

July 2010

EPPSA Response to European Commission Public Consultation Towards a new Energy Strategy for Europe 2011-2020

Directorate General for Energy

EPPSA, representing European power plant suppliers, both manufacturing components for and constructing turnkey power plants, enthusiastically supports the new EU Energy Action Plan for 2011-2020, particularly for continuously shaping an EU inclusive energy policy.

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.

In the stock taking document Towards a new Energy Strategy for Europe 2011-2020, the implementation of European energy legislation is defined as a key challenge to achieve an effective policy framework for energy. Simultaneously it elaborates on some of the policies and actions that will be necessary to meet this challenge. We comment below on those most relevant to EPPSA.

1. Political imperative behind EPPSA views

- Need for a coherent and strong external energy policy to speak with one voice with 3rd parties and to get as much weight as the US and China, who travel already today the world to assure long term energy and resources supply.
- Need to have a coherent and EU-wide approach when discussing transmission lines (e.g. Nabucco or South Stream) to avoid “divide and rule” possibilities for non-EU contractors as seen for the moment when discussing these two projects.
- Energy dialogues must be intensified and technical cooperation for low carbon technology pushed. At the same time, however, the background Intellectual Property (hereafter IP) brought into the cooperation project must be respected by the cooperation partner, following both the general rules established by competent authorities like the World Trade Organisation’s Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and any ad-hoc consortium agreement on how to deal with IP Rights (hereafter IPR). One low carbon technology with a huge potential for CO₂ reduction is Carbon Capture and Storage (hereafter CCS), as states the International Energy Agency (hereafter IEA). This technology comes today with energy penalties from 10-12%-points; reducing the efficiency from a state-of-the-art plant from 46% to 35% (EU average on the installed base is today 38%). If IPR protection is not strongly supported and respected it fails to foster innovation; under these conditions no 2nd generation of low carbon CCS technologies with substantially reduced losses will be developed since there would be no business case for European companies to do so. Please find attached a position paper on IPR protection.

(See attached file: EPPSA Joint Position Paper on Knowledge Sharing in the Framework of CCS Demonstration.pdf)

2. Security of Supply

- A balanced energy mix, including renewables as well as conventional fossil fuelled power generation, is the best way to meet a secure energy supply.
- Supply contracts or indigenous (shale) gas must assure the possibility to use high flexible gas plants to back up indigenous renewable intermittent energy sources.
- High efficient coal fired power plants with CCS technology guarantee electricity generation with no exposition to disruption of supply routes due to the very large and diversified coal offer in the world markets; and due to the fact that existing coal is an indigenous energy source in a number of Member States.

3. Comments on Energy Infrastructure

- A general problem nowadays is making people aware that technology is needed to reduce the environmental impact of anthropogenic activities, be it wind mills, network lines or CCS technologies (new build high efficient capture ready coal plants replacing old inefficient plants and developing storage places for CO₂).
This is possibly due to the fact that some societal players used large public campaigns to turn people against conventional power plants without giving broad and concrete information. Public susceptibility to emotional icons is now jeopardising the normal technological development and innovation and more and more campaigns are used against all “technologies”.
- In order to tackle this common problem a common coordinated reply from the local, national and European authorities is necessary to raise acceptance towards the need of these technologies. More effort and money must be put into public education to de-mystify the technologies needed to produce “green” electricity, without prejudice to any low carbon technology.
- Permitting procedures must be facilitated and a good balance must be found to include all valid concerns or objections. The possibility to delay these procedures because subjective views are against a specific technology must be avoided. It should rather be assessed the impact of the existing legislation on new industrial assets, as they are not always compatible with the interest of society thus generating a negative impact on employment, taxes...

4. CO₂ storage infrastructure

- In order to take advantage of the huge potential CCS has to offer according to different EU and IEA studies, a reliable CO₂ infrastructure must be put in place before the actual large scale deployment of CCS starts to build trust for the investor. This can either be done by establishing a CO₂ pipeline network, or in a more flexible way, by using ships to transport the liquefied CO₂ to the storage sites.
- Operators must already know where to store the CO₂ and how to get it to the storage place when taking the decision of building a plant. Therefore CO₂ pipelines or ships must be part

of any future energy infrastructure and storage sites must be defined as soon as possible. Please find attached EPPSA's position paper on Energy Infrastructure for information.

