needed for the EU market (eg large storage technologies, pan-European grid)
- Increased scope for decentralized power generation and for local, integrated solutions for meeting energy, waste management and other needs of communities
- Public acceptance of need for increased energy efficiency
- Changed patterns of disruption in energy supplies, both fossil and electricity
- **Increases in energy prices and energy poverty**
- **Moving of energy-intensive industry to other parts of the world**
- Other

❖ **Question 4**

The EU's approach to energy policy is founded on regulation and an internal energy market providing competition, innovation, energy efficiency and development of resources including renewables, environmental sustainability, energy security and solidarity, and effective relations with external partners. Which are the main areas which you think might need further policy development at EU level, in a 2050 perspective? Please specify what you think is needed, references to supporting analyses welcome.

- Competition
- Carbon pricing
- Internalization of external costs
- RTD, innovation
- Energy efficiency
- Transport policy
- Renewables
- Financing
- Energy security
- Solidarity
- Development of infrastructure
- Effective relations with external partners
- Support for management of transition to affected regions, industries
- Other

❖ **Question 5**

Which milestones would you see as most useful to specify at this stage for the transition to a low-carbon energy system in Europe? References to supporting analyses welcome.

EPPSA sees **four top priorities** at this stage:

1) To ensure that Carbon Capture and Storage (CCS) is commercialised by 2020. Commercialisation has to start following demo projects without any delay to maintain skills, obtain full benefit from demos co-funded by the EU and accelerate deployment. So far no CCS-related activities are foreseen after the demo phase, which implies not only that a considerable reduction of CO₂ emissions will not take place before 2020 but also that European skilled engineers will unlikely be retained. This endangers European competitiveness;

2) A reliable CO₂ infrastructure must be put in place before the actual large scale deployment of CCS. The lack of public acceptance for transport and storage facilities is of concern;

3) Measures that will make the generation of electricity (supply side) more efficient are of utmost importance. The International Energy Agency (IEA) estimates that a 1ppt increase in power plant efficiency can deliver a 2.5% decrease in power sector emissions. There is substantial potential for improving thermal and system efficiency of Europe's power sector. A mix of incentives is urgently needed for new and existing plants, such as: mandatory Best Available Techniques (BAT) levels for new plants; stricter application of BAT levels to existing plants; tariff-based incentives for improving power plant efficiency and fiscal incentives for electricity generators to upgrade existing plants;

4) None of these priorities will be implemented without properly addressing the issue of

public awareness.

❖ Question 6

What are the most likely key drivers for the future energy mix in the EU?

- Global fossil fuel prices, compared to costs of domestic energy resources
- Long term security of supply
- Public subsidy
- Expectations about short-term security of supply
- **Political decisions by Member States**
- Gradual integration of internal energy market
- International framework for cooperation on climate
- **EU climate policy**
- **Public acceptance of new energy technologies and the related infrastructures**
- Other

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 €20 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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