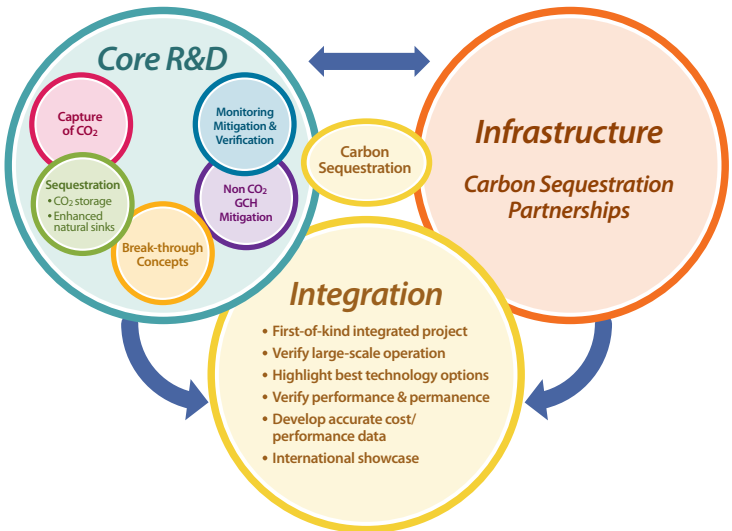
Carbon Capture and Storage Project, USA

Project Overview

Petrenel was commissioned to undertake a pre-feasibility study to establish the technical and commercial viability of utilising some of the Carbon Dioxide ("CO_2") captured from a large petrochemical plant for Enhanced Oil Recovery ("CO_2-EOR"). This study was built upon the findings from Petrenel's previous project that was focused predominantly on the technical and economic feasibility of injecting anthropogenic CO_2 storage into deep saline reservoirs ("DSRs") or depleted gas reservoirs, and the utilisation of CO_2 for CO_2-EOR in depleted oil fields.

Petrenel's Approach

- Screened for oil fields and DSRs amenable to fully utilise the captured CO_2 for CO_2-EOR and or DSR
- Established the potential CO_2 storage capacity
- Ranked and shortlisted sites for future detailed evaluation
- Prepared conceptual development plans, production, injection and cost forecasts for the preferred sequestration options
- Established the probable costs and economic value associated with CO_2-EOR, including the determination of a realistic CO_2 selling price
- Identified the main technical and commercial risks and uncertainties, taking into consideration existing and potential competitors, CO_2 market growth and regulatory framework
- Determined where in the CO_2-EOR value chain our client should participate
- Identified options and established a viable strategy for a potential market entry and business model



Outcome and Client Benefit

A ranked and list of preferred options for CO_2 disposal were provided to the Client, which enabled a decision to be made on how best to manage the CO_2 emissions from the planned GTL facility. A 96,000 bbl/d GTL facility is now planned.

For more info contact **Stewart Whiteley** ··· **Tel:** +44 (0) 1344 291 901 ··· **Email:** swhiteley@petrenel.com