



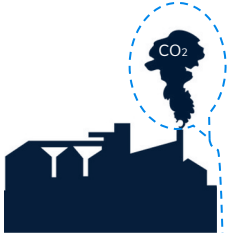
SUMMIT CARBON
SOLUTIONS

South Dakota
January 2022



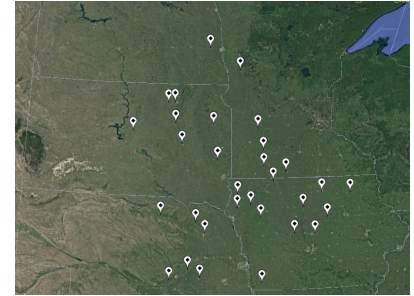
Summit Carbon Solutions Overview

HEADQUARTERED IN AMES, IOWA, SUMMIT CARBON SOLUTIONS ("SCS") IS THE WORLD'S LARGEST INTEGRATED CARBON CAPTURE, TRANSPORTATION AND STORAGE BUSINESS IN THE WORLD



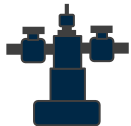
Step 1

SCS has aggregated over ~8M tons of CO₂ from 31 facilities in 5 Midwestern states



Step 2

The CO₂ will be transported via a pipeline network that spans nearly 2,000 miles and will be completed in 2024



Step 3

The CO₂ will be permanently and safely stored deep underground in North Dakota



SCS' INFRASTRUCTURE WILL BE CAPABLE OF STORING 12M TONS/Y; EQUIVALENT TO TAKING 2.6M CARS OFF THE ROAD



SUMMIT CARBON
SOLUTIONS

SCS IS ENGINEERING ITS PIPELINE SYSTEM TO ACCOMMODATE GROWTH IN CO₂ VOLUMES FROM ADDITIONAL PARTNER FACILITIES



World's largest carbon capture and storage project



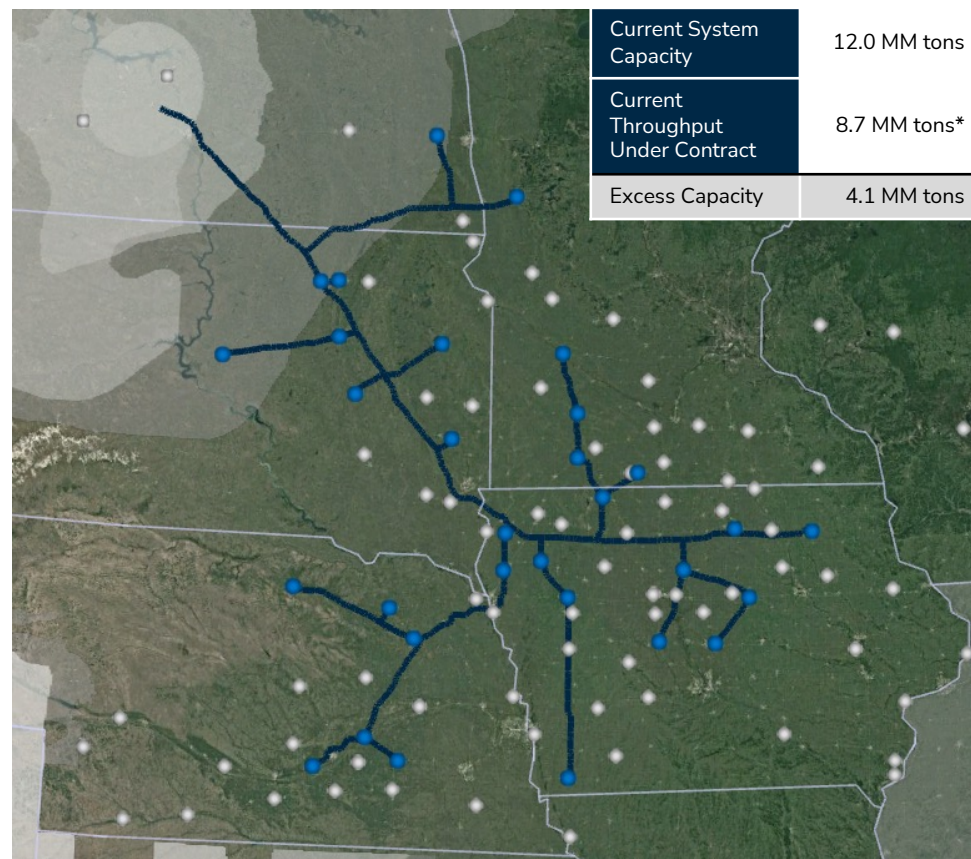
Oversized infrastructure to accommodate ~4M more tons of CO₂ annually



Partnering with already best-in-class biofuel facilities with direct access to the **lowest cost** inputs



CCS further **increases facility profitability and credit worthiness**, supporting **long-term viability** of SCS' partner facilities



Partner Facility



Other Low-Cost CO₂ Facility



Potential CO₂ Sequestration Zones



Pipeline Route

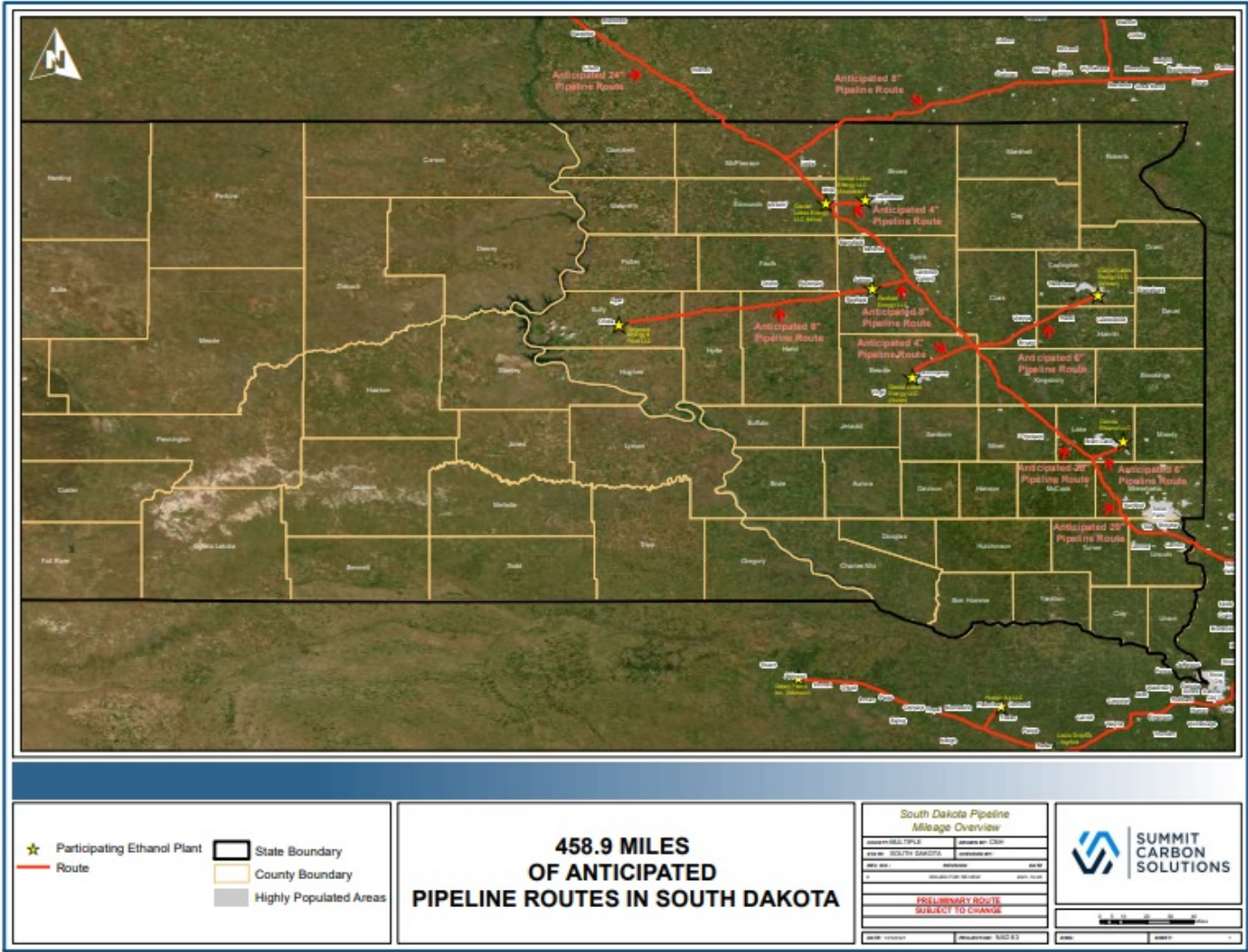
* Assumes all 31 partner facilities are running at nameplate capacity

