

Geological storage of carbon dioxide (CO₂)

2008/0015(COD) - 25/02/2014 - Follow-up document

The Commission presents a report on the implementation of Directive 2009/31/EC on the geological storage of carbon dioxide (CCS), based on Member States' reports sent to the Commission between July 2011 and April 2013.

General progress on the implementation of the CCS Directive: the report shows that all Member States notified transposition measures to the Commission (the date set for transposition was 25 June 2011.)

- Whilst the majority of Member States have completed transposition of the Directive; Austria, Cyprus, Hungary, Ireland, Sweden and Slovenia **have not yet notified complete transposing measures**. On account of this partial non-communication the Commission addressed reasoned opinions to these six Member States in November 2013 and will check that the measures are finalised by spring 2014.
- Member States took **different approaches to the transposition of the CCS Directive**. While several decided to only amend existing legislation, most Member States opted for a **combination of new specific legislation on the geological storage of CO₂ and amendments to existing legislation**. 17 Member States made amendments to their environmental legislation and eight of these made changes also to their mining legislation.
- **Most Member States assigned responsibilities to multiple authorities, as CCS intersects with a number of different regulatory areas**. The most frequently chosen competent authorities are environmental bodies (18 Member States), followed by institutions responsible for the fields of economy, energy and mining.
- **The assessment of potential CO₂ storage sites is ongoing**, with several Member States issuing exploration permits and the Commission reviewing the draft permit issued by the Netherlands for intended permanent storage of up to 8.1 Mt CO₂ in a storage reservoir on the Dutch continental shelf. An appraisal of CO₂ storage capacity was provided by **the EU GeoCapacity project**, which estimated for the 21 participating Member States theoretical storage potential of 87 Gt CO₂ (69 Gt in deep saline aquifers, 17 Gt in depleted hydrocarbon fields and 1 Gt in unmineable coal beds).
- **Member States that authorise CO₂ storage on their territory** have communicated implementation of the provisions on monitoring, reporting and inspections, leakages and significant irregularities, closure and post-closure obligations, as well as the two financial mechanisms established by the CCS Directive.
- Some Member States have reported a decision not to allow CO₂ storage on their territory due to unsuitability of their geology for CO₂ storage (Finland, Luxembourg and the Brussels Capital Region of Belgium). Some other Member States have also not allowed geological storage of CO₂ (Austria, Estonia, Ireland, Latvia, Slovenia, Sweden) or restricted it (Czech Republic, Germany). As regards Member States which restrict or prohibit CO₂ storage on their territory, some transposed only the provisions of the Directive that deal with capture and transport aspects of CCS, while others transposed all the provisions of the Directive, including the storage related Articles.

Ensuring consistent implementation of the CCS Directive across the EU: the report notes that assessments made in the context of the [EU's Roadmap for moving to a competitive low carbon economy](#)

[in 2050](#) and the [Energy Roadmap 2050](#) see CCS, if commercialised, as an important technology contributing to the transition to a low carbon energy system in the EU.

The Commission underlines the importance of consistent implementation of the CCS Directive across the EU, in particular regarding the selection, operation, closure and post-closure of storage sites and the assessment to retrofit large combustion plants for CO₂ capture. It therefore **pursues infringement cases for partial non-communication of transposing measures and it is checking whether the notified measures conform in substance to the CCS Directive.**

In addition to checking the transposition of the CCS Directive and reviewing draft storage permits, the Commission performs other activities in order to support consistent implementation of the CCS Directive throughout the EU. In September 2009 **an Information Exchange Group of experts from Member States** was set up. In March 2011 **four guidance documents** were published with a view to providing an overall methodological approach to implementation of the key provisions of the CCS Directive.

The next Commission report, will be transmitted to the European Parliament and the Council by 31 March 2015.