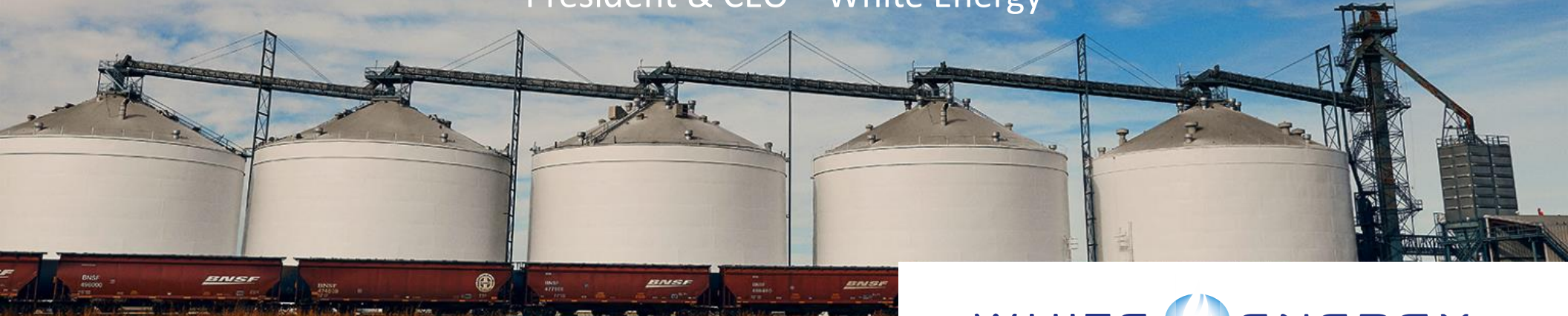


Carbon Capture & Ethanol

The Perfect Fit

Greg Thompson

President & CEO – White Energy



WHITE  ENERGY
CLEAN ENERGY FOR A CLEAN FUTURE.

white-energy.com

Why Carbon Capture Matters

**Background on White Energy
Our company and our history with CCS**

**Occidental Petroleum Announcement
Details and what it means**

**Carbon Capture & Ethanol
Why it makes environmental and financial sense**



Introducing White Energy

One of America's leading producers of biofuels, food ingredients and animal feed

Ethanol

Capacity to produce more than 300 million gallons of ethanol per year

Gluten

The largest manufacturer of vital wheat gluten in North America

Co-Products

Valuable co-products include wet and dry distillers grains for use as livestock feed

Carbon Capture Initiatives

Our Operations

Four state-of-the-art grain processing facilities strategically located in Texas and Kansas