South Dakota

SEVEN CURRENT
PARTNERS LOCATED
IN SOUTH DAKOTA

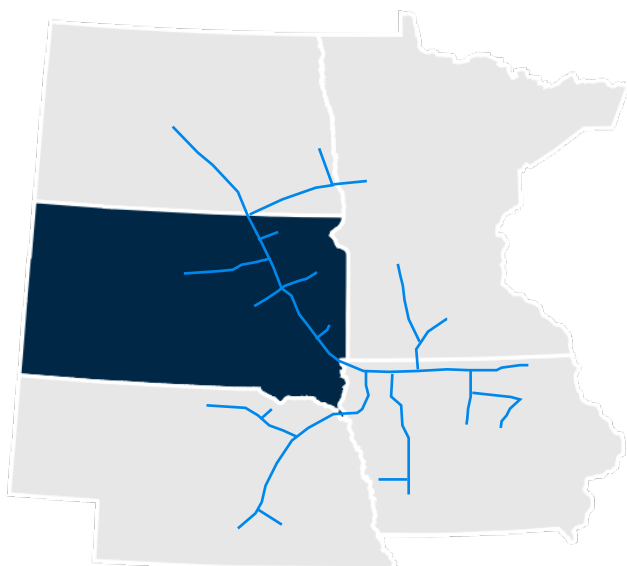


- DAKOTA ETHANOL – WENTWORTH
- GLACIAL LAKES – ABERDEEN
- GLACIAL LAKES – HURON
- GLACIAL LAKES – MINA
- GLACIAL LAKES – WATERTOWN
- REDFIELD ENERGY – REDFIELD
- RINGNECK ENERGY - ONIDA



Project Location & Partner Facilities

THE MIDWEST CARBON EXPRESS SPANS FIVE STATES INCLUDING SOUTH DAKOTA



2,000
miles of newly
installed pipeline

12 million
metric tons of CO₂
transportation capacity

3.3 billion
gallons of ethanol
production capacity
connected

31 BIOREFINERY PARTNERS
ACROSS
20 COMPANIES

SEVEN CURRENT PARTNERS
LOCATED
IN SOUTH DAKOTA

BIOREFINERY PARTNER COMPANIES

 Green Plains

 Homeland
Energy
Solutions

 Golden
Grain
Energy



Dakota
ETHANOL

 Glacial Lakes
Energy, LLC

 Siouxland
Energy
Cooperative

 REDFIELD
ENERGY, LLC

 PINE LAKE CORN
PROCESSORS
EST. 2005

 LITTLE SIOUX
CORN
PROCESSORS

 Plymouth Energy
LLC

 TE
Tharaldson | Ethanol

 Hickory
AG

 RINGNECK
Energy

 CEDAR FALLS ENERGY LLC

 HERON LAKE
BIO ENERGY

 LDC
Louisiana Drilling Company

 LE
Louisiana Drilling Company

 HE

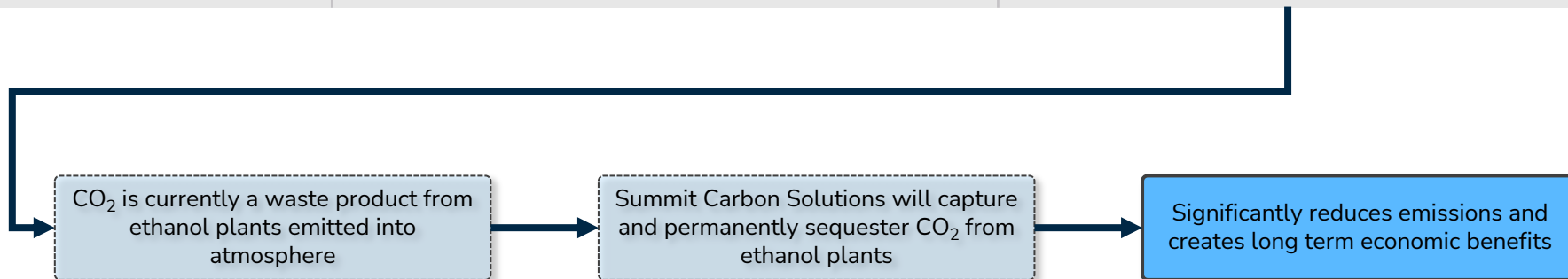
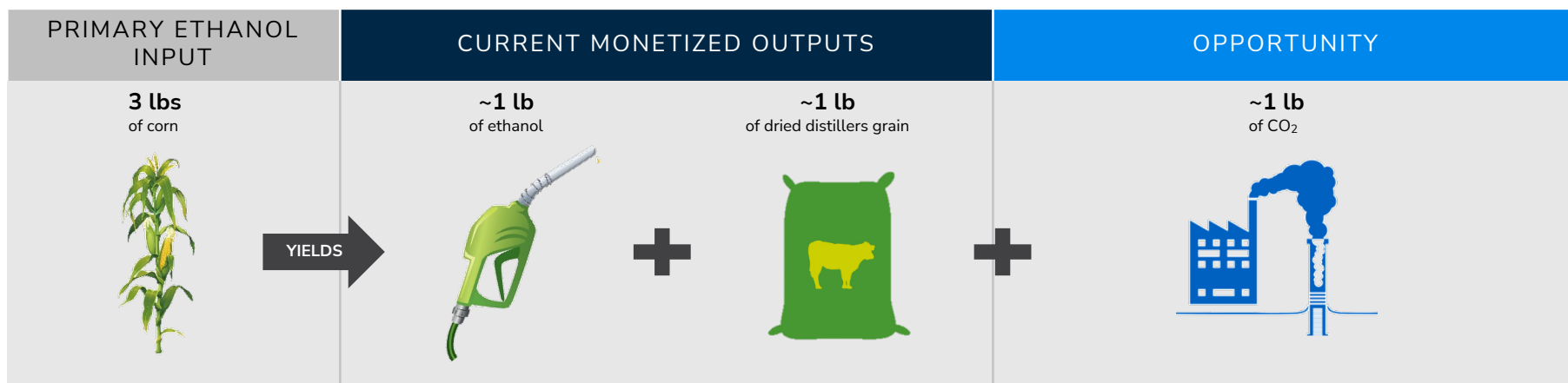
 GARD COUNTY
CORN PROCESSORS

