

○ ○ ○ ○

# ***LOW CARBON-INTENSITY AMMONIA PROJECT***

# ***ADAMS FORK ENERGY***

Mingo County, West Virginia

May 2025



# DISCLOSURE



Statements made in this presentation regarding TransGas Development Systems, LLC and the information incorporated by reference into this release that are not historical factual statements are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. It is intended that such forward-looking statements be covered by the safe harbor provisions for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. This section is included for purposes of complying with those safe harbor provisions. The forward-looking statements include, among other things, statements regarding the intent, belief or expectations of TransGas and its officers and can be identified by the use of terminology such as "may", "expect", "intend", "plan", "estimate", "anticipate", "should", and other comparable terms or the negative of them. In addition, we, through our senior management, from time to time make forward-looking oral and written public statements concerning our expected future operations and other developments. You are cautioned that, while forward-looking statements reflect our good faith belief and best judgment based upon current information, they are not guarantees of future performance and are subject to known and unknown risks and uncertainties. These risks and uncertainties could cause actual results to differ materially from expectations.

Factors that could affect TransGas' results include the availability of financing for the projects, the decision of others as to proceeding with the projects, the timing of various phases of the projects, and the entry into definitive agreements with others related to the projects and our joint venture. Any forward-looking statements, whether made in this report or elsewhere, should be considered in context with the risk factors discussed or incorporated by reference in this report and the various disclosures made by us about our businesses in our various public reports including but not limited to forms 10Q and 10K filed with the United States Securities and Exchange Commission which can be accessed at no monetary charge through the Company website at:

[www.tgds.com](http://www.tgds.com)





# ***EXECUTIVE SUMMARY***

As a low carbon-intensity (“CI”) ammonia plant, in late-stage development, Adams Fork is well-positioned to rapidly contribute to the decarbonization of the global economy. Working towards a goal to provide a secure supply of low carbon-intensity ammonia to the world.



# KEY POINTS

## DELIVERING DE-CARBONIZATION

One of the largest energy transition projects in the world

Phase 1 will produce up to 2.16MM metric tons per year of low-CI ammonia

## AMMONIA USES ARE EXPANDING

Ammonia is a key component of energy transition:

Hydrogen carrier  
Powering steam boilers  
Carbon Free Shipping fuel

## SEQUESTERED CO2 HAS VALUE

AFE recovers > 99% of the 2.873MM metric tons of CO2 produced each year

Permanently captured and stored on-site

Anticipate eligibility for a \$85/metric ton,<sup>1</sup> 45Q federal tax credit for 12 years

<sup>1</sup>Will include a direct-pay option under the recently passed Inflation Reduction Act



# ***KEY POINTS***

## **LOW COST DELIVERED GAS**

150 acre site has permit for higher-pollution CTL project

Connected to abundant local methane reserves

Gathering pipeline system adjacent to site

Lump sum purchase fixes input cost

## **ADVANTAGEOUS LOCATION**

Co-located with abundant low-cost methane

CO2 storage capacity

Cooling water

Access to two Class 1 railroads

## **LOW LIFECYCLE CARBON INTENSITY**

Low carbon-intensity (low CI) gas comprises 25% of supply balance

Haldor Topsoe SynCor ammonia technology >99.3% CO2 capture

Indicative cradle-to-gate carbon intensity of -19.3kg\_CO2/kg\_H2

Similar to “green” ammonia, Adams Fork CI score makes it eligible for full Inflation Reduction Act 45V Clean Hydrogen credit of \$3/kg\_H2



