



SUMMIT CARBON  
SOLUTIONS

# South Dakota Informational Meetings

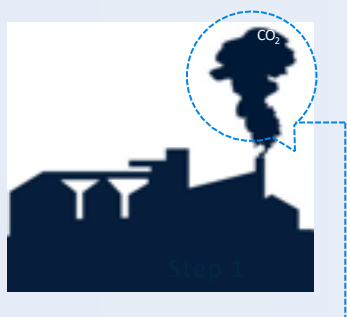
January 2025

SCS Carbon Transport, LLC  
(a subsidiary of  
Summit Carbon Solutions)

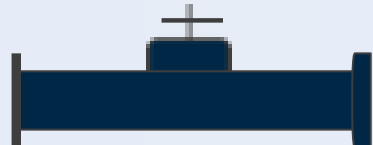


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# Project Overview

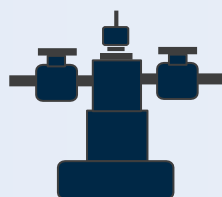


Carbon dioxide (CO<sub>2</sub>) created by ethanol fermentation and currently put into the air is instead captured.



The clean CO<sub>2</sub> gas is then compressed, dehydrated, and moved through a state of the art, continuously monitored and operated pipeline system.

\*Pipeline route permits issued in Iowa, North Dakota and Minnesota.



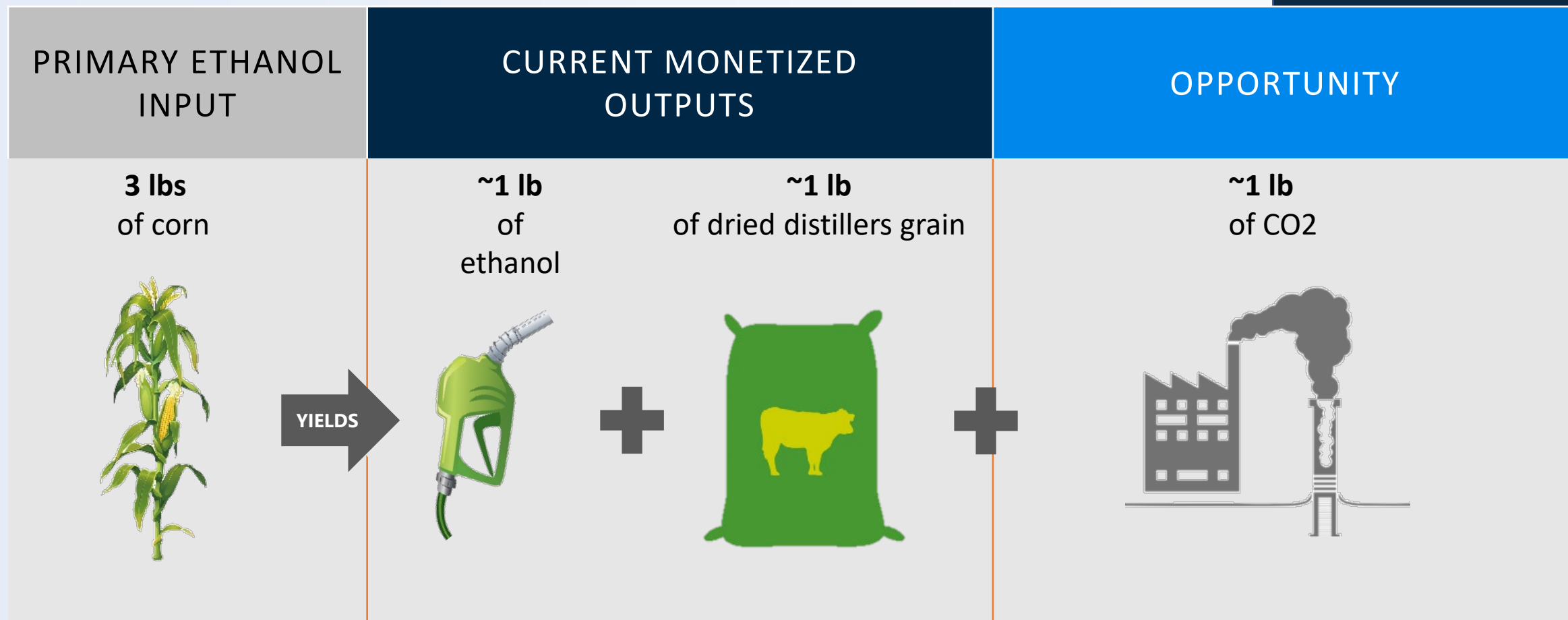
CO<sub>2</sub> arrives at the injection site in North Dakota where it will be permanently and safely stored in deep underground geologic formations and eventually turns to rock.