DAKOTA ETHANOL (WENTWORTH)
GLACIAL LAKES ENERGY (ABERDEEN)
GLACIAL LAKES ENERGY (HURON)
GLACIAL LAKES ENERGY (MINA)
GLACIAL LAKES ENERGY (WATERTOWN)
REDFIELD ENERGY (REDFIELD)
RINGNECK ENERGY & FEED (ONIDA)



Opportunity to Scale a Transformational Carbon Capture Platform

SUMMIT CARBON SOLUTIONS ("SCS") WILL BE THE LARGEST CARBON CAPTURE & STORAGE ("CCS") PLATFORM IN THE WORLD

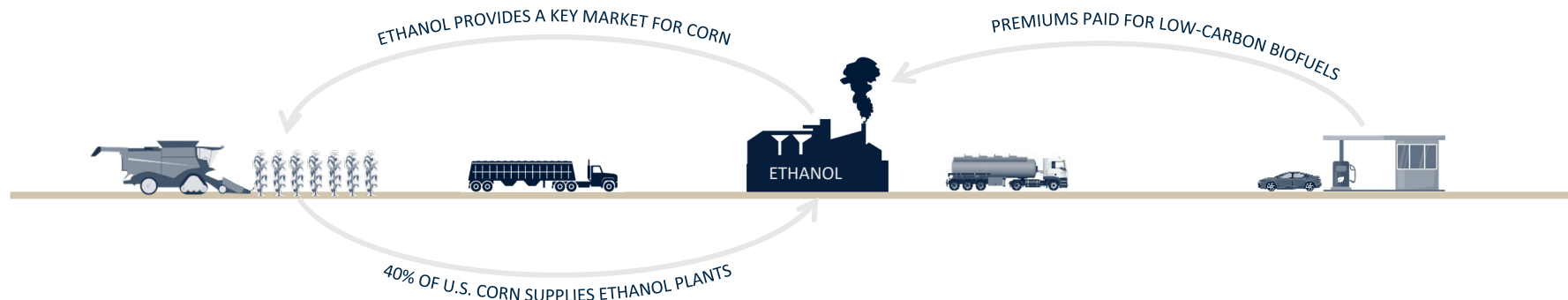


SCS WILL LEAD THE DECARBONIZATION OF THE BIOFUELS INDUSTRY IN THE MIDWEST



Enhancing the Long-Term Profitability of Ethanol & Agriculture

SCS ENABLES ETHANOL TO BE PRODUCED MORE SUSTAINABLY ALLOWING IT TO BETTER COMPETE IN A LOW-CARBON WORLD



ETHANOL AND AGRICULTURE WORK TOGETHER TO ADD VALUE ACROSS THE SUPPLY CHAIN AS WELL AS CREATE ECONOMIC IMPACT AND JOBS FOR RURAL AMERICA.

UNITED STATES

EACH YEAR, THE ETHANOL
INDUSTRY ADDS:

\$43B+
of annual GDP contribution

EACH YEAR, THE ETHANOL
INDUSTRY SUPPORTS:

