

A study on CO₂ Transportation and Storage Conceptual Design

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CO₂ transport and injection pilot test in a near-shore domestic Korea basin and an offshore basin in the future will be performed. This plan will be realized through optimized conceptual design of transport and injection process.

Aspen Hysys is used for process simulation from CO₂ feed tank for this conceptual design study. Approximately 10,000 tons of CO₂ will be annually provided for this pilot test process. Purity of CO₂ stored in feed tank is about 95%. Pipeline from CO₂ feed tank is connected to platform topside process equipments. CO₂ will be injected to the basin selected for this pilot test.

Flow assurance and risk analysis will be studied based on this designed process. FEED design and detailed design will be performed through this study in the future. Finally, annually 10,000 tons of CO₂ capacity will be operated based on this design package.