

CO₂ Transportation and Storage Offshore Process Basic Design Study

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CO₂ transport and injection pilot test in a near-shore domestic Korea basin will be performed. Captured CO₂ is designed to be transported to offshore basin by tank truck and ship. Construction and operation will be performed through conceptual design, basic design and detailed design of transport and injection process.

Aspen Hysys is used for process simulation from CO₂ feed tank for this basic design study. Approximately 10,000 tons per annum of CO₂ is design capacity for pilot operation. 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 basic designed process. 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.