GETICA CCS
CO_2 TRANSPORT

CO_2 Transport and Storage

"Natural Gas Knowhow Centre in Mediaş", Thursday, 9th June 2011

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Institutional and Financial Support

Project Company

Tehnical Consortium

Support Services

Objectives

- ✓ Scope of the Project: to implement a full-chain CCS demo project for the CO2 resulted from Power Unit no. 6 at Turceni Power Plant
- ✓ Scope of the CO2 Transportation Pipeline Feasibility Study: to determine the preliminary design and costs for the CO2 pipeline
- ✓ The CO2 transportation will be performed by onshore pipeline
- ✓ Dense phase CO2 has been selected for long distance transportation, as being the most cost effective solution

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Location

- ✓ Two storage options: Zone 5 (most suitable) and Zone 1 (possible) → two alternative CO2 transport pipelines routes
- ✓ Routes located partially on public domain and partially on privately owned land
- ✓ the pipeline route from CCP to Storage zone no. 5 crosses **Gorj and Mehedinți counties**
- ✓ the pipeline from CCP to Storage zone no. 1 crosses **Gorj, Mehedinți and Dolj counties**

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Key considerations

- ✓ Safety evaluation
- ✓ Environmentally sensitive areas
- ✓ Facilities in the area
- ✓ Third-party activities in the area
- ✓ Geotechnical conditions
- ✓ Hydrographical conditions
- ✓ Construction and operation

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Pipeline Control System

The control system includes safety functions that ensure **protection of the population, the environment and the equipment**.

The **CO2 transport control system** will include:

- ✓ Field Instrumentation System for measuring the process parameters along the pipeline;
- ✓ Supervisory Control and Data Acquisition (SCADA) System;
- ✓ Emergency Shut-Down System (ESD);
- ✓ Incidental CO2 Leak Detection System;
- ✓ System for Monitoring and reporting the CO2 transferred by pipeline.

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Pipeline operation

- ✓ Pipeline operation will be **constantly monitored** and remotely controlled from the **CO_2 Transport Pipeline Monitoring and Control Centre** (TPMCC).
- ✓ The transportation pipeline is designed for **>97% availability**, achieved by monitoring, inspection, maintenance works and a careful selection of experienced vendors for materials and equipment.
- ✓ The expected lifespan of the pipeline is **25 years**.

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Thank you for your attention!

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