

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

2013/2079(INI) - 14/01/2014 - Text adopted by Parliament, single reading

The European Parliament adopted by 524 votes to 141 with 25 abstentions a resolution on implementation report 2013: developing and applying carbon capture and storage technology in Europe.

Carbon Capture and Storage (CCS) might be the only means of achieving significant CO<sub>2</sub> reductions from industrial sources, yet required investment and industrial-scale demonstration to promote innovation, secure cost reductions, and confirm its environmental safety. The International Energy Agency suggested that CCS was necessary to deliver almost 20 % of the CO<sub>2</sub> reductions needed by 2050, and claimed that if CCS is not deployed, an additional 40 % in electricity investment would 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 low-carbon aspirations at least cost and that it was necessary in particular for decarbonising high CO<sub>2</sub> emitting industries. They believed that it might also contribute to the diversity and security of energy supplies while creating employment opportunities. Parliament 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, and called on the Commission to set goals for the achievement of this objective. It called on the Commission 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. Members insisted that the Commission should 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.

**Leading role of Member States:** Parliament emphasised that, in the absence of a high carbon price, Member States that wish to promote deployment of CCS have the key role to play in providing a transparent revenue stream and such other financial support as may be necessary to secure the construction and operation of flagship projects, while enabling operators who face high first-mover costs to secure a return on their investment. **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 CO<sub>2</sub> 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 CO<sub>2</sub> price signal. The Commission should facilitate debate on possible options by carrying out an analysis of systems requiring the purchase of CCS certificates proving the CO<sub>2</sub> emissions avoided, through storage or treatment, in proportion to the CO<sub>2</sub> 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.

**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 CO<sub>2</sub> 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 CO<sub>2</sub> in sites approved by Member States were unquantifiable and excessive. Any accidental release of CO<sub>2</sub> 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. Parliament pointed out that the CCS Directive gave Member States wide flexibility to determine the financial security to be provided by CCS operators and the period before which responsibility for a closed storage site was transferred to the competent authority. It suggested that Member States that seek to promote CCS development would have to play a more entrepreneurial role and accept a greater share of the responsibilities than presently understood. It called on the Commission to revise its CCS Directive guidance documents to clarify these points. Members also suggested that the CCS Directive requirement that in the event of CO<sub>2</sub> leakage operators must surrender allowances did not take into account the costly remedial efforts required. They 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:** the Commission and Member States to improve communication in order to raise public awareness of CCS. Parliament also asked the Commission to 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 CO<sub>2</sub> 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 CO<sub>2</sub> to enhance oil and gas recovery within the EU.