

Geological storage of carbon dioxide (CO₂)

2008/0015(COD) - 07/10/2008

The Committee on the Environment, Public Health and Food Safety adopted the report by Chris **DAVIES** (ALDE, UK) amending the proposal for a directive of the European Parliament and of the Council on the geological storage of carbon dioxide and amending Council Directives 85/337/EEC, 96/61/EC, Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC and Regulation (EC) No 1013/2006.

The main amendments adopted by the Committee (first reading of the co-decision procedure) are as follows:

Purpose: MEPs wish to point out that the Directive establishes a legal framework for the transport and environmentally safe geological storage of carbon dioxide (CO₂) to contribute to the fight against climate change. The purpose of geological storage is to provide an alternative to the release of CO₂ into the atmosphere by **containing it permanently and safely underground** in such a way as to prevent, or where that is not feasible, to eliminate as far as possible any negative impact on human health or the environment. Enhanced hydrocarbon recovery shall be excluded from the scope of this Directive.

Scope and prohibition: the Directive shall not apply to geological storage of CO₂ undertaken for research, development or testing of new products and processes, nor to the geological storage of CO₂ or gas mixtures containing CO₂ being injected for the purpose of and as a measure to increase the exploitation of hydrocarbons in the storage site. It shall, however, apply to demonstration and commercial projects with a total intended storage of 100 kilotonnes or more. Storage on the sea bed shall not be permitted.

Selection of storage sites: Member States should make a realistic assessment of the storage capacity available within their territory and send these assessments to the Commission before 2012. This information should be made public. The storage site selected should not jeopardise other energy options such as renewables or the security of the EU's energy supply. Moreover, the Directive shall not affect essential economic interests of Member States related to hydrocarbon reservoirs.

Exploration permits: the procedure for granting exploration permits must be non-discriminatory and take account of the fact that it is directly linked to the procedure for the subsequent award of storage permits. Exploration permits shall be granted for a limited volume area and a maximum three-year period, to enable the activities for which the exploration permit has been granted to be carried out. The period of validity of an exploration permit shall not exceed the estimated time required to carry out the activity for which it was issued. A competent authority may extend an exploration permit if its period of validity is not sufficient to complete the activity in question and the activity has been carried out in accordance with the exploration permit. In this case, an extension shall be for a period of no more than three years. Member States shall retain the right to refuse storage permits on serious grounds. Lastly, MEPs believe that the explorer, who will generally have made substantial investments, should be favoured over competitors in the granting of the storage permit.

Applications for storage permits: applications to the competent authority for storage permits shall include at least the following information: (i) a financial assessment of the cost of capturing and safely storing CO₂; (ii) the total quantity of CO₂ which may be injected and stored, depending on the characteristics of the storage area, as well as the prospective sources, composition of CO₂ streams; (iii) injection rates and pressures, the location of injection facilities and the transport methods; (iv) the description of measures to prevent significant irregularities; (v) the availability of transport linking the site with prospective capture points, as well as its economic viability, having regard to the distance of the

storage site from such points; (vi) proof of financial standing of the applicant and of its ability to put in place the adequate security or other equivalent provision; (vii) a proposed public information and consultation plan.

Commission review of draft storage permits: MEPs recommend that Member States introduce the following procedure:

1. applicants for storage permits shall provide the competent authority with two copies of all documentation required;
2. the competent authority shall, upon receipt of the documentation from the applicant, provide the Commission with details of each application for a permit and all other material that shall be taken into account by the competent authority when it seeks to make a decision on the award of a storage permit;
3. the Commission shall confirm receipt of the required documentation to the competent authority upon its arrival;
4. the competent authority shall inform the Commission of any draft storage permit decision. The Commission shall, within three calendar months of the date of submission, issue a consultative opinion on the draft permit;
5. a decision by a Member State to award a storage permit shall be made public as shall any consultative opinion issued by the Commission.

Transfer of responsibility: where a storage site has been closed, the responsibility for the closed site, including all ensuing legal obligations, shall remain with the operator for a post-closure interim period of **at least 50 years**. Transfer to the competent authority shall only occur at the end of this period if and when all available evidence indicates that the stored CO₂ will be completely contained for the indefinite future and the criteria laid down in the storage permit for transferring responsibility have been met.

Monitoring: in the case of geological storage under the seabed, the monitoring requirements shall be adapted to the uncertainty and operational difficulties associated with managing CCS technology in the marine environment.

Financial mechanism: in Member States which allow storage on their territory, a financial instrument shall be established and maintained through annual contributions paid by storage site operators upon commencement of CO₂ injection and until the closure of the storage site. The fund shall be used to cover the costs of monitoring, oversight and remediation incurred by the competent authority after transfer of responsibility.

“Schwarzenegger Clause”: the Committee on the Environment, Public Health and Food Safety adopted a new provision, entitled the “Schwarzenegger clause”, which introduces an **emissions performance standard** for new power-producing combustion plants with a rated output of 300 MW or more. MEPs point out that, after 2015, these large power-producing combustion plants will be permitted to emit a maximum of 500 g of CO₂/kWh based on an annual average. By 31 December 2014, the Commission shall conduct a review of the provisions. The review shall consider in particular the emission performance standard, the possibility of widening the scope to include existing installations and installations other than those generating electricity, and of introducing derogations to address the concerns of Member States that may be unable to comply with the requirement referred to in the Directive.

Commission reports: on the basis of experience acquired with the capture, geological sequestration and transport of carbon and in the light of changes in the international situation, the Commission shall, by 31 December 2012, publish a report on progress with the development and deployment of technology enabling the capture and storage of CO₂ produced in association with power generation from fossil fuel sources. The Commission shall carry out a review of the Directive, taking into account technical progress and the most recent scientific knowledge.

Transposition into national legislation: lastly, MEPs want to give Member States not one but two years to transpose the Directive into national legislation after its publication.