

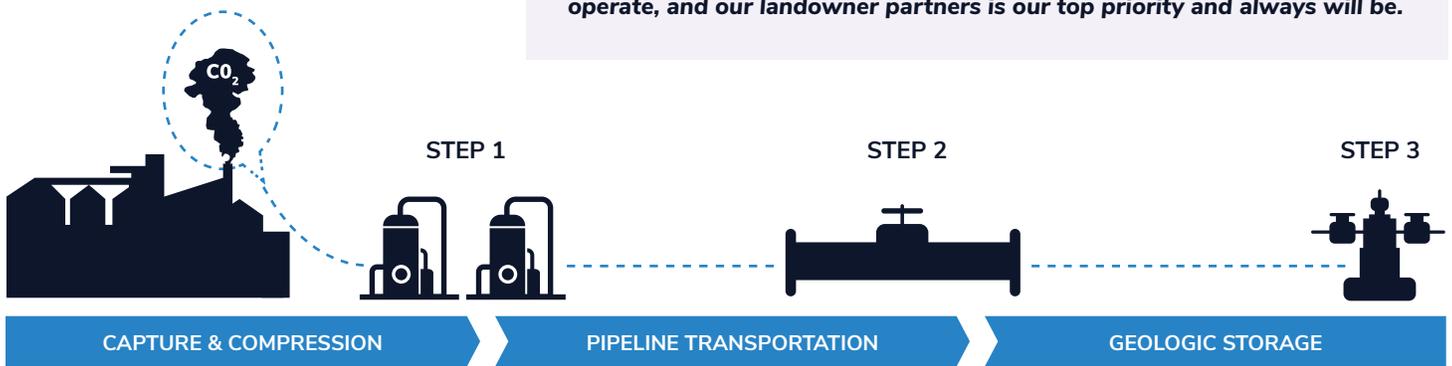


PROVEN TECHNOLOGIES MAKE CARBON CAPTURE AND STORAGE SAFE

The Summit Carbon Solutions (Summit) carbon capture and storage (CCS) project will reduce the carbon footprint of biofuel plants across the five-state Midwest region to create long-term economic benefits and support longterm viability of Summit's partner facilities. The project will use proven, safe technology and equipment.

Carbon Capture and Storage

The safety of our operations, our employees, the communities where we operate, and our landowner partners is our top priority and always will be.



At Summit's partner facilities, carbon dioxide capture and compression equipment will be installed to capture CO₂ emissions.

CO₂ capture technology has been safely and successfully implemented since the 1970s and is deployed at over 40 ethanol facilities throughout the United States for manufacturing, refrigeration, and food-grade CO₂.

Small underground pipelines will connect each facility to a large trunk pipeline, which will transport CO₂ to the sequestration site in North Dakota.

Pipeline is the safest method for CO₂ transport. Established federal and state regulations govern pipeline materials, siting, construction, and operation. Summit follows all requirements for CO₂ pipeline construction and is committed to safety.

Captured CO₂ will be safely and permanently stored in rock layers about a mile deep in North Dakota, with permission of and oversight by the North Dakota Department of Mineral Resources.

Safe, permanent CO₂ storage in geologic layers has been proven during more than 40 years of field operations associated with oil production in Texas, 20 years in Saskatchewan, and 10 years in Montana.

Summit is committed to using proven technologies and employing the best industry practices to ensure the project is safe for landowners and the communities where they live, work, and raise families.

Summit's infrastructure will be capable of storing 12 million tons of CO₂ a year, equivalent to:



~1.4 MILLION homes powered per year



~2.6 MILLION cars removed from the road per year



~1.4 MILLION gallons of gasoline consumed



- A gas in atmospheric conditions.
- A fluid deep underground or in a pipeline.
- Nonexplosive, nonflammable, and cannot burn.
- A major greenhouse gas that helps create and maintain the natural greenhouse effect that keeps our planet hospitable to life.
- Essential to plant life.
- A byproduct of animal metabolism.
- A byproduct of burning carbon-based fuels (wood, ethanol, biodiesel, and fossil fuels), making cement, and plowing.
- Low-risk to fish and aquatic life.

Pipeline Transport Is Critical to CCS

Transporting carbon dioxide by pipeline is the safest method for the large volumes of CO₂ that will be captured and permanently stored. With more than 5,000 miles currently operating in the United States, carbon dioxide pipelines have an impeccable safety record of no fatalities and only one injury in the last 20 years.

