

European Commission
Directorate-General Energy
Unit C1 – Renewables and CCS
Rue De Mot 24
B-1049 Bruxelles
Belgium

Consultation on the future of Carbon Capture and Storage in Europe – COM(2913) 180

Energy Norway - registration ID 50098025830-01 - is a non-profit industry organization representing about 270 companies involved in the production, distribution and trading of electricity and district heating in Norway.

Energy Norway represents members that base their business almost 100 % on renewable energy sources and deliver electricity and district heating and cooling.

Most studies of the future of the energy system in Europe meeting the requirements of climate change state that CCS technology will be part of the solution. Demonstration and commercialization of this technology is therefore necessary to reach the ambitious targets for reduction of emissions of CO₂.

Below we present our comments to the questions raised in chapter 5 in the Communication on the future of carbon capture and storage in Europe.

1) Should Member States that currently have a high share of coal and gas in their energy mix as well as in industrial processes, and that have not yet done so, be required to:

a) develop a clear roadmap on how to restructure their electricity generation sector towards non-carbon emitting fuels (renewables or renewables) by 2050

b) develop a national strategy to prepare for the deployment of CCS technology

The European power sector aims to be almost CO₂-free by 2050. All investments in the energy sector have long lead times. All investments we plan today will be in operation in 2030 and most of them also in 2050. Therefore all Member States need to start developing a roadmap now on how to restructure their electricity supply system. It should be technology neutral as long as it satisfies the key target of nearly zero emission from the power sector. CCS will be an important share of the solution.

2) How should the ETS be re-structured, so that it could also provide meaningful incentives for CCS deployment? Should this be complemented by using instruments based on auctioning revenues, similar to NER300?

Energy Norway believes that there as soon as possible should be implemented changes in the ETS that help to restore ETS as a driving force for a de-carbonized Europe. Energy Norway has supported the European Commission's proposal for back loading and for structural changes in the ETS. We recommend tightening of the linear reduction factor for the emission ceiling faster than the current 1,74-factor with start in 2020 in order to meet reduction target in 2030 and a 80-95% reduction target for 2050.

A number of CCS-demonstration plants need to be financed and we support the idea of using a mechanism like the NER300 for this purpose.

3) Should the Commission propose other means of support or consider other policy measures to pave the road towards early deployment, by:

a) support through auctioning recycling or other funding approaches? Yes – but should be technology neutral

b) an emissions performance standard? No, early deployment to contribute to commercialisation of the CCS-technology should be secured through extension of the NER300 mechanism. The key driver to build CCS is the reward from the market and as long as CCS will not be rewarded on the market there will be no development, with or without EPS. Therefore – an efficient and integrated power and ETS-market should be the preferred solution.

c) a CCS-certificate system? No, will influence ETS and contribute to lower the price of allowances – parallel to what we have experienced (and we want to avoid) with support to renewables

4) Should energy utilities henceforth be required to install CCS-ready equipment for all new investments (coal and potentially also gas) in order to facilitate the necessary CCS retrofit?

Yes – because every fossil fuelled power plant built the coming years will operate in 2050, and planning for CCS already now, will increase the possibility to reach the reduction target in time

5) Should fossil fuel providers contribute to CCS demonstration and deployment through specific measures that ensure additional financing?

No - however - the major oil and gas companies have first class experience and knowledge on storage and transport of gas – knowledge that also can be used for transport and storage of CO₂. These companies have over the last ten years developed substantial experience which can be utilized for CO₂ transport and storage for the implementation of CCS on power plants. Technology competence for carbon capture is the market for technology suppliers and is necessarily not on the top of the agenda in the oil and gas companies. Development of CCS-technology should therefore be a combined effort between power companies, technology suppliers and oil and gas companies. The work carried out at the test-centre for CCS at Mongstad in Norway will give valuable knowledge for this necessary development.

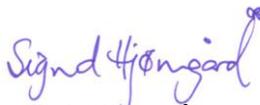
6) What are the main obstacles to ensuring sufficient demonstration of CCS in the EU?

As far as we can see – too low CO₂-prices in ETS resulting in too low power prices, lack of necessary risk capital to support the early movers and public acceptance of the technology. The first plants need to be deployed near the coast with storage subsea (large storage capacities are identified in the North Sea) to build confidence in the technology.

7) How can public acceptance for CCS be increased?

Only through successful demonstration plants with storage subsea – combined with extensive monitoring, verification and communication programs.

Best regards
Energy Norway



Sigrid Hjørnegård
Executive Director Renewable Energy



Dag R Christensen
Senior Adviser Energy and Climate and climate change