RUSSELL, KS
Ethanol and Vital Wheat
Gluten Production

HEREFORD & PLAINVIEW, TX
Ethanol Production

PLANO, TX
Corporate Office

Profile: Hereford, Texas

Ethanol production has increased nearly 20 percent in the past five years

Overview

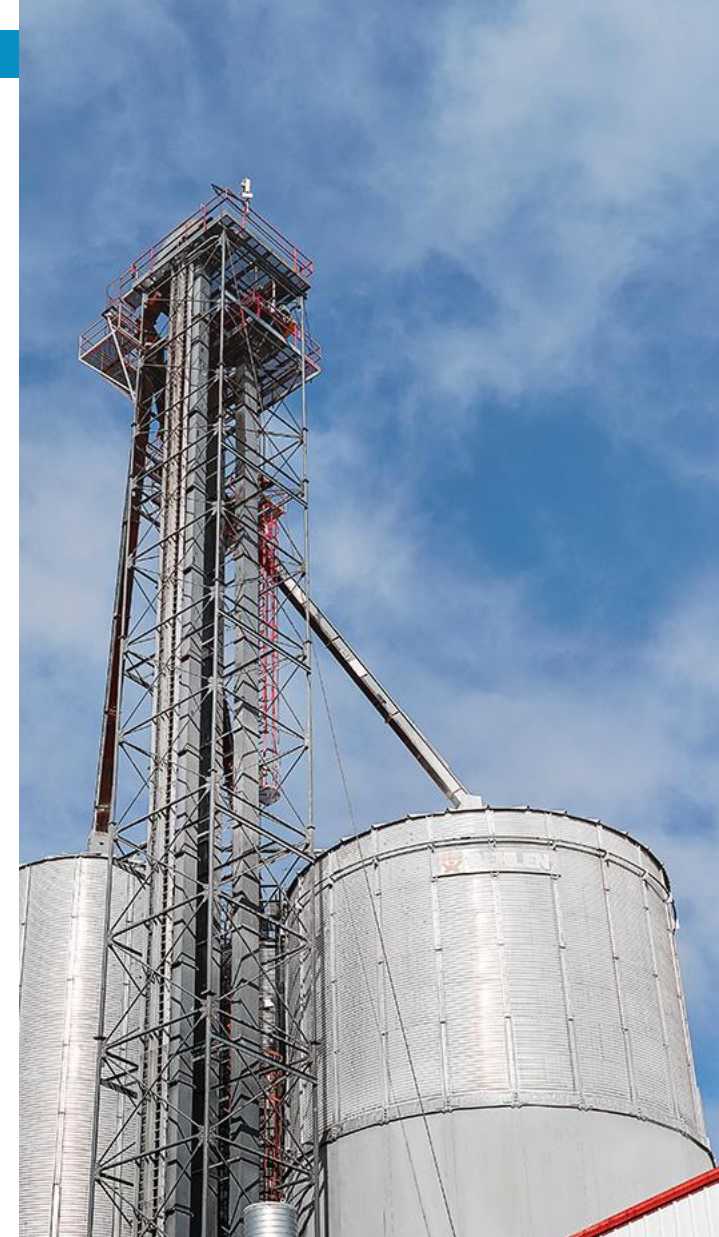
- Designed by ICM. Built by Fagen.
- Began operations in 2008

Ethanol Production

- Nameplate: 100M gallons per year
- Permitted Capacity: 130M gallons per year
- 2017 Production: 113M gallons
- 2018 Production: 123M gallons (projected)

Operational Details

- Feedstock: Milo/Corn Feedstock Capabilities
- Storage Capacity: 3M gallons of ethanol
- Co-Products: Wet Distillers Grains, Corn Oil



Celebrating 10 Years

The Hereford plant has produced more than 1 billion gallons of ethanol since beginning operations 10 years ago.

Profile:

Plainview, Texas

Strategically located with easy access to the nation's largest ethanol markets in both the US and Internationally

