

Developing and applying carbon capture and storage technology in Europe. Implementation report 2013

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The Committee on the Environment, Public Health and Food Safety adopted the own-initiative report by Chris DAVIES (ALDE, UK) on implementation report 2013: developing and applying carbon capture and storage technology in Europe.

The Committee on the Environment, Public Health and Food Safety, exercising its prerogative as an association committee in accordance with [Rule 50 of the Parliament's Rules of Procedure](#), was also consulted for an opinion on the report.

Carbon Capture and Storage (CCS) is a promising technology that may be the only means of achieving significant CO₂ reductions from industrial sources. It is necessary to deliver almost 20 % of the CO₂ reductions needed by 2050, and if CCS is not deployed, an additional 40 % in electricity investment will be needed to prevent a temperature rise in excess of 2°C.

In 2007 EU heads of government aspired to have up to 12 CCS demonstration plants in operation by 2015, but as their financial viability depended on there being a high carbon price these ambitions cannot now be realised. The **EU is losing its technological lead** in CCS and – with only one project still being considered for NER300 funding, and European Energy Programme for Recovery projects having been terminated or suspended – now has **no effective policy** to promote development of CCS flagship projects.

Raising ambitions: Members recognised that CCS deployment has the potential to allow the EU to meet its 2050 lowcarbon aspirations at a low cost and that it is necessary in particular for decarbonising high CO₂ emitting industries. They affirmed the urgent need to **develop a range of full-chain CCS flagship projects** so as to identify the best and economically most advantageous solutions. Given the substantial investment required, instruments in addition to the EU emissions trading system (ETS) are needed to foster research and the technical and safe application of CCS.

The Commission is called upon to :

- encourage CCS deployment not only in connection with coal and gas power generation but also in a range of industrial sectors such as chemicals, metallurgy, iron and steel, cement and refineries;
- address the issue of CCS deployment within the 2030 climate and energy framework, and should bring forward proposals for promoting the early construction of CCS flagship projects;
- adopt farreaching measures to foster international cooperation and to promote the use of technologies for mitigating the effects of climate change.

Leading role of Member States: the report recognised that CCS deployment cannot take place without support from Member States and private investors, and that the former have an absolute and sovereign right to encourage or prevent its application. It reminded the Commission that Parliament has called for legislation to require every Member State to produce a 2050 low-carbon strategy and suggested that these national roadmaps should be updated at five-yearly intervals.

EU regulation and funding: Members called on the Commission to consider **creating an EU industrial innovation investment fund** to support the development of innovative climate-friendly technologies

including CCS flagship projects, other innovative low-carbon technologies, and measures to reduce CO2 emissions from energy-intensive industries and their processes which could be financed from the sale of allowances from the EU ETS. This should not lead to a new demand on the EU budget.

Longer-term CCS support should be derived principally from an appropriate CO2 price signal and any interim financial support required from Member States or the EU would best be derived from the production and import of the fossil fuels mainly responsible for CO2 emissions. The Commission should facilitate debate on possible options by carrying out an **analysis of systems requiring the purchase of CCS certificates** proving the CO2 emissions avoided, through storage or treatment, in proportion to the CO2 embedded within the fossil fuels placed on the market.

Guidelines for Member States should be prepared with regard to the **various financial and other mechanisms** which they could deploy to support and incentivise CCS development, and to access support funds from within the EU budget.

The report suggested that the Commission should consider how use could be made of the **EU Coal and Steel Research Fund** to support CCS pre-commercial demonstration in these industrial sectors.

Transport and storage sites: Members acknowledged that significant financial savings can be made by establishing **CCS clusters** of industrial installations served by shared pipelines or other CO2 transport systems. They emphasised that Member States seeking the deployment of CCS may have a direct role to play in ensuring the provision of CCS transport and determining the availability of storage infrastructure.

They supported EU measures and funding to establish a common **definition of a storage site's character**, identify appropriate storage locations across Europe, develop pilot projects, and prepare sites for commercial-scale storage on the territory of supportive Member States.

Storage liabilities: Members noted the concern of some potential CCS developers that the **requirements and liabilities** placed upon them for the geological storage of CO2 in sites approved by Member States are **unquantifiable and excessive**. Any **accidental release** of CO2 from a storage site must be prevented and the environmental integrity of the project protected. The Commission should offer guidance regarding the degree to which the details of compliance arrangements should be determined in advance through negotiation between potential operators and the competent authorities of the Member States concerned. The report suggested that the CCS Directive requirement that in the event of CO2 leakage operators must surrender allowances does not take into account the costly remedial efforts required. Members feared that this obligation puts a **further obstacle in the way of CCS development** and called on the Commission to propose a revision in its assessment of the CCS Directive.

Capture and storage-ready status: Members insisted that it is no longer acceptable to invest in power plants or industrial installations likely to emit large quantities of CO2 without regard to how this will be reduced in future. The Commission and the Member States to improve communication in order to **raise public awareness** of CCS.

The report asked the Commission to analyse and submit a report on the level of CCS which would need to be deployed by certain key dates, for example 2030, in order for CCS to make a significant contribution to 2050 emissions reduction targets.

Carbon capture and use: whilst welcoming the various initiatives to make use of CO2 in ways that reduce overall emissions into the atmosphere and create alternative products such as sustainable transport fuels, Members called in particular for the Commission to **assess urgently the potential for the secure use of CO2** to enhance oil and gas recovery within the EU.