340,000+
jobs

IOWA

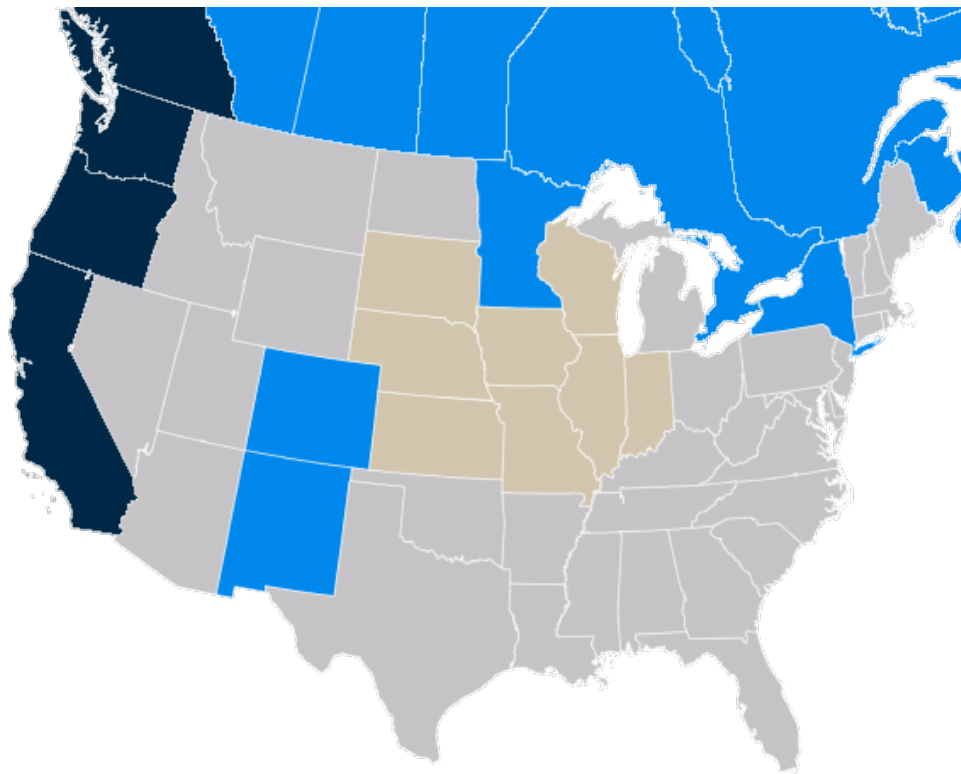
\$4.5B+
of annual GDP contribution

44,000+
jobs

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

Growing Low-Carbon Markets Provides Attractive Market

NORTH AMERICAN LOW-CARBON FUEL MARKETS

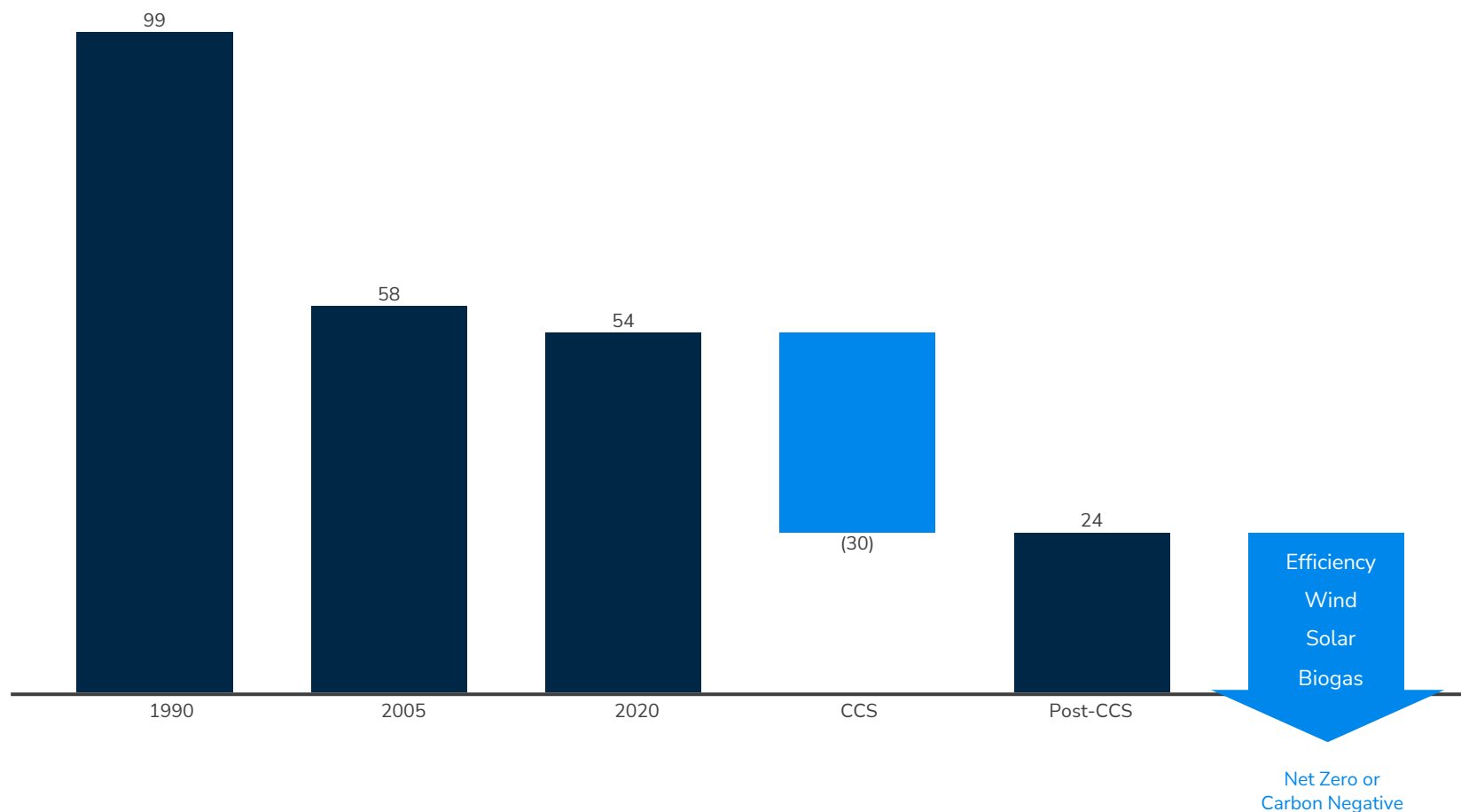


BILLION GALLONS OF LOW-CARBON ETHANOL DEMAND

Existing	Likely	Proposed	Total
2.1	2.2	1.8	6.1

CCS Provides a tangible path to Net Zero

ETHANOL CARBON INTENSITY DECREASING DRAMATICALLY OVER TIME

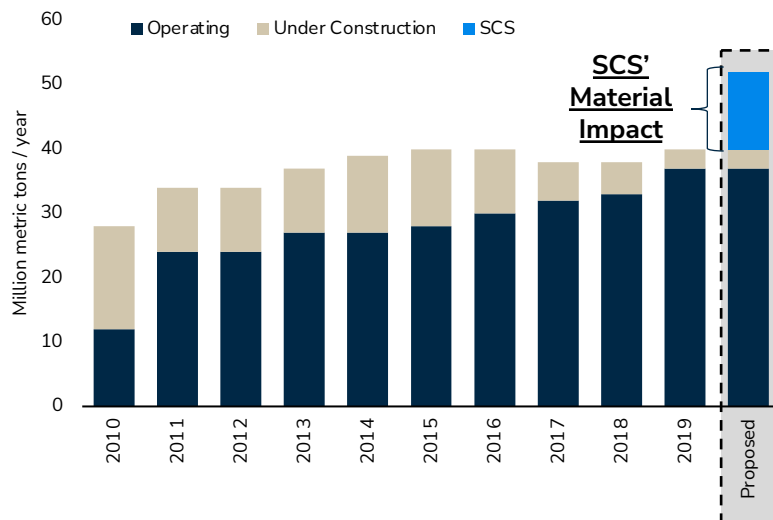




Environmental Impact of Capturing and Storing 12M Tons of CO₂

SCS IS COMMITTED TO A GREEN INITIATIVE THROUGH ITS INVESTMENTS IN CCS AND RENEWABLE ENERGY

GLOBAL CARBON CAPTURE & STORAGE CAPACITY



Largest Global CCS Projects	Location	CCS Capacity
Summit Carbon Solutions	Upper Midwest	12.0
Century Plant	Texas	8.4
Shute Creek Processing	Wyoming	7.0
Gorgon Carbon	Australia	3.7
Great Plains Synfuels	North Dakota	3.0
Petrobras Santos Basin	Brazil	3.0
Petra Nova	Texas	1.4
Quest	Canada	1.0
Coffeyville Gasification	Kansas	1.0
Air Products	Texas	1.0
Boundary Dam	Canada	1.0
Illinois Industrial CCS	Illinois	1.0
Sleipner CO ₂ Storage	Norway	1.0

CCS capacity in million metric tons per year

IMPACT OF 12 MILLION TONS OF CO₂ SEQUESTERED



~ 2.6 million

Cars Removed from the Road
per Year



~ 1.4 million

Homes Powered
per Year



~ 1.4 billion

Gallons of Gasoline
Consumed



~ 15 million

Acres of Forest
per Year

Summit Carbon Solutions Economic Benefits

SCS WILL DRIVE ECONOMIC GROWTH AND JOB CREATION ACROSS THE MIDWEST AND BEYOND

\$4.5 Billion

capital investment with operations beginning in 2024



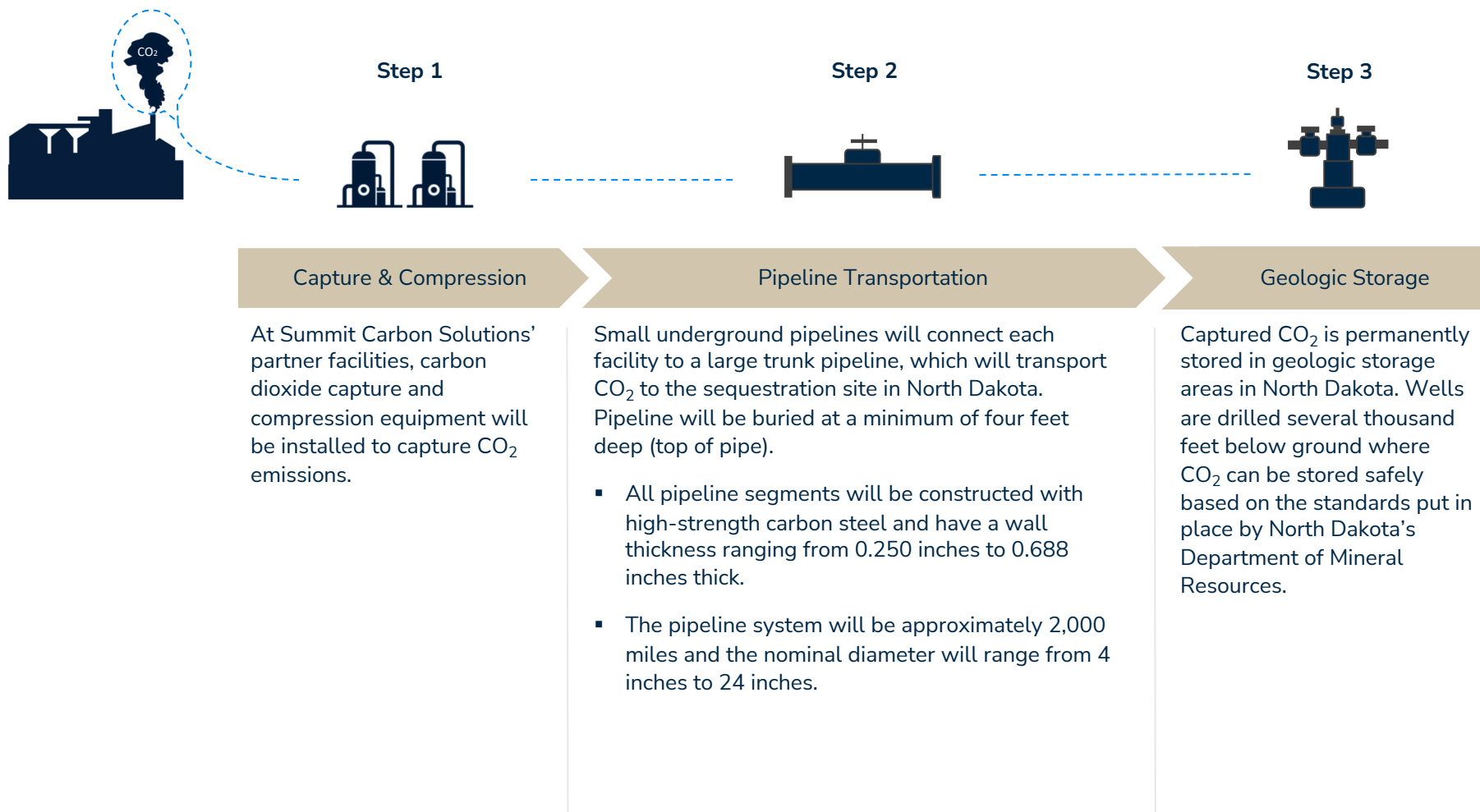
	Capture & Compression	Pipeline	TOTAL
PROJECT JOBS	132 - 198	14,067 - 17,193	14,199 - 17,391
OPERATION JOBS	220 - 307	128 - 156	348 - 463
TOTAL JOBS	352 - 505	14,195 - 17,349	14,547 - 17,854