\*Sequestration permits issued in North Dakota.





# Where's the CO<sub>2</sub> Coming From?







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# Project Location & Partner Facilities

Summit Carbon Solutions will operate in five states and traverse 23 South Dakota counties in the total project



57 BIOREFINERY FACILITIES ACROSS 22 COMPANIES

8 PARTNERS & 15 FACILITIES LOCATED IN SOUTH DAKOTA

GEVO

DAKOTA ETHANOL

GLACIAL LAKES

NUGEN ENERGY

REDFIELD ENERGY

RINGNECK ENERGY

POET

VALERO

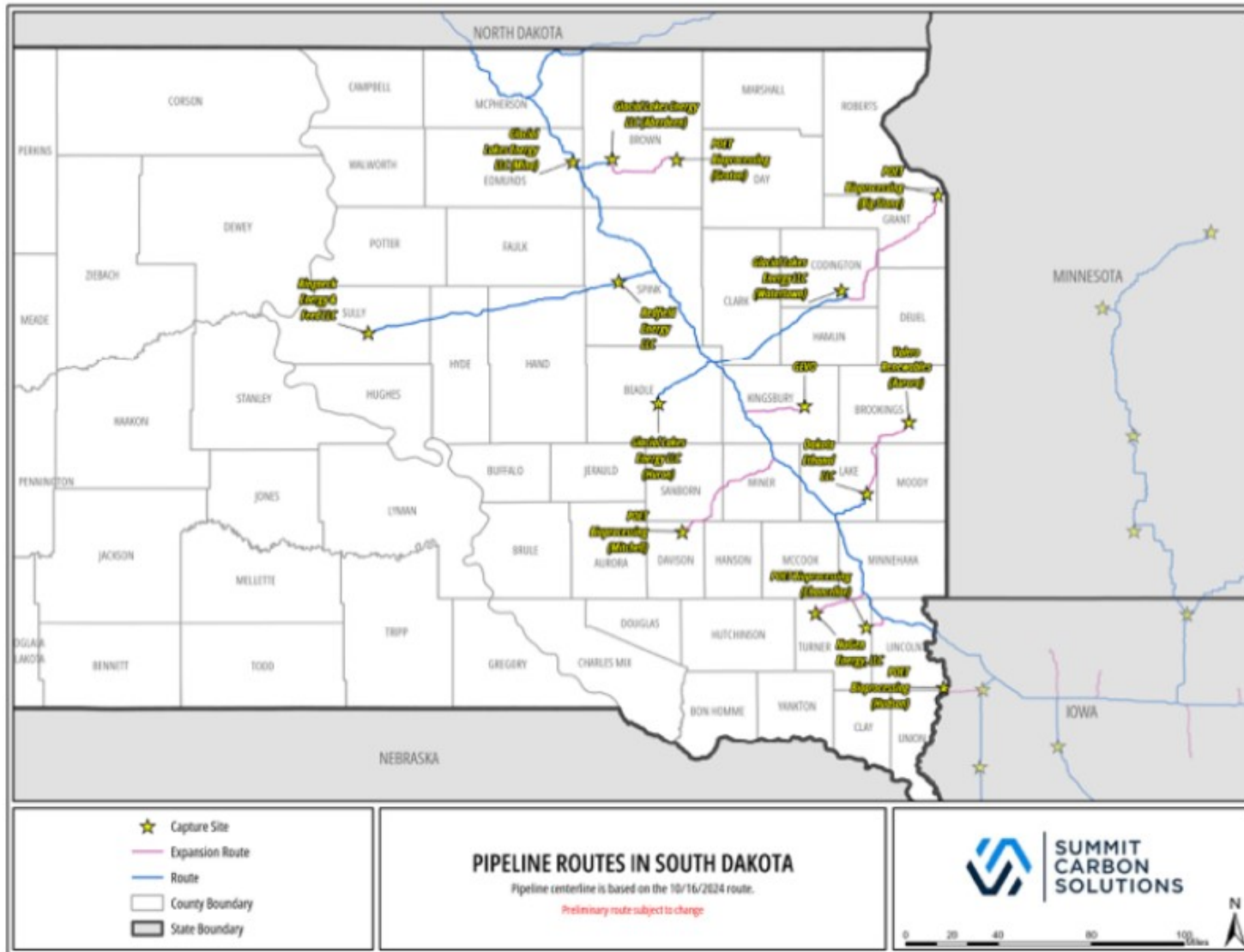
## BIOREFINERY PARTNER COMPANIES



# South Dakota Route



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# Enhancing the Long-Term Profitability of Ethanol & Agriculture

CO2 Capture and Storage lowers ethanol's Carbon Intensity, making it competitive in a low-carbon world



## THE LOW CARBON MARKETS OFFER EXPANSIVE OPPORTUNITIES FOR SOUTH DAKOTA PRODUCERS

TOTAL SOUTH DAKOTA PRODUCTION:	JURISDICTION	2022 ACTUALS (gallons)
<b>1.34 BILLION GALLONS</b>	California	1.35 Billion
TOTAL SOUTH DAKOTA CONSUMPTION:	Washington	261 Million
<b>50.4 MILLION GALLONS</b>	Oregon	149 Million
TOTAL LCFS OPPORTUNITY:	New Mexico	98 Million
<b>2.75 BILLION GALLONS</b>	Canada	898 Million

THE LONG-TERM VIABILITY OF THE ETHANOL INDUSTRY IS CRITICAL FOR AGRICULTURE AND RURAL AMERICA

# Why CCS Infrastructure is Essential

The pipeline is not just about capturing CO<sub>2</sub>; it's about transforming South Dakota's economy today and building a foundation for tomorrow.

## Maintaining Corn Ethanol Market Access:

- **LCFS markets** are here to stay. Someone will fill that demand for **2.8 billion gallons** of ethanol.
