PROJECT PROFILE LARGE-SCALE CARBON CAPTURE AND SEQUESTRATION



Client: PUBLIC COMPANY | Location: SOUTHWESTERN UNITED STATES

To meet emissions-reduction objectives, an operator enlisted Audubon for design and management services on a large-scale <u>carbon capture</u> and sequestration (CCS) system. Audubon supplied <u>conceptual design</u>, frontend <u>engineering</u> and design (FEED), economic evaluation, and <u>project management</u>.

The CCS system was designed to capture, process, and sequester 1.5 million metric tons of CO2 in an existing oil field. To ensure feasibility for the project, the Audubon team evaluated and estimated CAPEX and OPEX for capturing CO2 from local industrial emitters.

Audubon project deliverables gave a road map to the operator for developing a CCS system to capture, process, and transport CO2 via pipeline and produce a high-quality carbon product for enhanced oil recovery (EOR).

Project overview

- CCS system for EOR
- CO2 dew-point control
- CO2 dehydration
- H2S removal
- CO2 compression
- CO2 pipeline

Scope of work

- Conceptual design
- FEED
- CAPEX & OPEX estimation
- Project management
- Technology selection
- Pipeline engineering & optimization
- Overall system configuration
- Power generation & optimization