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 AND THE MIDWEST.



Summit Carbon Solutions: A Commitment to Safety

DEPLOYING EXISTING, PROVEN TECHNOLOGIES TO REDUCE CARBON INTENSITY OF ETHANOL PRODUCTION

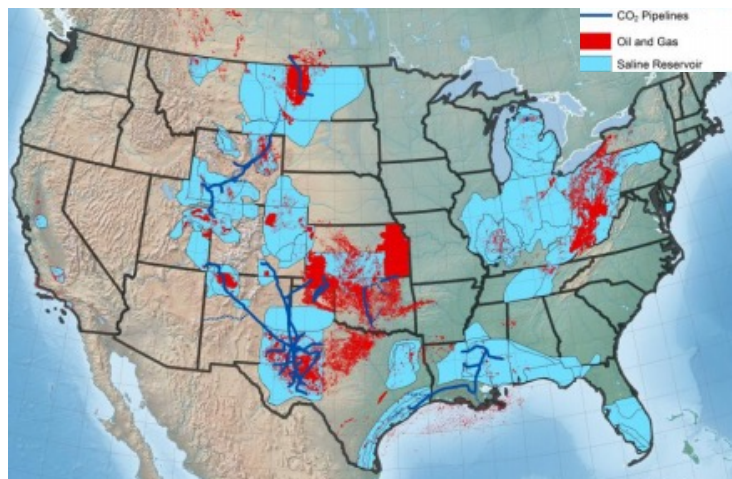




Carbon Capture, Transportation and Storage is a Safe, Proven Practice

CCS TECHNOLOGY HAS BEEN SAFELY AND SUCCESSFULLY IMPLEMENTED SINCE THE 1970S

CURRENT U.S. CO₂ PIPELINE FOOTPRINT



Capture technology has been deployed at 40+ ethanol facilities throughout the U.S.



Pipeline transportation is the safest method



More than 5,000 miles of CO₂ pipelines exist in the U.S.

IMPECCABLE SAFETY RECORD

Zero

CO₂ pipeline fatalities in
the last 20 years¹

CO₂ is much less of a health and environmental hazard than other pipelines. CO₂ is not combustible (it is used as a fire retardant)



SCS will only utilize highly rated and safe materials, including carbon steel



We will utilize proven technologies and employ the best industry practices to ensure the project is safe for landowners and the communities where they live, work, and raise families



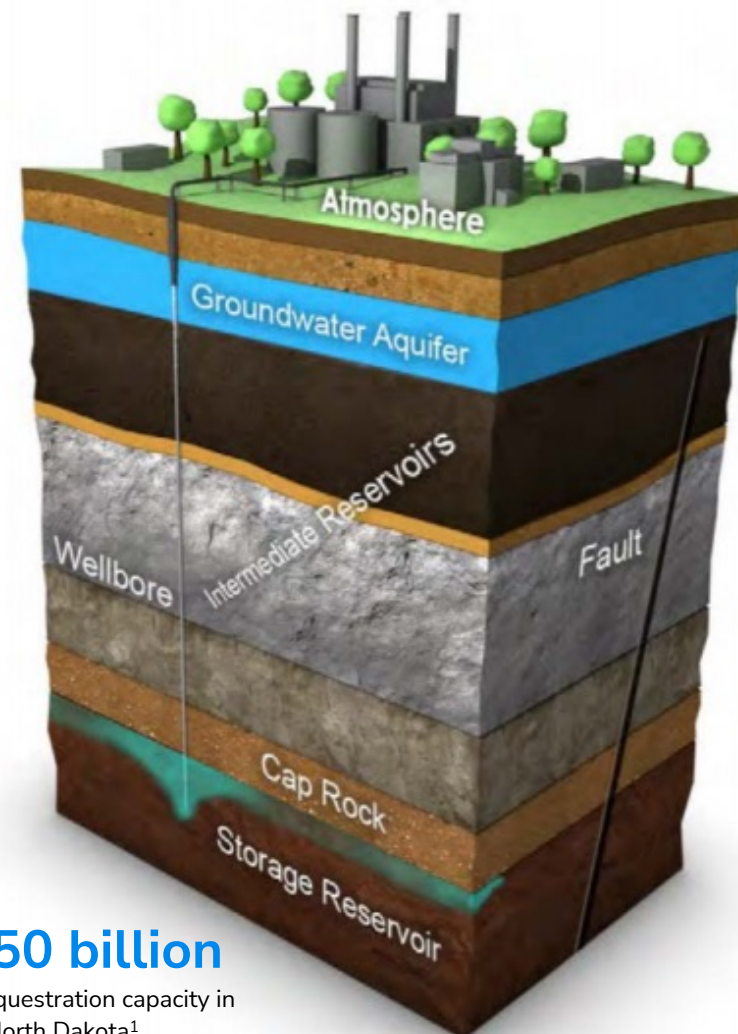
Geologic Sequestration in Saline Reservoirs

SUMMIT CARBON SOLUTIONS WILL INJECT SUPERCRITICAL CO₂ DEEP INTO SALINE RESERVOIRS FOR PERMANENT STORAGE

- At the end of the pipeline, the CO₂ will be injected underneath an impermeable rock layer into saline formations for permanent sequestration
- Pore space is leased from landowners that own the surface rights
- Saline storage has been proven by ADM's Decatur, IL facility and is currently being pursued by several other ethanol operators outside of Summit Carbon Solutions' project (e.g. Red Trail Energy, Midwest Ag Energy, REX, Alto Ingredients)
- Over a 100 year injection period, SCS will utilize less than 1% of North Dakota's total sequestration capacity

GEOLOGICAL SEQUESTRATION STEPS

- 1 Site Screening & Selection
- 2 Lease Pore Space
- 3 Permitting & Construction
- 4 Well Testing
- 5 Injection
- 6 Monitoring, Verification & Accounting
- 7 Site Closure



up to **250 billion**
tons of sequestration capacity in
North Dakota¹

Our Commitment to You

SUMMIT CARBON SOLUTIONS WILL
WORK WITH LANDOWNERS, COMMUNITY
LEADERS, STAKEHOLDERS, AND MORE
WITH RESPECT, HONESTY, AND
TRANSPARENCY. IF YOU FEEL THAT HAS
NOT BEEN DEMONSTRATED, PLEASE
REACH OUT TO
INFO@SUMMITCARBON.COM

THE SAFETY OF OUR OPERATIONS, OUR
EMPLOYEES, THE COMMUNITIES WHERE
WE OPERATE, AND OUR LANDOWNER
PARTNERS IS OUR TOP PRIORITY AND
ALWAYS WILL BE.