- **It won't be Midwest ethanol without CCS.** Our ethanol will have to try to sell elsewhere.
- Neighboring states have **permitted CO<sub>2</sub> pipeline** projects which provides an **advantage** to those ethanol producers.

## Massive Economic Opportunities:

- **Increased Revenue for Farmers:** \$427 million more yearly from ethanol plants.
- **Farm-Level Impact:** A 1,000-acre farm could make \$11,670 more each year.
- **Market Resilience:** Without new markets like SAF, corn prices could drop \$0.64 per bushel.

## Driving New Investment:

- Industrial and commercial **demand** for the CO<sub>2</sub> is developing.
- There are **new industries** desiring CO<sub>2</sub> which want to locate along the pipeline.
- The potential exists for **\$15.8 billion in new SD plants and facilities**, paying hundreds of millions in sales and property taxes, and creating more than 2,000 permanent jobs for future generations.



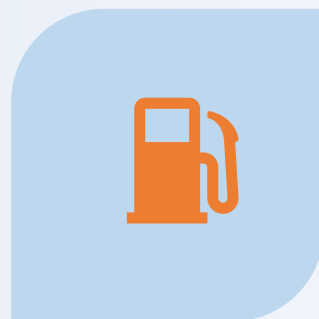
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# Sustainable Aviation Fuel (SAF)

The only way for Midwest ethanol to access this market is with carbon capture and sequestration (CCS).



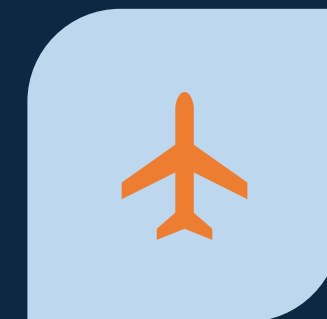
AS CORN PRODUCTION INCREASES, ETHANOL PLANTS GROW AND GLOBAL DEMAND DECREASES, WE NEED ACCESS TO NEW MARKETS.



ADDITIONALLY, AS CARS ARE MORE FUEL EFFICIENT, DEMAND FOR ETHANOL DECREASES.



SAF FROM CORN ETHANOL IS A DROP-IN TO JET FUEL, AND CAN BE BLENDED 1:1, BUT IT MUST HAVE A LOWER CARBON INTENSITY SCORE TO QUALIFY.



