

AVOIDING EMISSIONS BY CAPTURING CO₂

As one of the largest energy infrastructure companies in North America, we recognize that the consumption of energy contributes to greenhouse gas emissions. We are actively making enhancements to our business practices and operations to reduce our emissions footprint.

WHO WE ARE

Kinder Morgan provides **safe, reliable and environmentally responsible** energy storage and transportation services. We are the largest transporter of carbon dioxide in North America, **transporting approximately 800 million cubic feet per day of carbon dioxide (CO₂)** from our source fields in Southwest Colorado to New Mexico and West Texas for use in **enhanced oil recovery (EOR)** projects.



WHAT WE ARE DOING

Kinder Morgan CO₂ is a leader in applying advanced technologies for EOR, a process in which CO₂ is used to recover oil, typically from mature fields that have ceased being productive through traditional primary and secondary recovery methods. Nearly 100% of our oil production is associated with our EOR operations.

Primary recovery relies on the natural pressure of the reservoir or gravity to push oil into the well. Pumps are then used to bring the oil to the surface. Secondary recovery involves water or gas being injected into the reservoir to displace the oil and drive it toward the production well. **These two methods typically leave two-thirds of the original oil in place.** Applying EOR techniques can recover an additional 10-20% of the original oil in place.

At our **Snyder Gas Plant**, gas treating units remove non-hydrocarbon gas, which primarily consists of CO₂, from the hydrocarbon gas produced in the surrounding fields. Rather than vent the CO₂ into the atmosphere, a common industry practice, **we capture and inject it into the ground for EOR.** This method avoids flaring and venting emissions, resulting in the **capture and injection of approximately 121,000 metric tons of CO₂ equivalent (CO₂e) in 2023 alone.** This is the equivalent of the emissions from roughly **23,880 homes' electricity use for one year.**

THE EOR PROCESS

1. At the surface, the CO₂ is **compressed and injected** into an injection well at high pressure. As the **injected CO₂** moves through pore spaces in the reservoir, it becomes miscible with the oil (combines into one fluid) and travels via differential pressure to a production well.
2. Oil, water and gas are **produced** at the production well.
3. Approximately **15% of the CO₂ that was injected remains sequestered** in the reservoir, while the rest exits the well mixed with the produced hydrocarbon gases, oil and water.
4. All produced fluids are sent to a separator where oil and water are extracted from the combined stream.
5. The gas stream is sent through the **gas processing equipment**, where the CO₂ is separated from the hydrocarbon gas.
6. The separated CO₂ is compressed to injection pressure and sent to the **reinjection system**, which routes to the injection well.

From 2015 through 2023, Kinder Morgan processed approximately **21.3 billion cubic feet** of CO₂ at our Snyder Gas Plant. As a result, approximately **1.2 million metric tons of CO₂e** were captured and reinjected, preventing it from being released into the atmosphere. Along with **reducing environmental impacts by avoiding the release of CO₂,** this process increases oil recovery by maintaining reservoir pressure and improving oil flow.