WE WILL BE GOOD STEWARDS
OF THE LAND ACROSS OUR
ENTIRE PROJECT AREA. SUMMIT CARBON
SOLUTIONS WILL
PROTECT AND RESTORE LANDS,
TOPSOIL, DRAIN TILES, DRAINAGE
SYSTEMS, AND MORE TO THEIR
PRECONSTRUCTION LEVELS.

Compensation for Landowners

SUMMIT CARBON SOLUTIONS WILL HAVE
LAND AGENTS ASSIGNED TO EACH
INDIVIDUAL LANDOWNER FOR
THE DURATION OF THE PROJECT.

WE ARE COMMITTED TO BUILDING AND
MAINTAINING A POSITIVE, PRODUCTIVE
RELATIONSHIP WITH LANDOWNERS BUILT
ON TRUST AND TRANSPARENCY.



Along with safety, it is a top priority for Summit Carbon Solutions to negotiate easements with landowners that are agreeable for both parties and provide value to both parties.



Easement rights are acquired with the land and are not impacted by future changes in ownership.



Compensation is based on a fair market value for land in the county – Summit will be utilizing recent comparable sales data for each county to determine the fair market value. Summit will offer 115% of the fee value based on that comparable sales analysis for its permanent easement.



Summit Carbon Solutions will pay for anticipated damages to crops or lands prior to construction and work directly with landowners to address their specific concerns related to the impact of construction on their property.

FOLLOWING TODAY'S MEETING, WE WOULD LIKE TO HAVE THE OPPORTUNITY TO VISIT WITH LANDOWNERS INDIVIDUALLY, ANSWER QUESTIONS AND HOPEFULLY SECURE YOUR PERMISSION TO START SURVEY WORK ON YOUR PROPERTY.



Crop Loss Compensation

SUMMIT CARBON SOLUTIONS WILL PAY LANDOWNERS FOR LOSSES TO CROPS PLANTED PRIOR TO CONSTRUCTION OR IF A CROP NORMALLY WOULD HAVE BEEN PLANTED PRIOR TO THE FINISH OF CONSTRUCTION

THE COMPANY WILL PAY FOLLOWING PERCENTAGES OF THE ESTIMATED CROP LOST TO CONSTRUCTION:

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 figures will be based on the prevailing market price index by crop type or in accordance with any prearranged purchase agreements and based upon the three-year annual average yield of the crop as documented by the landowner or by the records from the local agricultural agency.



Drainage Tile

PIPELINE ON THE MIDWEST CARBON EXPRESS PROJECT WILL BE BURIED AT A MINIMUM OF FOUR FEET DEEP TO THE TOP OF THE PIPE

Summit Carbon Solutions will work with each landowner to develop a plan to restore drainage systems to its prior function.

EXAMPLES INCLUDE:

Individual drain tile repairs

Installation of new drain tile(s)

Redesign and re-installation of the drain tile system

WHO PERFORMS THE WORK?

As a common practice, Summit Carbon Solutions will employ a professional drain tile company to repair tile damaged during construction. We are also willing to work with landowners who prefer to hire their own contractor for the repairs.

Summit Carbon Solutions will pay reasonable costs if the company chooses to have a representative present during this process.

When practical, Summit Carbon Solutions will work with landowners to relocate tile(s) prior to the start of construction.

Key Takeaways



\$4.5 billion capital investment in 5 Midwestern states



14,500 – 17,900 estimated jobs created by the project



Up to 12M tons of CO2 is captured and stored every year



Significantly reduces ethanol carbon intensity, leading to a net zero transportation fuel produced in the Midwest



