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### Carbon Capture

As technologies continue to migrate towards sustainability and cleaner energy, so do we.

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## Petra Nova

Petra Nova - WA Parish Generating Station

### Background

Petra Nova, a 50/50 joint venture between NRG and JX Nippon Oil & Gas Exploration, is developing a commercial-scale post-combustion carbon capture project at NRG's WA Parish generating station southwest of Houston, Texas.

### Solution

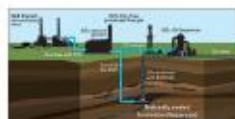
This project is designed to capture approximately 90 percent of the carbon dioxide (CO<sub>2</sub>) from a 240 MW slipstream of flue gas and use or sequester 1.6 million tons of this greenhouse gas annually. The demonstration project is expected to be operational in 2016.

At 240 MW, Petra Nova WA Parish will be the largest post-combustion carbon capture project installed on an existing coal-fueled power plant. The technology has the potential to enhance the long-term viability and sustainability of coal-fueled power plants across the U.S. and around the world. The project has been selected by the United States Department of Energy (DOE) to receive up to \$167 million as part of the Clean Coal Power Initiative Program (CCPI), a cost-shared collaboration between the federal government and private industry.



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The Petra Nova Carbon Capture Project will utilize a proven carbon capture process, which was jointly developed by Mitsubishi Heavy Industries, Ltd. (MHI) and the Kansai Electric Power Co., that uses a high-performance solvent for CO<sub>2</sub> absorption and desorption.



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Captured CO<sub>2</sub> will be used to enhance production at mature oil fields in the Gulf Coast region. The first site to use CO<sub>2</sub> from the WA Parish carbon capture system is Hilcorp's West Ranch Oil Field. Through EOR, it is expected that oil production will be boosted from around 500 barrels per day to approximately 15,000 barrels per day. This field is currently estimated to hold approximately 60 million barrels of oil recoverable from EOR operations.

Other sites have been identified, and reservoir analysis is underway.

### Learn more

- [Press release](#)
- [EOR Fact Sheet](#)
- [WA Parish Fact Sheet](#)
- [West Ranch Fact Sheet](#)

### How Carbon Capture Works



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