(See attached file: EPPSA Position on European Energy Infrastructures.pdf)

5. Efficiency Increase

- EPPSA welcomes the Institutions efforts to tackle the efficient use of energy with energy labels. We nonetheless believe that an efficient conversion from fuel to electricity or heat is also mandatory.
 - By setting minimum efficiency standards for new plants as well as a minimum efficiency standard for existing plants the maximum contribution to CO₂ reduction is guaranteed. Global CO₂ can be reduced by 35% if all old hard coal plants will be put on state of the art level.
 - The misuse of combined heat and power (CHP) in power plants drives to enormous energy losses. By setting minimum standards for heat use, and by supporting the erection of new CHP power plants in strategic locations one can off-set the oil use for domestic heating and considerable CO₂ reduction can be achieved through the significant energy saving potential of CHP.
 - This should also be pushed from a sustainable point of view, as mentioned in the Communication COM 670 (2005), the Thematic Strategy on the sustainable use of natural resources, by generating more usable energy per unit of fossil fuel resource used.
- 6.** Continuous support for CCS technology is necessary to avoid dip in European research capacity and European skilled engineers, which are needed for a fast CCS deployment after the successful CCS demonstration phase. So far no CCS-related activities are foreseen after the demo phase, which implies that no considerable reduction of CO₂ emissions will take place before 2020 and an inevitable brain drain since know-how and resources will be lost after commissioning demo plants. If no public funding is available to promote these activities industry will of course assume its responsibility, but the development and deployment speed will not be the same. Given the fact that the latest IPCC findings clearly state that well-timed interventions are essential for avoiding costly and irreversible climate changes time is definitely an important factor!

7. Legal Framework

- Without a stable legal framework in place no investment in low CO₂ technology will occur. Some Member States openly discuss the possibility to retroactively changing their support schemes, the changing constraints on CO₂ emissions are not valid long enough to match the long term investment calculation of over 40 years. It is therefore necessary to create a planning and an economic certainty.
- Lock-in must be avoided by forcing any type of new fossil fuel plant to be built capture ready. In the UK, for instance, gas plants release nowadays more CO₂ than coal plants, so a

shift from one fossil fuel to another does not solve the problem. A roadmap of possible legal actions pushing lower CO₂ emissions is attached to this document.

(See attached file: EPPSA CCS Roadmap.pdf)

8. Research and development

- Given the huge need to make our technologies more competitive to address the CO₂ reduction, and given the fact that these developments must be made very fast, it is necessary to channel financing to specific research and technological developments, including demonstration, of all low carbon technologies.
- This could be done by using the FP8 funds, but faster means should be made available, possibly through structural funds or other existing Community financing, in order to start these activities today. However, this will probably not be enough. There is a real need for a long-term funding for the development and implementation of safe, reliable and economic and carbon lean energy supply in Europe, which must be supplied by European companies.
- In this context a clear priority must be given to technologies identified in the SET-Plan and the related European Industrial Initiatives. They are the key to future energy technology.

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The European Power Plant Suppliers Association (EPPSA) is the voice, at a European level, of companies both manufacturing components for and constructing turnkey power plants. EPPSA's members, throughout Europe, represent a leading branch of technology with more than 100 000 employees and an annual turnover of over 20 billion €. It actively promotes projects aimed at increasing efficient and environmentally friendly improvements in power generation, particularly zero or near zero emission power generation. EPPSA believes increased investment in Research, Development and Demonstration (R, D & D) is a key factor in driving EU competitiveness as well as assuring a power supply for European consumers.

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List of attached files:

- *EPPSA Joint Position Paper on Knowledge Sharing in the Framework of CCS Demonstration.pdf*
- *EPPSA Position on European Energy Infrastructures.pdf*
- *EPPSA CCS Roadmap.pdf*