SAF PLANT IN GEORGIA IS IMPORTING LOW CARBON ETHANOL FROM BRAZIL RIGHT NOW.

The SAF market is expected to be 6X the current ethanol market.





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# E-Fuels Opportunity\* in South Dakota



15 million tons

The pipeline could transport over 15 million tons of CO<sub>2</sub> annually through South Dakota.



\$15.8 Billion

If utilized across various industries, this represents \$15.8 billion in new facility investments.



13,000 jobs

This would create more than 13,000 temporary jobs and more than 2,000 permanent jobs.



# Investing in South Dakota & the Midwest

Driving economic growth & job creation across the Midwest and beyond

**\$8.9  
Billion**

Capital Expenditures – Total Project

**\$1.9\*  
Billion**

Capital Expenditures – South Dakota

**3,000+  
Annually**

Construction Jobs Annually –  
South Dakota  
(estimating for 3 years)

**260  
Annually**

Operations Jobs Annually –  
South Dakota

**\$62,000+  
Annually**

Average Wage of Employees –  
Supported by Construction

**\$89,000+  
Annually**





Average Wage of Employees –  
Supported by Operations

SUMMIT CARBON SOLUTIONS IS COMMITTED TO UTILIZING LOCAL UNION AND NON-UNION CONTRACTORS, LOCAL SUPPLIERS, AND LOCAL BUSINESSES TO PROVIDE ONGOING ECONOMIC BENEFITS TO LOCAL COMMUNITIES, SOUTH DAKOTA AND THE MIDWEST.

\* The capital expenditures for SD are estimated to total \$1.9b, of which \$1.0b will be directly sourced to SD utilizing in-state construction labor and purchasing materials and equipment within the state. Right-of-way acquisition costs are included in the capital expenditures however the cost is not included in the economic impact analysis, as it represents a transfer rather than a new activity. These figures are subject to change.



# Sharing the Property Tax Burden in Lake, Kingsbury, Beadle, & Brookings Counties

ESTIMATED BENEFITS	LAKE	KINGSBURY	BEADLE	BROOKINGS
 Estimated property taxes SCS will pay to each county, each year:	\$1,286,000	\$1,111,000	\$1,036,000	\$399,000
 Most of SCS's property taxes will go to schools. Each county will receive:	\$1,006,000	\$901,000	\$726,000	\$270,000
 Within each county, the various townships, cities, and special districts will receive:	\$53,000	\$49,000	\$140,000	\$21,000
 A portion goes to the General Fund to be used at the County's discretion. Each county will receive approximately:	\$227,000	\$161,000	\$170,000	\$108,000

Estimates may change due to factors like cost revisions and route adjustments. Updated in July 2024, these estimates cover the entire Summit carbon capture, pipeline, and storage project, including the expansion announced earlier in 2024.

# Investing in Local Communities

Annual projection of county tax revenue: \$17,153,000 in aggregate

County	New Property Taxes
Beadle	\$ 1,036,000
Brookings	\$ 399,000
Brown	\$ 1,222,000
Clark	\$ 233,000
Codington	\$ 613,000
Davison	\$ 340,000
Edmunds	\$ 1,216,000
Grant	\$ 512,000
Hamlin	\$ 140,000
Hand	\$ 249,000
Hyde	\$ 154,000
Kingsbury	\$ 1,111,000

County	New Property Taxes
Lake	\$ 1,286,000
Lincoln	\$ 1,097,000
McCook	\$ 71,000
McPherson	\$ 1,893,000
Miner	\$ 708,000
Minnehaha	\$ 916,000
Sanborn	\$ 173,000
Spink	\$ 2,525,000
Sully	\$ 439,000
Turner	\$ 808,000
Union	\$ 12,000

\*Estimates are subject to change based on factors like final route and cost of the project. These estimates were revised in July of 2024. The yearly estimates were derived utilizing an initial year valuation of the project assets.

# Compensation for Landowners



Summit Carbon Solutions prioritizes fair agreements with landowners, ensuring easements benefit both parties. Land Agents are assigned to each individual landowner for the duration of the project, and we negotiate the location of the pipeline.



Easement rights stay with the land, regardless of future ownership changes.



Compensation is based on fair market value and includes three components: permanent easement, temporary easement, and damages.

