EUROPEAN PARLIAMENT

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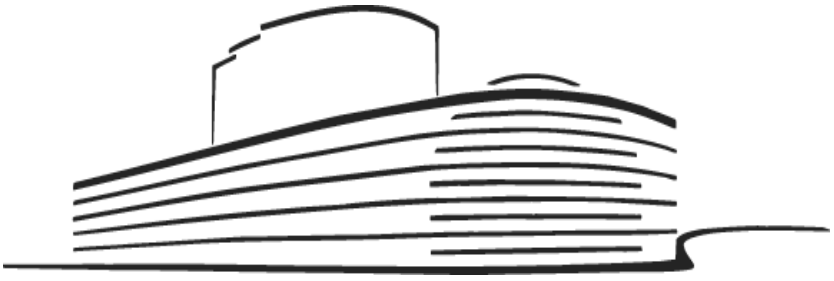
14 January 2014



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# P7_TA-PROV(2014)0009

## Carbon capture and storage technology

**European Parliament resolution of 14 January 2014 on implementation report 2013: developing and applying carbon capture and storage technology in Europe (2013/2079(INI))**

*The European Parliament*,

– having regard to Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006[1] (the CCS Directive),

– having regard to the Commission Communication of 27 March 2013 on the Future of Carbon Capture and Storage in Europe (COM(2013)0180),

– having regard to the Commission Green Paper of 27 March 2013 entitled 'A 2030 framework for climate and energy policies' (COM(2013)0169),

– having regard to the EU climate and energy package of December 2008,

– having regard to its resolution of 15 March 2012 on a Roadmap for moving to a competitive low carbon economy in 2050[2],

– having regard to Rule 48 of its Rules of Procedure,

– having regard to the report of the Committee on the Environment, Public Health and Food Safety and the opinion of the Committee on Industry, Research and Energy (A7-0430/2013),

A. whereas Carbon Capture and Storage (CCS) is a promising technology that may be the only means of achieving significant $CO_2$ reductions from industrial sources and has the potential to significantly reduce $CO_2$ emissions from fossil fuel power plants, yet requires investment and industrial-scale demonstration to promote innovation, secure cost reductions, and confirm its environmental safety;

B. whereas the International Energy Agency predicts that fossil fuels will continue to provide 75 % of the global energy mix by 2030, suggests that CCS is necessary to deliver almost 20 % of the $CO_2$ reductions needed by 2050, and claims that if CCS is not deployed, an additional 40 % in electricity investment will be needed to prevent a temperature rise in excess of 2°C;

C. whereas CCS is the only technology able to provide significant $CO_2$ reductions from major industrial sectors including steel, cement, and chemicals and oil refineries, and in conjunction with the use of biomass for electricity generation has the potential to promote a

[1] OJ L140, 5.6.2009, p. 114.
[2] OJ C 251 E, 31.8.2013, p. 75.

net reduction in $CO_2$ emissions;

D. whereas based on current usage levels of fossil fuels and future projections for the use of the same, CCS would seem to be essential to achieving the target of keeping the rise in global temperatures below 2°C;

E. whereas the development of CCS should be regarded as a strategy that is complementary to the development of renewables in the transition to a low-carbon economy;

F. whereas 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;

G. whereas development of this technology should not serve as an incentive to increase the share of fossil fuel power plants;

H. whereas 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;

I. whereas the general public should always receive a full and clear picture of the advantages of and possible threats from CCS before any projects are developed at commercial scale;

***Raising ambitions***

1. Recognises that CCS deployment has the potential to allow the EU to meet its 2050 low-carbon aspirations at least cost and that it is necessary in particular for decarbonising high $CO_2$ emitting industries; believes that it may also contribute to the diversity and security of energy supplies while maintaining and creating employment opportunities; affirms 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 calls on the Commission to set goals for the achievement of this objective; appreciates that, 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;

2. Believes that although CCS might offer part of the solution to reach the goals for limiting greenhouse gas emissions, it would be even better if the Member States could reach these goals without the use of CCS;

3. Calls 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; insists 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;

4. Calls on the Commission and the Member States to adopt far-reaching measures to foster international cooperation and to promote the use of technologies for mitigating the effects of climate change, in order to point expanding economies in the direction of developmental alternatives including, for example, CCS, which are less carbon intensive;

5. Believes that the Steel Action Plan should make specific reference to the need to develop CCS flagship projects within this sector;

***Leading role of Member States***

6. Recognises 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; notes that while certain Member States have indicated that they do not expect CCS to play a role in their emissions reduction strategies, this should not to deter initiatives by those who consider that technology can play an effective role in their transition to a low-carbon economy;

7. Reminds the Commission that Parliament has called for legislation to require every Member State to produce a 2050 low-carbon strategy; suggests that these national roadmaps should be updated at five-yearly intervals; expects them to indicate whether and how CCS is to be deployed by the Member States concerned;

8. Calls on the Commission to propose that Member States should be required to prepare and publish national low-carbon roadmaps prior to the United Nations Framework Convention on Climate Change conference in 2015;

9. Emphasises 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; notes that appropriate regulatory arrangements may also be required if CCS is to be deployed on a commercial basis; recognises the necessity of environmental safety standards being met;

***EU regulation and funding***

10. Calls 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 $CO_2$ emissions from energy-intensive industries and their processes; suggests that this could be financed from the sale of allowances from the EU ETS; underlines that this should not lead to a new demand on the EU budget; recognises that in framing the parameters for the use of such a fund, account should be taken of experience gained from the limitations and inflexibility of the NER300 funding mechanism;