Project utilizes proven, safe technology and equipment



State Maps

12 CURRENT PARTNERS
LOCATED IN IOWA

CORN LP

GOLDEN GRAIN ENERGY

GREEN PLAINS - SHENANDOAH

GREEN PLAINS - SUPERIOR

HOMELAND ENERGY SOLUTIONS

LINCOLNWAY ENERGY

LITTLE SIOUX CORN PROCESSORS

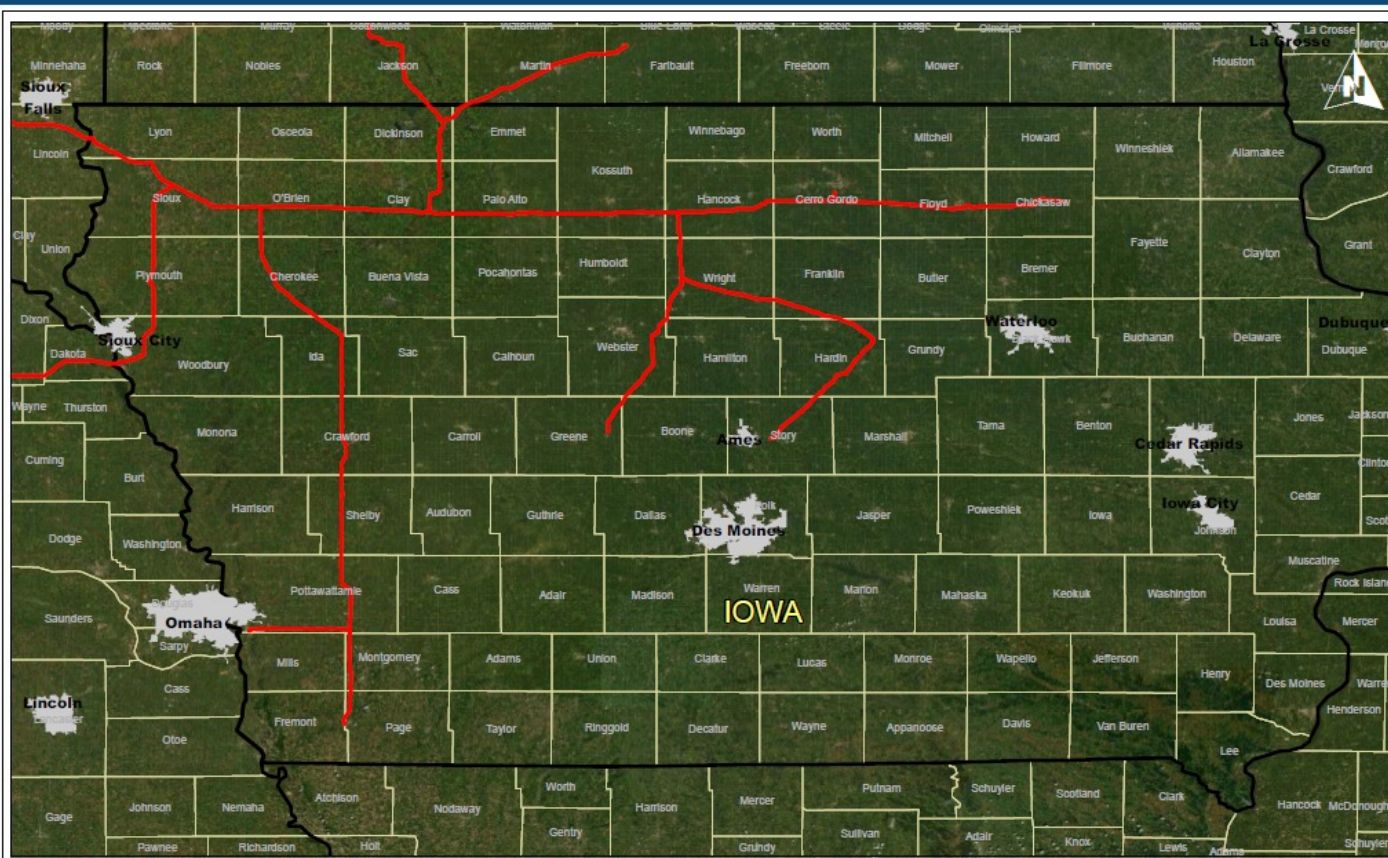
LOUIS DREYFUS – GRAND JUNCTION

PINE LAKE CORN PROCESSORS

PLYMOUTH ENERGY

QUAD COUNTY CORN PROCESSORS

SIOUXLAND ENERGY COOP



**703.53 MILES
OF ANTICIPATED
PIPELINE ROUTES IN IOWA**

*Iowa Pipeline
Mileage Overview*

COUNTY: MULTIPLE	DRAWN BY: CHW
STATE: IOWA	DATE: 08/01/2023
REV: 001	REVISION: 001
DATE: 08/01/2023	PROJECT: 104233
DATE: 08/01/2023	PROJECT: 104233

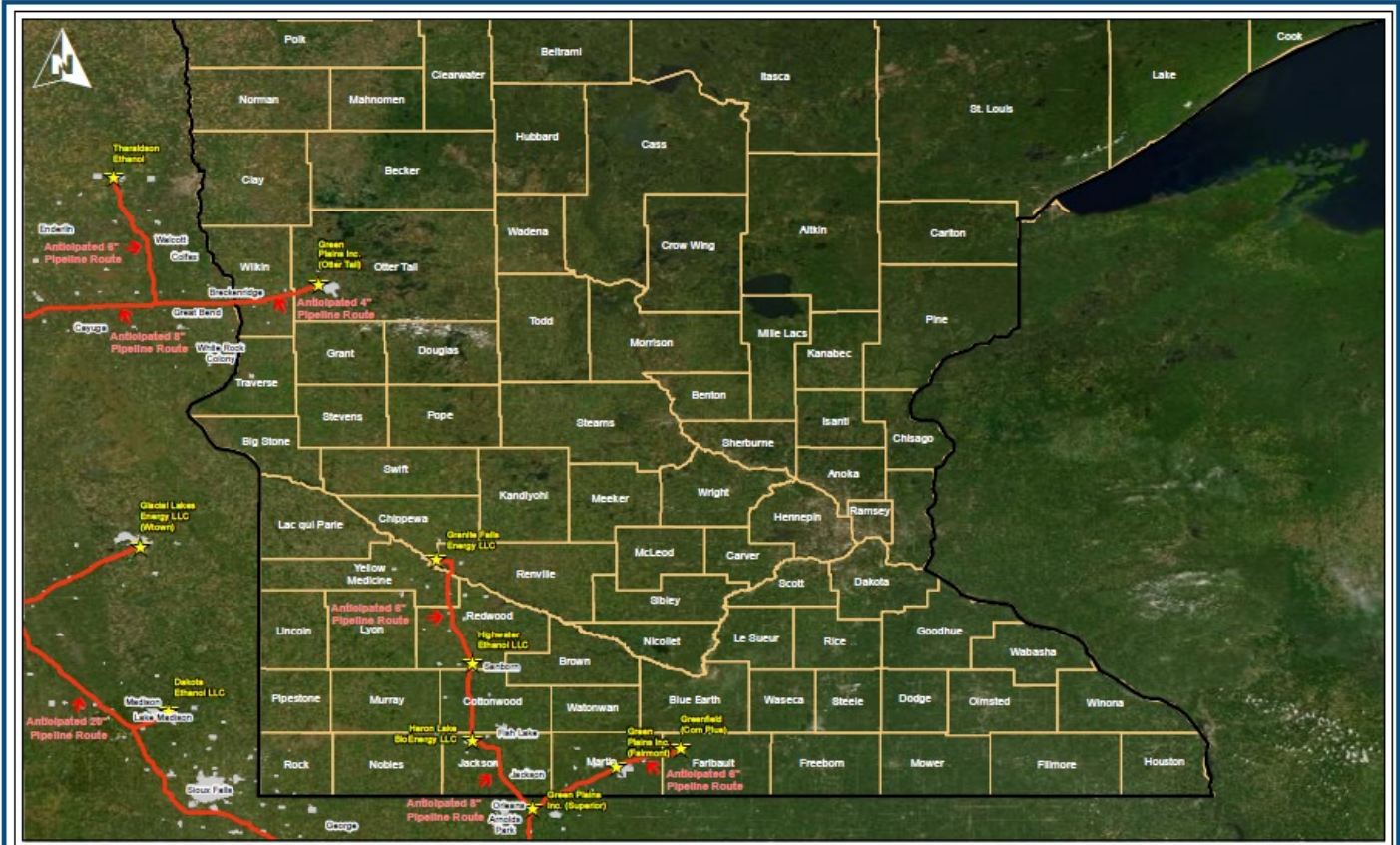


SUMMIT
CARBON
SOLUTIONS

0 10 20 30 40 Miles

- State Boundary
- County Boundary
- Highly Populated Area
- Route

Minnesota



★ Participating Ethanol Plant

Route

State Boundary


County Boundary

Highly Populated Areas

170.86 MILES
OF ANTICIPATED
PIPELINE ROUTES IN MINNESOTA

Minnesota Pipeline
Mileage Overview

COMPANY/PLANT	ADDRESS
STATE	COUNTY
API NO.	DATE
1	100.000 PLS. REVIEW
PRELIMINARY ROUTE SUBJECT TO CHANGE	
DATE: 10/1/2021	PRODUCTION: N/A