THE COMPANY WILL PAY THE FOLLOWING PERCENTAGES OF THE CROP LOST TO PRODUCTION:

**100%**

coverage of crop loss in  
the first year



**80%**

coverage of crop loss in  
the second year



**60%**

coverage of crop loss in the  
third year

Compensation will be paid before construction begins and will be based on the prevailing market price for the crop or pasture type, though we will always negotiate this with the landowner. Payment will reflect the three-year average annual yield, as documented by the USDA NASS for the County.

Summit Carbon Solutions will compensate landowners for any crop yield losses in the easement area for the life of the pipeline.



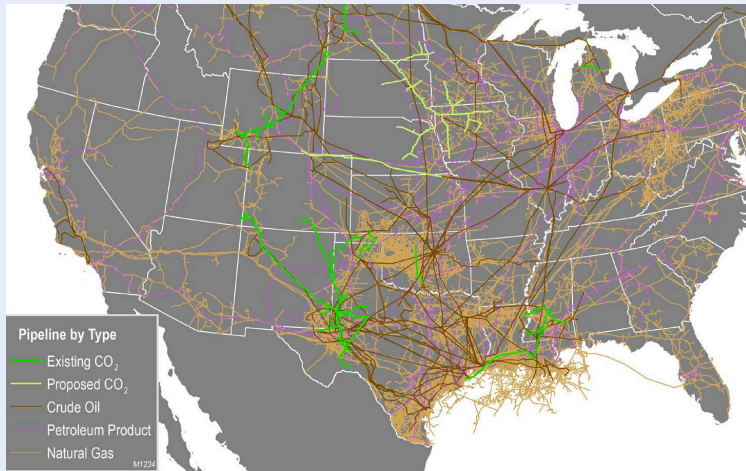
# Summit's Guarantees

- **Indemnity for Landowners:** Summit is responsible for damages caused by or as a result of constructing or operating the pipeline.
- **Minimum Burial Depth:** Pipeline will be buried at least 4 ft deep, exceeding federal regulations of 3 ft.
- **Disclosure of Dispersion Analysis:** Our dispersion analysis has been made public.
- **Lifetime Drain Tile Repairs:** Summit will repair any drain tile it damages, both during construction and operation of the pipeline
- **Safety Plan and Restoration:** Summit will implement a pipeline safety management system (SMS) and an agriculture impact mitigation plan (AIMP), to ensure proper crop land restoration and the safe design, construction and operation of the pipeline.
- **Property Ownership:** While Summit Carbon Solutions holds the easement, ownership of the land remains with the landowner.
- **Property Use:** Landowner can continue to use the pipeline easement land for agriculture, livestock, etc.

# Commitment to Safety

CCS technology has been safely and successfully implemented since the 1970s

## CURRENT U.S. PIPELINE FOOTPRINT



# Zero

CO<sub>2</sub> pipeline  
fatalities in the last  
25 years<sup>1</sup>

CO<sub>2</sub> is less of a health and environmental risk than other products and is nonflammable. (Used in many commercial applications and is a fire suppressant).

- ✓ Capture technology has been deployed at 40+ ethanol facilities throughout the U.S.
- ✓ CO<sub>2</sub> pipelines are regulated by the Pipeline Hazardous Material Safety Administration (PHMSA); same agency that regulates crude oil pipelines, refined products pipelines, and other pipelines transporting liquid products.
- ✓ More than 5,300 miles of CO<sub>2</sub> pipelines are currently operating in the U.S.
- ✓ Pipeline transportation is the safest method of transportation; 99.999% reliable.
- ✓ Summit Carbon Solutions will only use high quality material and equipment with preference to material and equipment made or manufactured in the U.S. when available.
- ✓ Summit Carbon Solutions will utilize proven technologies and employ best industry practices to ensure the project is safe for landowners and the communities where they live, work, and raise families.
- ✓ The pipeline is continuously monitored and operated by skilled personnel 24/7.



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# Our Commitment



Summit Carbon Solutions will **work with landowners, community leaders, and stakeholders** with respect, honesty, and transparency.



The **safety of our operations**, our employees, the communities where we operate, and our landowner partners is a core Company **value**.



The Company is guided by our Agricultural Impact Mitigation Plan (AIMP), in **partnership** with landowners, to **protect and restore lands**, topsoil, drain tiles, drainage systems, and terraces to their preconstruction levels.