Overview

- Designed by ICM. Built by Fagan.
- Began operations in 2008

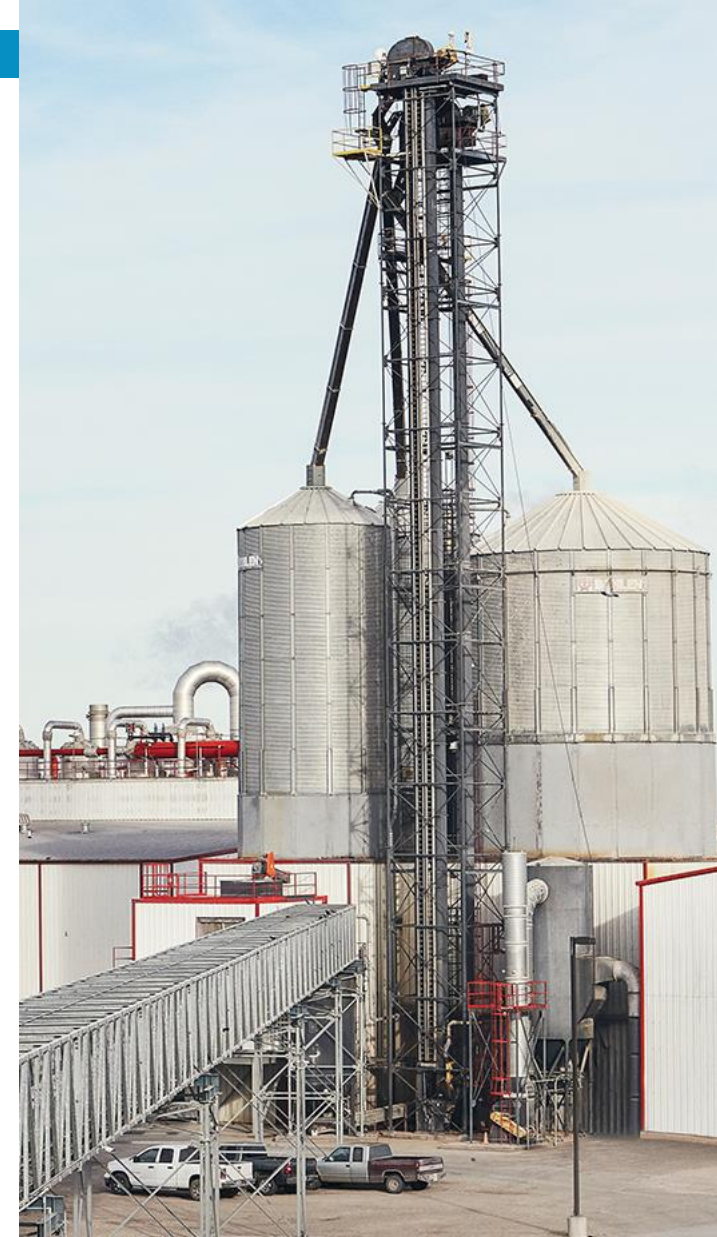
Ethanol Production

- Nameplate: 100M gallons per year
- Permitted Capacity: 120M gallons per year
- 2017 Production: 114M gallons
- 2018 Production: 118M gallons (projected)

Operational Details

- Feedstock: Milo/Corn Feedstock Capabilities
- Storage Capacity: 3M gallons of ethanol, 2M bushels of grain
- Co-Products: Wet/Dry Distillers Grains, Corn Oil

A new permit, expected to be finalized in 2018 will increase production capacity to 130 million gallons per year



Investing in the Future

White Energy has invested more than \$25 million in capital improvements at the Plainview plant.

Profile:

Russell, Kansas (Ethanol)

The most cost efficient ethanol plant in the United States

Overview

- Designed by ICM. Built by Fagen.
- Began operations in 2001

Ethanol Production

- Nameplate: 30M gallons per year
- Permitted Capacity: 55M gallons per year
- 2017 Production: 49M gallons
- 2018 Production: 49M gallons (projected)

Operational Details

- Feedstock: Corn/Sorghum/Wheat Starch
- Storage Capacity: 2M gallons of ethanol, 1.6M bushels of grains
- Co-Products: Wet/Dry Distillers Grains

The adjacent gluten operation provides low-cost wheat starches that account for 1/3 of the feedstock supply — a competitive advantage that makes the Russell plant the most cost-efficient in the nation.



First in the Nation

When the Russell plant opened in 1995, it was the first ICM designed ethanol plant in the nation.

Profile: Russell, Kansas (Gluten)

The largest gluten processing facility in North America

Overview

- State-of-the-art plant featuring dry milling, gluten separation, drying, product blending, and packaging lines
- Began operations in 1995

Gluten Production

- Permitted Capacity: 55M lbs per year
- 2017 Production: 44M lbs
- 2018 Production: 45M lbs (projected)

Operational Details

- Wheat starch created during the production process is used as feedstock at the adjacent ethanol plant
- FDA approved facility ensures safety and quality
- Co-Products: Wheat Midds

White Energy distributes safe, quality gluten under the Heartland brand name to America's most iconic food and beverage companies.



A National Leader

The Russell plant is the largest supplier of Gluten in the United States which is growing at 5.3% per year

White Energy CO2 History

1998-99 CO2 EOR feasibility study conducted by University of Kansas (KGS and TORP), and Shell CO2 Company (now Kinder Morgan CO2 Co. L.P.). Submitted grant proposal (1999) to DOE.

2000-01 DOE grant awarded for CO2 EOR and work begun. Data gathering, reservoir characterization, drill and core CO2 injection well, additional resource assessment reservoir simulation, and technology transfer.

2001 Well injection testing and further reservoir simulation. U.S. Energy Partners/White Energy ethanol plant completed and full capacity production began in November.

2002 Co-gen plant start-up in March. Final decision on how to proceed with EOR pilot, finish wellbore upgrades and testing, and install surface facilities, repressure reservoir to 1250 psi (presently 600-800 psi), and CO2 injection began.

