ExxonMobil

Positioning Southeast Texas as a leader In a low carbon energy future

Dating back to 1903, ExxonMobil has played a critical role in supporting the energy needs of our nation and world while fueling economic growth across Southeast Texas. Now, ExxonMobil Low Carbon Solutions business looks to build off our legacy in the region by positioning Southeast Texas to be a leader in a low carbon energy future.

Working with ExxonMobil

Reducing CO_2 emissions from industrial sources in SE Texas; positioning the region as a leader in the low carbon energy future,

Access to optimal geology for permanent carbon storage

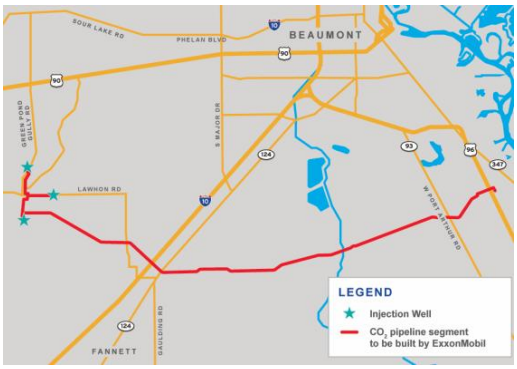
Enabling ~$3 billion of investments in multiple clean energy projects in Jefferson County, while protecting and creating industrial jobs.

Rose Carbon Capture & Storage Project

The Rose Carbon Capture and Storage (CCS) project in Jefferson County represents an investment in the future of energy in Southeast Texas. Through the deployment of CCS technology, the project will provide an opportunity to reduce carbon dioxide (CO_2) emissions from industrial sources in the region which are critical to powering our modern-day life.

The Rose Project scope includes:

- Storage of CO_2 is sited on 13,000+ acres of privately owned land containing 3 CO_2 storage wells and CO_2 monitoring systems including 3 water monitoring wells and 1 in-zone monitoring well.
- CO_2 storage will take place between 0.5-1.5 miles below the surface.
- An 18-mile pipeline will connect the captured CO_2 to the storage area



ExxonMobil has submitted a permit application for the project to the Texas Railroad Commission, which is the state regulatory agency responsible for overseeing underground CO_2 storage in Texas. In 2025, the Texas Railroad Commission was granted primary regulatory authority ("state primacy") for this activity by the U.S. Environmental Protection Agency.

Carbon Capture and Storage 101

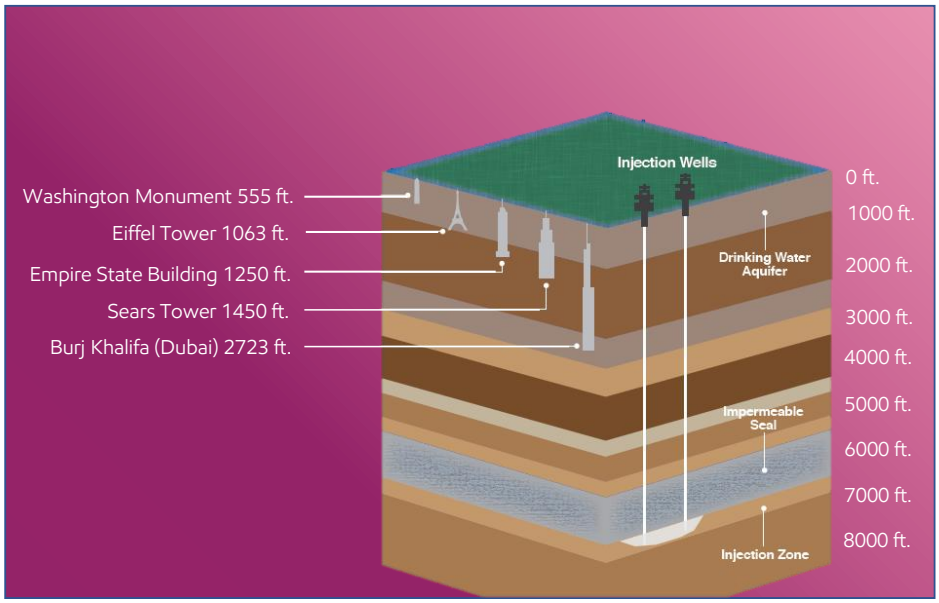
What is carbon capture and storage?

CCS is the process of capturing CO_2, a gas released into the atmosphere from natural and man-made sources, and injecting it into deep, underground geologic formations for safe, secure, and permanent storage in compliance with state and federal regulations.

What is CO_2?

Carbon dioxide (CO_2) is a colorless, odorless gas that is a natural component of our air. It is also a greenhouse gas that is released into the atmosphere from natural and man-made sources, including the combustion of fossil fuels, like coal, oil, or natural gas.

Permanent CO_2 storage occurs deep underground.



Is CCS Safe?

Carbon capture and storage technology is a safe, proven, and permanent solution to reduce CO_2 emissions, and it has been used for decades. Potential CO_2 storage sites are carefully selected only after undergoing rigorous analysis to ensure they are suitable. Once stored, the storage sites are constantly monitored for any potential geologic changes.

How deep will the CO2 be stored? Will it impact groundwater or drinking water?

Any formation chosen for CO_2 storage will be far underground, with multiple layers of impermeable seal rock between storage well and the water table. All underground injection activities are regulated by the Environmental Protection Agency or relevant state agencies with primacy to ensure there is no impact to underground sources of drinking water.

Why the Gulf Coast?

The U.S. Gulf Coast is ideally suited for carbon capture and storage. The area is home to some of the nation's most active industrial corridors and sits close to many suitable storage locations. In addition to Texas' extensive industrial workforce and existing infrastructure, the Gulf Coast region, specifically southeast Texas, has a unique geology that creates the ideal conditions for safe, proven, and permanent carbon capture and storage.