

CO₂ Transport

Proposal - *Integrated infrastructure for CO₂ transport and storage in the west MEdiTerranean – COMET*



Work programme topic: ENERGY.2009.5.2.2 **Score 13.5/15**

Aims to **identify and assess the most-cost effective infrastructure** that is able to serve the West Mediterranean area, considering the time and spatial aspects of possible developments over time on the energy sector and industrial park of **Spain, Portugal and Morocco**.

Special attention will be given to the costs and benefits of constructing a **CCS network as part of an international cooperation agreement**.



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The information on CO₂ sources, storage capacities and CO₂ transportation routes will be implemented into the TIMES models for Spain, Portugal and Morocco. The geographical constraints affecting CCS will be modelled as national cost curves for CO₂ capture, transport and storage in each of these countries. For this several sub-task will be carried out:

- development for each country of “business as usual” (BAU) scenarios for energy and materials demand projections and policy constraints (namely CO₂ caps and prices);
- preparation and test of a TIMES model for Morocco, compatible with the existing Portuguese and Spanish models;



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- design of the inter-country trades and interfaces among the three models (regarding electricity and CO₂ trade, among other) with the aim to link the three national models,
- improvement of the existing information on CCS in the Portuguese and Spanish TIMES models and its implementation in the Moroccan model, considering the modeling of CO₂ capture in power and industrial sectors, transport pipelines and storage facilities and including possible spatial disaggregating of national CO₂ sources, possibly using the MIP (Mixed Integer Programming);
- Identification of the cost-effective CCS potential and the most cost effective source-sink combination between the three countries in several scenario