2003-05 CO2 slug and WAG (CO2 injection ended June 17, 2005 continuous water flooding June 21st 2005)

2005-07 Post-CO2 waterflood

RESULTS

Approximately **95%** of the injected CO2 remained in the reservoir

An estimated **27,902 bbls** of oil recovery was attributed to CO2 injection (through March 2010)

What Sets Us Apart

Environmental Responsibility

We produce ethanol with some of the lowest carbon intensity ratings of any plant in the nation.

- Ethanol produced at the Russell plant has the lowest carbon intensity rating approved by the California Air Resource Board (CARB).
- Capital improvement projects — including updated waste water treatment facilities and the use of integrated zero liquids discharge technology — have reduced water consumption and decreased electric usage.
- Well-positioned to pursue Enhanced Oil Recovery (EOR) and Carbon Sequestration (CCS) projects due to close proximity to the Permian Basin



Innovation Projects

Enhanced Oil Recovery (EOR)

Carbon Capture & Sequestration (CCS)

Industrial Grade Alcohol

White Wheat Gluten

Biodiesel



A photograph of an industrial facility at sunset. In the foreground, a white semi-truck with a long trailer is parked on a paved area. Behind it, several large, cylindrical, metallic storage tanks are visible, arranged in a row. The sky is a mix of orange, pink, and blue, indicating the time is either dawn or dusk. The overall scene is industrial and well-lit by the ambient light of the setting or rising sun.

Enhanced Oil Recovery Opportunities

How White Energy and Occidental Petroleum are working together

Carbon Capture Opportunities

CCS: A solution for meeting climate mitigation targets

- California to adopt CCS/CCUS for cap and trade as well as LCFS in near future; Oregon and Washington may soon follow suit
- As carbon taxing becomes more prevalent, carbon producers must mitigate CO₂ emissions through sequestration or by purchasing offsets
- Among major CO₂ emissions sources, ethanol fermentation is the cleanest — and the cheapest — to capture. Low hanging fruit for CCS projects.



CO₂ Enhanced Oil Recovery Project Overview



White Energy partnered with Occidental Petroleum to conduct a FEED study to refine the investment case for one or more transformational CO₂-EOR projects. Key drivers include:

Expansion of 45Q federal tax credits

- Improved tax incentives -- up to \$35.00 per metric ton for CO₂ used in EOR
- Smaller-scale projects now eligible (threshold reduced from 500 thousand metric tons per annum ("kmtpa") to 100-150 kmtpa)

LCFS attribution of a CI point reduction to ethanol with CO₂ capture for use in EOR targeted for September 2018 approval

CO₂ Enhanced Oil Recovery Project Overview



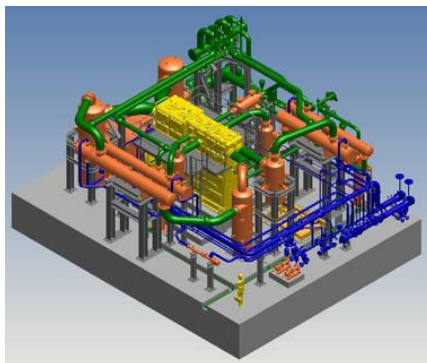
Project structure still being developed. Potential value sharing includes:

- Oxy and White Energy provide capex (compression, pipeline, etc.) and operate the project
- White Energy supplies high-purity CO₂
 - (~98.5% purity from fermentation and scrubbing processes).
- The Project is expected to qualify for 45Q
- LCFS/low carbon intensity value attributes

CCUS with CO₂ Enhanced Oil Recovery: FEED Study

Front End Engineering Design Study

- Set design parameters for capture facility
- Set design parameters for CO₂ compression
- Set design parameters for pipeline
- Scope cost of facility
- Scope cost of pipeline
- Scope timeline

