

Geological storage of carbon dioxide (CO₂)

2008/0015(COD) - 23/01/2008 - Legislative proposal

PURPOSE: to establish a legal framework for the geological storage of carbon dioxide (CO₂).

PROPOSED ACT: Directive of the European Parliament and of the Council.

BACKGROUND: on 10 January 2007, the Commission adopted an integrated package of measures in the area of energy and climate change, inviting the Council and the European Parliament to approve:

- an EU commitment to reduce greenhouse gas emissions by at least 20% by 2020 compared to 1990 levels, as well as the aim for a 30% reduction by 2020, subject to the conclusion of an international agreement on climate change;
- a binding target for the EU of a 20% share of renewable energy sources in energy consumption by 2020, and a 10% target for biofuels.

This strategy was approved by the European Parliament and EU leaders during the March 2007 European Council. The European Council invited the Commission to present concrete proposals, particularly on the provisions for sharing the effort between Member States to achieve this objective. The series of measures presented is the response to this invitation. It includes a proposed set of key interdependent measures to be taken, as outlined below:

- a proposal for a directive amending Directive 2003/87/EC, to improve and extend the European Union Greenhouse Gas Emission Trading Scheme (see [COD/2008/0013](#));
- a proposal for a decision on the effort to be made by Member States to reduce their greenhouse gas emissions, in order to respect the Community's commitments to reduce these emissions by 2020 (see [COD/2008/0014](#));
- a proposal for a directive aiming to promote renewable energy (see [COD/2008/0016](#)).

Included among the proposals that make up this set of measures are: a proposal for a regulatory framework on carbon capture and storage; a communication on the demonstration of carbon capture and storage; and a new Community framework on State aid in the area of the environment.

CONTENT: Energy efficiency and renewables are in the long term the most sustainable solutions both for security of supply and climate. However, we cannot reduce EU or world CO₂ emissions by 50% in 2050 if we do not also use the possibility to capture CO₂ from industrial installations and store it in geological formations (carbon dioxide capture and storage, or CCS).

This legal framework is designed to ensure that CO₂ capture and storage is an available mitigation option, and that it is done safely and responsibly. The proposal ensures that CO₂ capture is regulated under Directive 96/61/EC, concerning integrated pollution prevention and control for certain industrial activities, and that both CO₂ capture and pipeline transport are regulated under Directive 85/337/EEC, concerning the assessment of the effects of certain public and private projects on the environment. Its main objective, however, is the regulation of CO₂ storage and the removal of barriers in existing legislation to CO₂ storage.

The proposal specifies that the objective of geological storage is permanent containment, and that storage in the water column is prohibited. This shall not apply to geological storage of CO₂ undertaken for research, development or testing of new products and processes.

As regards site selection and exploration permits, the proposal stipulates that Member States determine the areas to be made available for storage, the conditions for site use, and the provisions governing exploration.

The proposal provides for review of draft permit decisions on storage by the Commission. The Commission may offer an opinion, which the competent authority would take into account in making its permitting decision. A further provision relevant in this context is the conferring of the Environmental Impact Assessment Directive (85/337/EEC as amended by 97/11/EC) on CO₂ storage sites in Article 29 (paragraph 1, point b), which ensures impact assessment and public consultation.

The proposal also covers operation, closure and post-closure obligations, including CO₂ acceptance criteria, monitoring and reporting obligations, inspections, measures in case of irregularities and/or leakage, and provision of a financial security.

One chapter establishes provisions concerning transport and storage. Finally, general provisions take account of the competent authority, cross-border cooperation, penalties, reporting and the relevant comitology procedures.

Annex I specifies detailed criteria for the requirements on site characterisation and risk assessment of Article 4. Annex II specifies detailed criteria for monitoring requirements of Article 13.