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Storage capacity evaluation for development of CO₂ infrastructure in the west Mediterranean

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Abstract

"Integrated infrastructure for CO₂ transport and storage in the West Mediterranean", known by the acronym COMET is an FP7 project, funded by the European Commission. COMET Work Package 3 aims to identify and to evaluate geological structures and formations that have a potential to host CO₂ captured from industrial plants. Although these structures can be just defined through their location, geometry and capacity, there are many other factors that will have an influence in the behaviour of the storage, such as injectivity, salinity, sealing rocks, etc. Many of these factors are studied within COMET and their values are included in generated databases.

Moreover, COMET Project also aims to evaluate different scenarios of CO₂ sources and sinks in the West Mediterranean region, in order to propose most effective settings for CO₂ transport and storage networks. The goal of COMET is to use all available geological parameters in order to obtain a qualitative qualification of the storage sites. This qualification will be useful for network modellers who will use it as a tool to decide where most effective solutions can be found for linking CO₂ sources and sinks.

Moreover, once storage sites are identified, evaluated and ranked, a quantification of the potential storage costs has been carried out. These costs are used as a first approach to much more detailed models that are under development in other Work Packages.

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