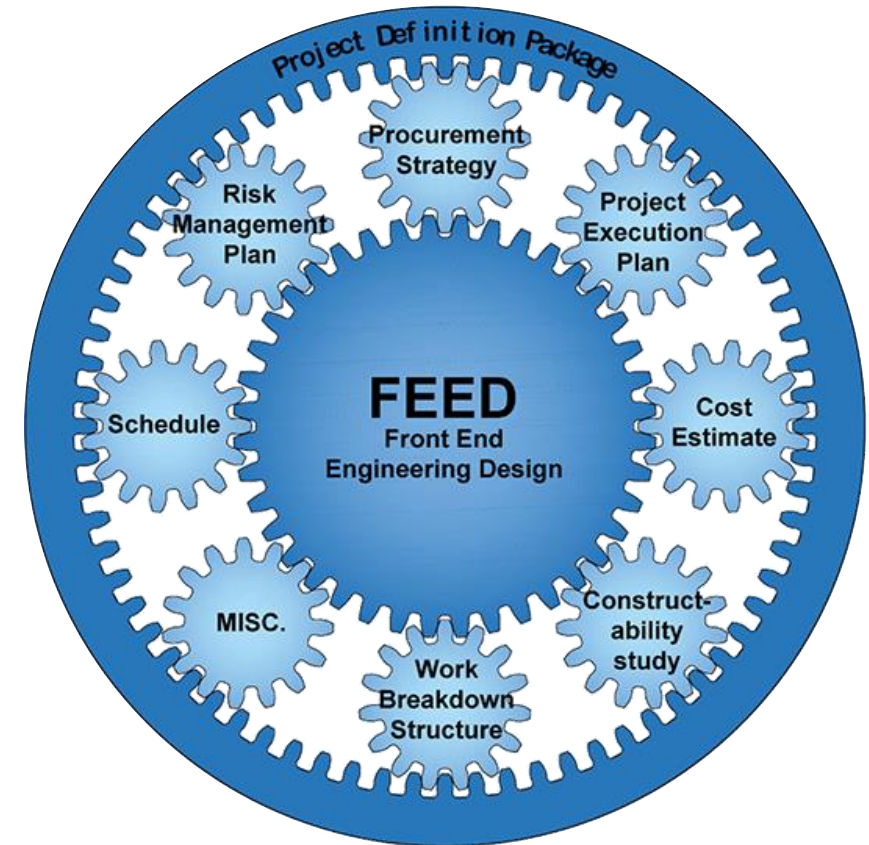


Source: Company Management.

Independent Engineer



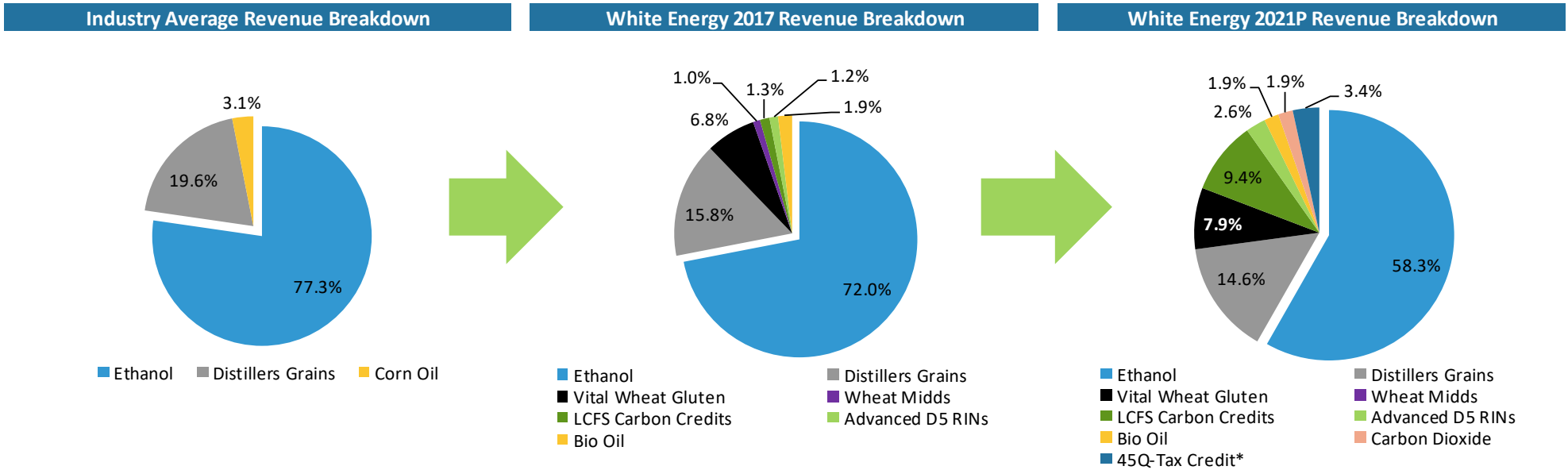
Clients



Diversification Through Carbon Initiatives

2021 Growth / Diversified Earnings Outlook:

- EOR presents an opportunity to further diversify White Energy's revenue streams via 45Q tax credits, CO₂ sales, D5 RINs, and CI attributes



Source: Company Management.