11. Believes that CCS policies and strategies should only be framed on the basis of sound evidence of the positive impact that they will have on the environment, on the stability of EU industry, on employment in the EU and on the affordability of energy prices for the public and for industry;

12. Believes that longer-term CCS support should be derived principally from an appropriate $CO_2$ price signal; suggests that the Commission should facilitate debate on possible options by carrying out an analysis of systems requiring the purchase of CCS certificates proving the $CO_2$ emissions avoided, through storage or treatment, in proportion to the $CO_2$ embedded within the fossil fuels placed on the market;

13. Requests that the Commission prepare guidelines for Member States 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;

14. Notes the decision of the European Investment Bank to prohibit lending for the construction of coal power plants that would emit more than 550g $CO_2$/kWh; emphasises that without the financial support to develop CCS, the introduction of stringent emissions performance standards will be essential;

15. Suggests 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;

16. Appreciates the encouragement given by the Norwegian Government to CCS projects within the EU and expresses the wish that in negotiating the next programming period a request be made for funding support for CCS flagship projects;

17. Requests that the Commission assess the benefits of adopting and developing the Ciuden CCS pilot project in Spain, which has received some EUR 100 million in support funding from EU sources, as a European test facility for capture technologies and inland $CO_2$ storage;

***Transport and storage sites***

18. Acknowledges that significant financial savings can be made by establishing CCS clusters of industrial installations served by shared pipelines or other $CO_2$ transport systems; suggests that plant operators cannot generally be expected to take into account the future requirements of other installations, and that major investments such as trunk pipelines intended eventually to carry $CO_2$ from multiple sources could be developed through public-private sector partnerships; emphasises 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;

19. Calls for closer cooperation with the United States and Canada in the form of an exchange of expertise and good practices in the light of CCS activities undertaken in the context of the US-Canada Clean Energy Dialogue;

20. Insists that new low-carbon technologies should be regarded as complementary and not as being in competition with one another; stresses the fact that both renewable and CCS have roles to play in the future EU energy mix and that the latter should not be to the detriment of achieving the EU's mandatory renewables development target; calls for measures to promote the use of both technologies to be proposed within the 2030 climate and energy framework;

21. Notes that Europe's geology may provide an abundance of potential sites for the permanent sequestration of large quantities of $CO_2$, not least below the North Sea far from human habitation; supports 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;

22. Calls on the Commission to promote the production of a European atlas of potential $CO_2$

storage sites;

23. Recognises that Article 6 of the London Protocol has been amended so that it no longer needs to provide a barrier to the cross-border transportation of $CO_2$ for sequestration; notes, however, that ratification of this change could take many years; calls on the Commission to clarify whether there are circumstances in which it will permit the cross-border transfer of $CO_2$ prior to ratification of the Protocol;

***Storage liabilities***

24. Notes the concern of some potential CCS developers that the requirements and liabilities placed upon them for the geological storage of $CO_2$ in sites approved by Member States are unquantifiable and excessive; recalls, however, the rules on responsibility for the storage of $CO_2$ laid down in the Directive on the geological storage of $CO_2$ (the CCS Directive) and the obligations incumbent upon holders of a storage permit;

25. Fully accepts that any accidental release of $CO_2$ from a storage site must be prevented and the environmental integrity of the project protected in accordance with Article 1 of the CCS Directive; calls on the Commission to 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;

26. Points out that the CCS Directive gives 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 is transferred to the competent authority; suggests that Member States that seek to promote CCS development will have to play a more entrepreneurial role and accept a greater share of the responsibilities than presently understood;

27. Calls on the Commission to revise its CCS Directive guidance documents to clarify these points;

28. Suggests that the CCS Directive requirement that in the event of $CO_2$ leakage operators must surrender allowances does not take into account the costly remedial efforts required; fears that this obligation puts a further obstacle in the way of CCS development; calls on the Commission to propose a revision in its assessment of the CCS Directive;

***Capture and storage-ready status***

29. Insists that it is no longer acceptable to invest in power plants or industrial installations likely to emit large quantities of $CO_2$ without regard to how this will be reduced in future;

30. Highlights that, according to a Eurobarometer survey, the European population remains largely unaware of CCS but that those who are informed are more likely to support it; Calls on the Commission and the Member States to improve communication in order to raise public awareness of CCS, and believes that a wider understanding of CCS is crucial to public acceptance, and thus to the delivery, of CCS;

31. Notes that Member States are permitted to evaluate in different ways the provisions of the CCS Directive requiring an assessment of capture, transport and storage capability to be made prior to the granting of operating licences for power plants;

32. Calls on the Commission to suggest that it can be a condition – in the Member States that have decided to make use of CCS technology – of construction that adequate preparations for the implementation of CCS, or of other measures to reduce $CO_2$ emissions significantly, be made for all new fossil fuel power plants and high-emission industrial installations above an agreed size, except in the case of electricity demand peak shavers or when a Member State has complied with a legislative requirement to publish a roadmap indicating how it will meet its 2050 $CO_2$ reduction goals without the use of CCS;

33. Asks 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***

34. Welcomes the various initiatives to make use of $CO_2$ in ways that reduce overall emissions into the atmosphere and create alternative products such as sustainable transport fuels; calls in particular for the Commission to assess urgently the potential for the secure use of $CO_2$ to enhance oil and gas recovery within the EU;

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35. Instructs its President to forward this resolution to the Council and the Commission.