Press release

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Czech-Norwegian consortium has launched a project to prepare a pilot CO_2 storage site in a carbonate reservoir (CO2-SPICER)

A consortium led by the Czech Geological Survey has launched a four-year Czech-Norwegian project, whose major objective is to prepare a pilot CO_2 storage site in a depleting oil and gas field located in south-east Moravia. At the same time, the site will serve as a model example for possible implementation of further potential CO_2 storage sites in both the Czech Republic and Europe.

"*If the overall objective proves successful, it will be the first CO_2 storage pilot project in Central and Eastern Europe. In addition, the CO2-SPICER project will significantly increase the technology readiness level of geological storage of CO_2 in the Czech Republic and, at the same time, make a significant step towards CCS technology deployment in Central Europe,"* says project leader Vít Hladík from the Czech Geological Survey.

The CCS (Carbon Dioxide Capture and Storage) technology is being developed successfully worldwide. It involves capturing of CO_2 emitted by large industrial plants and subsequently storing it in liquid form in rocks deep beneath the Earth's surface, using injection through boreholes. The objective is to limit the growing amount of CO_2 – the key greenhouse gas – in the atmosphere and to mitigate the associated climate change.

The project is part of a long-term concept of the development of geological storage of CO_2 in the Czech Republic. Its successful implementation will provide not only a model for other intended CO_2 storage facilities in the conditions of the Czech Republic and Central Europe but also the possibility of using the selected storage site immediately. Specialists will compile a three-dimensional geological model of

the entire storage complex and simulate the injection of CO_2 into the geological reservoir. Other important parts of the work are studies on the geomechanical and geochemical properties of the storage site, analysis of possible risks and plans for their minimization and site monitoring.

"The CO2-SPICER project will employ a number of novel approaches and methods. In addition to dynamic modelling and computer simulation of CO_2 injection, these include the latest monitoring techniques and an evaluation of the possibility of combining CO_2 storage with bacterial methanogenesis," adds V. Hladík.

In addition to the Czech Geological Survey, the project includes four other partners from the research and industry sectors. Domestic organizations are represented by MND a.s., VSB - Technical University of Ostrava and the Institute of Geophysics of the Czech Academy of Sciences. The Norwegian side is represented by the research institute NORCE. The project is being carried out under the KAPPA Programme that supports applied research, experimental development and innovation. The programme is operated by the Technology Agency of the Czech Republic and is co-funded by Norway Grants.

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Programme Kappa

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