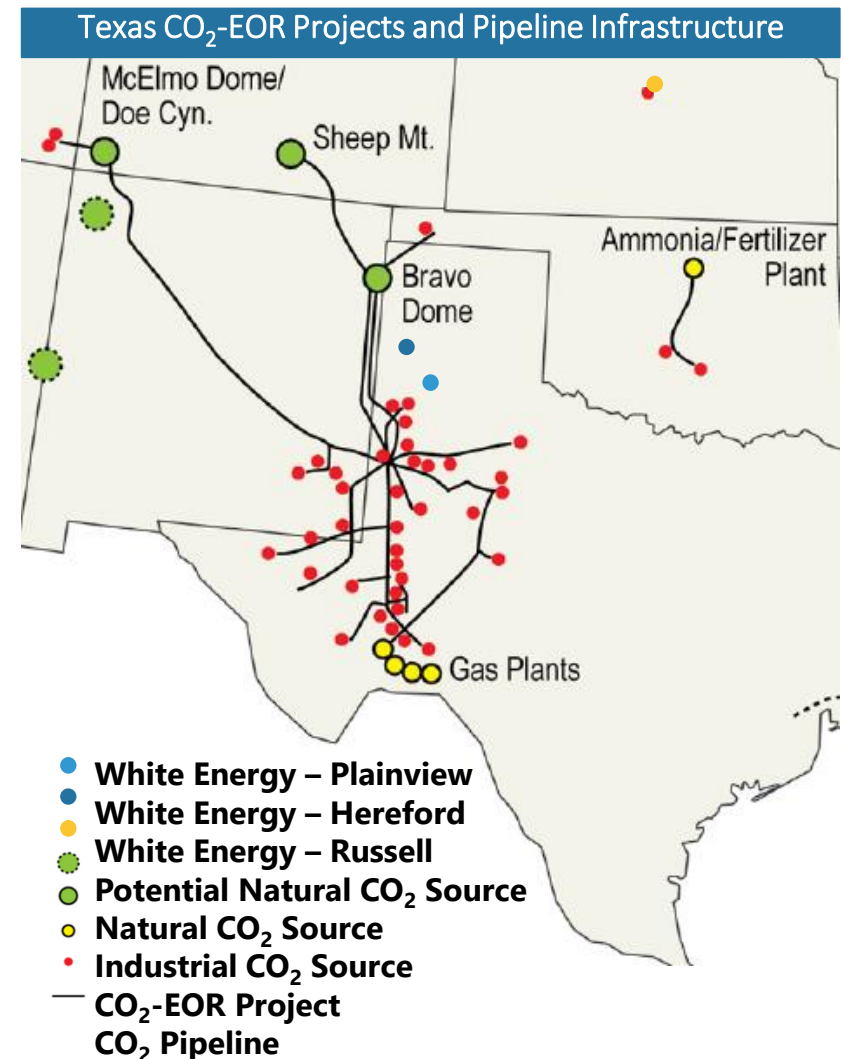
* 45Q EOR tax credit grossed up to a revenue equivalent based on 21% tax rate.

CO₂ Enhanced Oil Recovery: Downstream Market Access

White Energy is uniquely situated in close proximity to existing CO₂ pipeline infrastructure that supplies the growing appetite for Permian CO₂-EOR applications

- Multiple pipelines / EOR projects are in close proximity to our Texas facilities.
- Permian Basin demand for CO₂ remains strong as technology advancements continued to identify additional EOR exploitable reserves.

Source: Company Management, DOE-NETL



Why Carbon Capture Projects Make Sense for White Energy

- **Increased value for White Energy**

- **Occidental Petroleum is a leader in the EOR space**

By leveraging Oxy's in-house expertise, relationships and 50+ years of operating experience, White Energy can substantially increase the chances of a successful EOR project

- **It's the right time...**

There is a 6 year window to qualify for the 45Q credits
(Required start date: 2018-2023)

- **EOR is proven technology used in the Permian**

Thank You!



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