SUMMIT
CARBON
SOLUTIONS

0 5 10 20 30 40 Miles

0 5 10 20 30 40 Kilometers

FIVE CURRENT PARTNERS
LOCATED
IN MINNESOTA

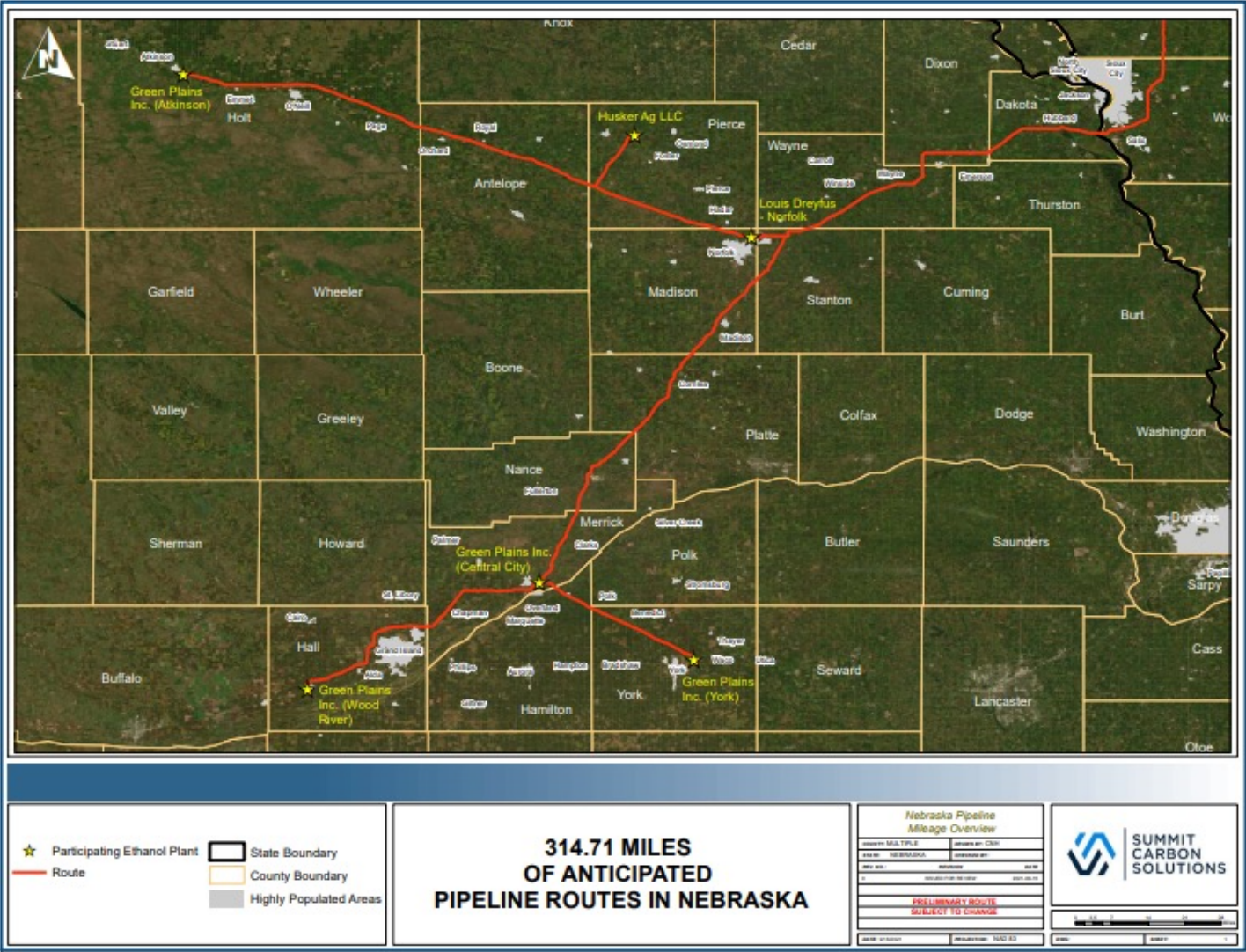
- GRANITE FALLS ENERGY
- GREEN PLAINS – FAIRMONT
- GREEN PLAINS – FERGUS FALLS
- HERON LAKE BIOENERGY
- HIGHWATER ETHANOL

Nebraska

SIX CURRENT PARTNERS
LOCATED
IN NEBRASKA



- GREEN PLAINS - ATKINSON
- GREEN PLAINS - CENTRAL CITY
- GREEN PLAINS - WOOD RIVER
- GREEN PLAINS - YORK
- LOUIS DREYFUS - NORFOLK
- HUSKER AG - PLAINVIEW

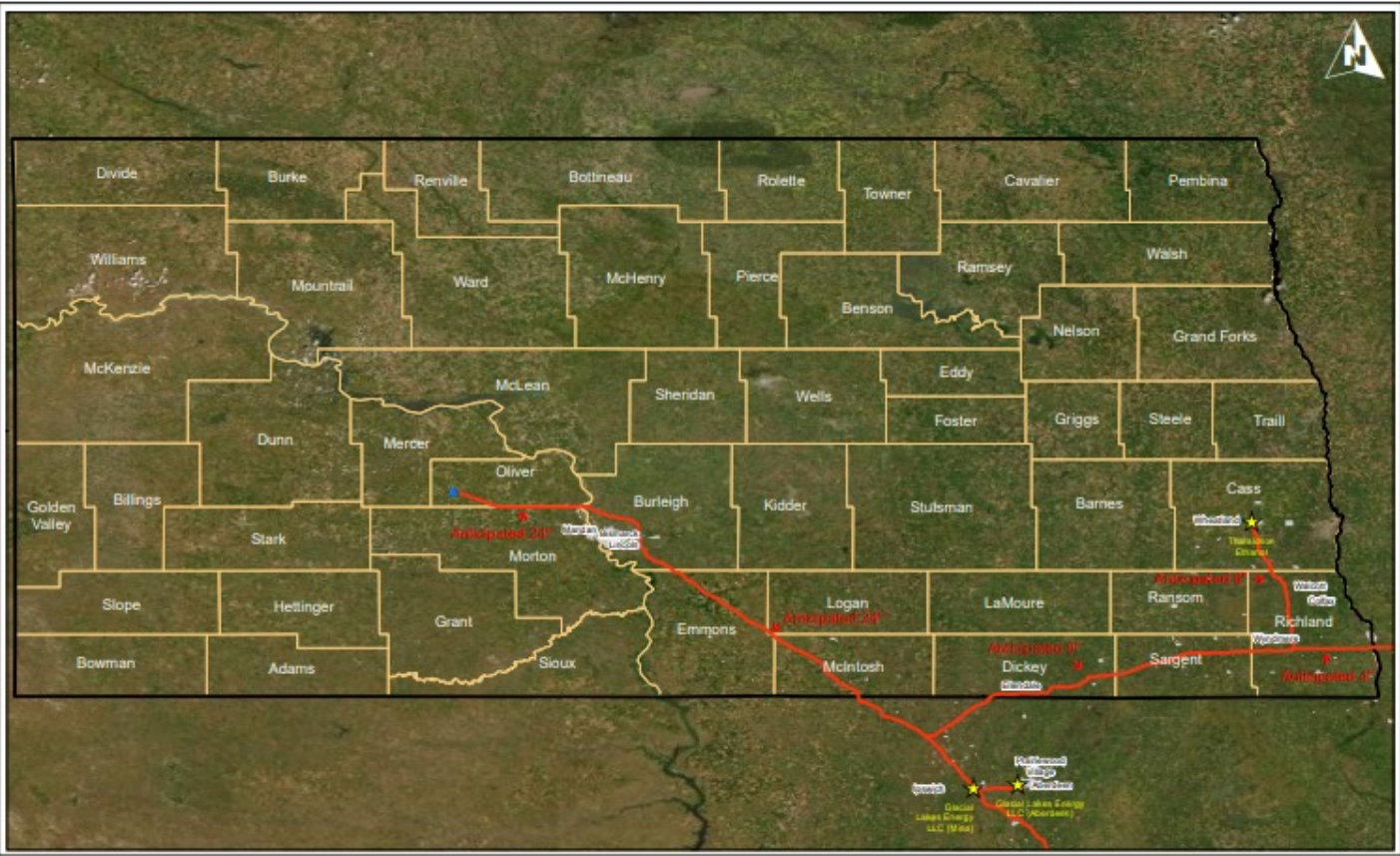


North Dakota

ONE CURRENT
PARTNER LOCATED
IN NORTH DAKOTA IN
ADDITION TO INJECTION
OPERATIONS



THARALDSON ETHANOL - CASSELTON



★ Participating Ethanol Plant

▲ Sequestration Site

— Route

▬ State Boundary

▬ County Boundary

303.82 MILES
OF ANTICIPATED
PIPELINE ROUTES IN NORTH DAKOTA

North Dakota Pipeline Mileage Overview			
System	MULTIPLE	Anticipated	2024
State	NORTH DAKOTA	Anticipated	2024
Area	Anticipated	Anticipated	2024
City	Anticipated	Anticipated	2024
County	Anticipated	Anticipated	2024
PRELIMINARY ROUTE SUBJECT TO CHANGE			
DATE	10/10/2023	REVISION	000003

SUMMIT
CARBON
SOLUTIONS

Anticipated

2024



SUMMIT CARBON
SOLUTIONS