Pipelines Are Highly Regulated

The U.S. Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) has established stringent requirements for the safe design, construction, and operation of CO₂ pipelines. In addition, constructing a carbon dioxide transportation pipeline requires permits from the following entities:

Federal: U.S. Army Corps of Engineers

State:

- Iowa Utility Board
- South Dakota Public Utility Commission
- North Dakota Public Service Commission
- Minnesota (county jurisdiction)
- Nebraska (county jurisdiction)

Summit must complete access agreements with all landowners on their proposed route as part of the permit applications. The entire process is anticipated to be completed by the end of 2022.

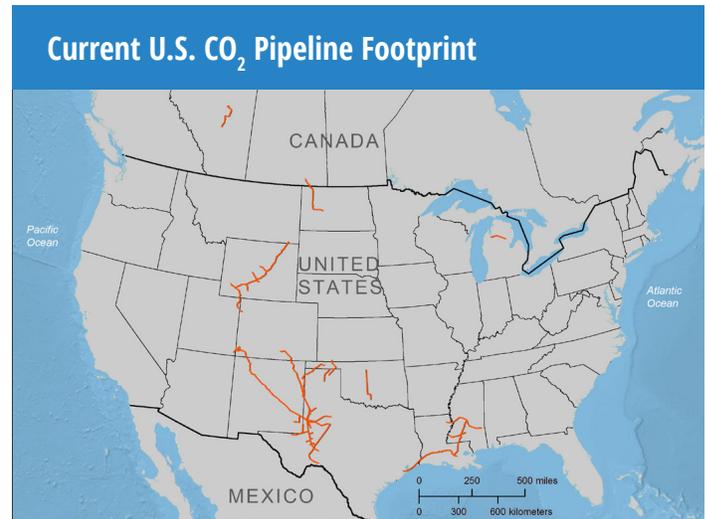
Summit's Pipeline Route Is Carefully Selected

Selecting a safe route for a carbon dioxide pipeline requires many data sources. An interactive software platform that includes all publicly available information is used to determine the path. This platform includes data regarding:

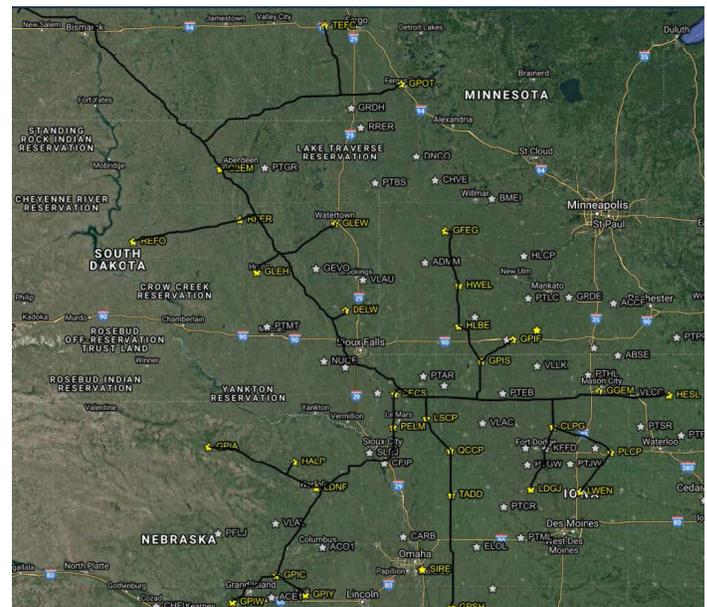
- High-population-density areas.
- Environmentally sensitive areas, such as wetlands and protected waterways.
- Culturally sensitive areas.
- Historical preservation areas.
- Federally restricted areas, such as grasslands and migratory bird-nesting areas.

Summit's Pipeline Is Overbuilt for Safety

Summit's pipeline will be built beyond federal specifications and deeper than required. Every weld is inspected by x-ray technology, and the pipeline will have the latest in leak detection-monitoring technology.



More than 5000 miles of CO₂ pipelines are in operation in the United States.



The pipeline system will be approximately 2,000 miles, constructed with high-strength carbon steel, and buried at least 4 feet deep. All pipeline segments will have a wall thickness ranging from 0.189 to 0.750 inches thick, and the diameter will range from 4 to 24 inches.

Summit Carbon Solutions seeks to lower greenhouse gas emissions by connecting industrial facilities via strategic infrastructure to safely and permanently store CO₂. To learn more, contact:

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