



**Project Acronym :** EU GEOCAPACITY

**Project Title :** Assessing European capacity for geological storage of carbon dioxide

**Coordinator :** DANMARKS OG GROENLANDS  
GEOLOGISKE UNDERSOEGELSE  
INTERNATIONAL SECTION - DENMARK

**Website :** <http://www.geology.cz/geocapacity>

## ABSTRACT

GeoCapacity is a three-year project focussing on data collection, mapping and building of a GIS database of CO<sub>2</sub> emission and geological storage capacity in 25 European countries. The project is carried out by a consortium of 26 project partners.

The objectives of GeoCapacity are :

- To establish an inventory of major CO<sub>2</sub> emission point sources in Europe.
- To conduct assessment of regional and local potential for geological storage of CO<sub>2</sub> for each the involved countries.
- To carry out analyses of source-transport-sink scenarios and conduct economical evaluations of these scenarios (using a Decision Support System, DSS developed in the project).
- To provide consistent and clear guidelines for assessment of geological capacity in Europe and elsewhere.
- To further develop mapping and analysis methodologies (i.e. GIS and DSS).
- To develop technical site selection criteria.
- To initiate international collaborative activities with China with a view to further and closer joint activities.

The EU GeoCapacity project has half a year left of the three-year project period and the process of collecting and working on data for the GIS database is almost at its end. What remains are final checks, and the fine tuning of the capacity estimates according to the standards developed through the lifetime of the project. The GIS database will provide updated CO<sub>2</sub> emission data and locations of potential geological storage capacity in deep saline geological formations, hydrocarbon and coal fields. The emission data will include technical information on the type of industry (e.g. power, cement, iron and steel, paper), fuel, technology, capacity etc. and the storage data will include geological information and physical properties of the reservoir and sealing formations as well as estimates of the storage capacity of each of the identified potential storage possibilities. The results of the study will be provided in a summary report at the completion of the project and it is the intention that the technical and geological results will be able to provide a solid foundation on which the application of the CCS concept in Europe can be judged, and – hopefully – be found sufficiently sound to warrant wider application.

## PARTNERS

Natural Envir. Research Council - **UK** ; Mineral and Energy Economy Resea. Inst. - Polish Academy of Sciences - **Poland** ; BUNDESANSTALT Fuer GEOWISSENSCHAFTEN Und Rohstoffe - **Germany** ; Endesa Generacion SA - **Spain** ; Sofiiski Univ."SVETI KLIMENT OHRIDSKI" - **Bulgaria** ; Sveuciliste u zagrebu - Rudarsko-geolosko-naftni fakultet - **Croatia** ; Ceska Geologicka Sluzba - **Czech Republic** ; Tallinna Tehnikaukool Geoloogia Inst. - **Estonia** ; Bureau de Reche. Geologiques et Minieres - **France** ; Inst. Francais du Petrole - **France** ; Inst. of Geology and Mineral Exploration - **Greece** ; Magyar Allami EOTVOS Lorand geofizikai intezet - **Hungary** ; Ist. Naz. di Oceanografia e di Geofisica Sperim. - **Italy** ; Latvijas Vides, Geologijas un meteorologijas agentura - **Latvia** ; Geologijos ir geografijos Inst. - **Lithuania** ; Nederlandse Organ. Voor toegepast natuurwetenschappelijk onderzoek - **Netherlands** ; ECOFYS B.V. - **Netherlands** ; przedsiebiorstwo badan geofizycznych - **Poland** ; Nat. Inst. of Marine Geology and Geo-Ecology - **Romania** ; State Geological Inst. of Dionyz Stur - **Slovakia** ; Geoinzeniring D.O.O - **Slovenia** ; Inst. Geologico y Miniero de Espana - **Spain** ; Eneconologie S.P.A. - **Italy** ; VATTENFALL UTVECKLING AB - **Sweden** ; TSINGHUA Univ. - **China**