

pilotSTRATEGY project 2021-2026: “CO₂ Geological Pilots in Strategic Territories”

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Abstract

The pilotSTRATEGY (2021-2026) is investigating geological CO₂ storage sites in industrial regions to support development of large-scale carbon capture and storage (CCS). It is focused on deep saline aquifers—porous rock formations filled with brine several kilometres below ground – which promise a large capacity for storing captured CO₂. The goal of the characterisation is to assess the site’s containment, injectivity, capacity, integrity, hydrodynamics, and monitorability in order to ensure safe and permanent storage of CO₂. PilotSTRATEGY covers the initial stages of project development up to the pre-final investment decision (pre-FID), regulatory approval and permitting of storage, and applied on selected structures of Paris Basin in France, the Lusitanian Basin in Portugal and the Ebro Basin in Spain, and in lower detail, in West Macedonia in Greece and Upper Silesia in Poland.

The Spanish region –Ebro Basin- includes two potential deep saline aquifers (one onshore and other offshore) with the mandate of selecting one of them on the month 18th (October 2022) to complete the studies. The selection of the most suitable structure will be based on a multi-criteria analysis included not only geological or technical features but also environmental, economical, regulatory and social aspects.

The project has received funding from the European Union’s Horizon 2020 programme (10.1 million Euros, No. 101022664). It involves 16 research partners from seven European countries and builds on research carried out by the **STRATEGY CCUS project**. BRGM (France) is the project coordinator, and the Spanish team is formed by IGME-CSIC (coordinator of the Spanish region), CIEMAT, and REPSOL as industrial partner.

IGME-CSIC is also leading the WP4: “Pilot Development” aiming to provide detailed information to the optimum development concept for the proposed pilots to help decide whether they are viable, and co-leading WP7: “Communication and impact”.

Web page: www.pilotstrategy.eu