

# PROJECT PROFILE CARBON CAPTURE – POWER GENERATION



Client: **NATURAL GAS POWER PLANT OPERATOR** | Location: **UNITED STATES**

To retrofit a 300-MW natural gas power plant, Audubon was selected for [carbon capture](#) system design, including front-end [engineering](#) and design (FEED), [project management](#), economic evaluation, and modeling services. The updated plant would have a stack gas carbon capture and cleanup system for volatile organic compounds (VOCs), sulfur oxide (SOx), and water removal.

The Audubon team evaluated several large-capacity carbon capture technologies for fuel gas applications, operational efficiency, and CAPEX. A 20,000-HP motor-driven centrifugal compressor was selected for CO2 pipeline transmission.

Capturing 1.1 million metric tons per annum (MMTPA) of CO2, the carbon capture system design by Audubon reduced emissions at the power plant and resulted in a marketable, pipeline-quality product.

## Project overview

- Natural gas power plant retrofit
- Stack gas carbon capture & cleanup system
- CO2 vent handling
- VOC, SOx, & water removal
- CO2 dehydration
- CO2 supercritical compression

## Scope of work

- Conceptual study
- FEED
- Project management
- Technology selection
- CAPEX & OPEX estimation
- CO2 compressor selection
- Power generation & optimization

