

# Geological storage of carbon dioxide (CO<sub>2</sub>)

2008/0015(COD) - 01/02/2017 - Follow-up document

The Commission presented a report on the implementation of Directive 2009/31/EC on the geological storage of carbon dioxide ("CCS" Directive).

The report is the second report on the implementation of the CCS Directive and covers the period from May 2013 to April 2016. It is based on the reports submitted by 26 Member States.

The Commission considers that the legislation of **16 Member States** fully complies with the Directive to date. It considers that the provisions of the CCS Directive have been **applied consistently** throughout the reference period in the Member States of the Union.

The main findings are as follows:

**Assessment of storage capacity:** some Member States (Belgium, Czech Republic, Germany, Romania, Poland, Slovenia, Spain) have made progress in their assessment of storage capacity, but the **implementation of CCS projects will require new, more thorough assessments**.

However, even in cases where the evaluation has not been positive, many authorised power stations **provide space** for the equipment required for CO<sub>2</sub> capture and its compression and are designed so that the CCS can be subsequently connected without major modifications in the structure.

In addition, **new power plants** generally go beyond legal requirements and reserve land for this purpose in the event that conditions change.

Other issues related to implementation include:

**Selection of storage sites:** in most cases, Member States have not defined new areas in which storage sites can or cannot be selected. Only Poland has established a storage area. Five German Länder are currently preparing decisions.

New storage stock assessments have been carried out, are under way or are planned in Bulgaria, Germany, Greece, Hungary, Italy, the Netherlands, Sweden and the United Kingdom.

**Applications for exploration and storage permits:** only Spain has received applications for exploration permits. Only one project resulted in an application for a storage permit in the United Kingdom and a license application is currently under review in Italy.

**Research projects linked to the CCS Directive:** although the demonstration and marketing of the CCS have not progressed during the reference period, a number of Member States, as well as the European Union, support or plan to support more research activities aimed at improving techniques and knowledge related to the underground storage of CO<sub>2</sub>.

**CO<sub>2</sub> transport and storage networks:** two regional CCS networks seek to develop common cross-border solutions for transport and geological storage of CO<sub>2</sub> - the North Sea Basin Taskforce and the CCS The Baltic Sea. Other countries are studying the possibility of setting up platforms for emissions from the power generation and industrial sectors in certain port areas.