# LOCATION

**TOTAL LOW-CI AMMONIA PRODUCTION:  
OVER 8.5 MILLION TONS PER YEAR**

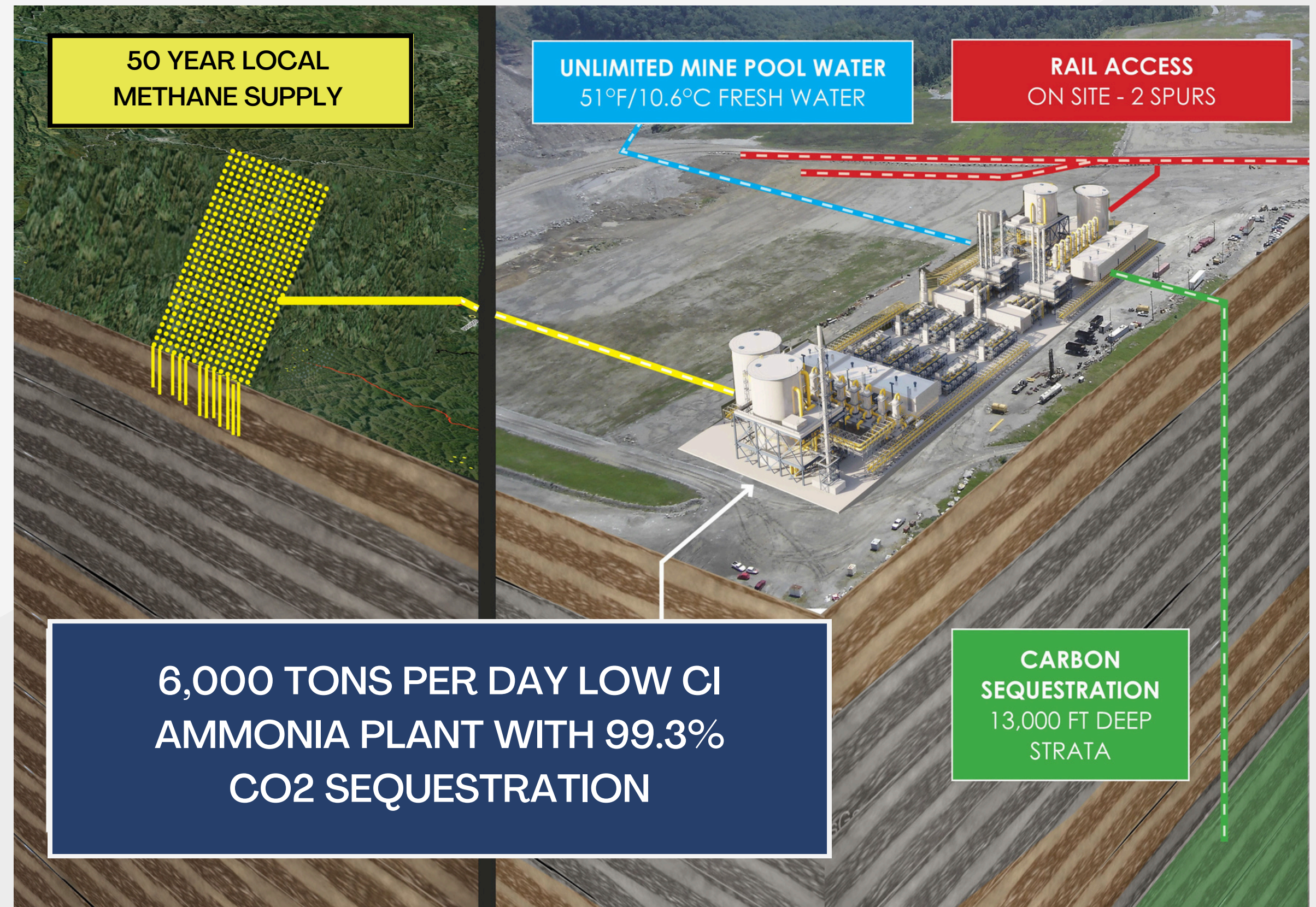
- Site has enough capacity, resources, and source permit for at least 5 trains
- Support from Mingo County, the State, and its congressional delegation
- Property tax abatement
- Existing pipeline gathering system
- Virtually limitless and free water supply
- 50 year property lease from Mingo County, West Virginia





# PERMITTED SITE

- Eligible for full Inflation Reduction Act 45V Clean Hydrogen credit of \$3/kg\_H2
- Abundant in situ, fixed price, fuel reserve
- On-site carbon sequestration
- >99.3% permanent decarbonization
- Advanced, cost-effective, proven technology



ILLUSTRATIVE DIAGRAM





# ***DEDICATED PROJECT FUEL RESERVES***

- Usage: ~180,000 MMBtu per day, or 65Bcf/year
- Methane delivered to site, at low fixed price, for its useful life
- Existing expansive gathering and transmission pipeline system adjacent to site – no FERC or PSC approval needed
- Local methane supply comprises 25% low CI gas, and 75% natural gas
- Low CI gas and natural gas ensure low lifecycle carbon intensity
- Close proximity to site, with direct feed and no commingling with other molecules
- Existing owner to operate and produce the reserves







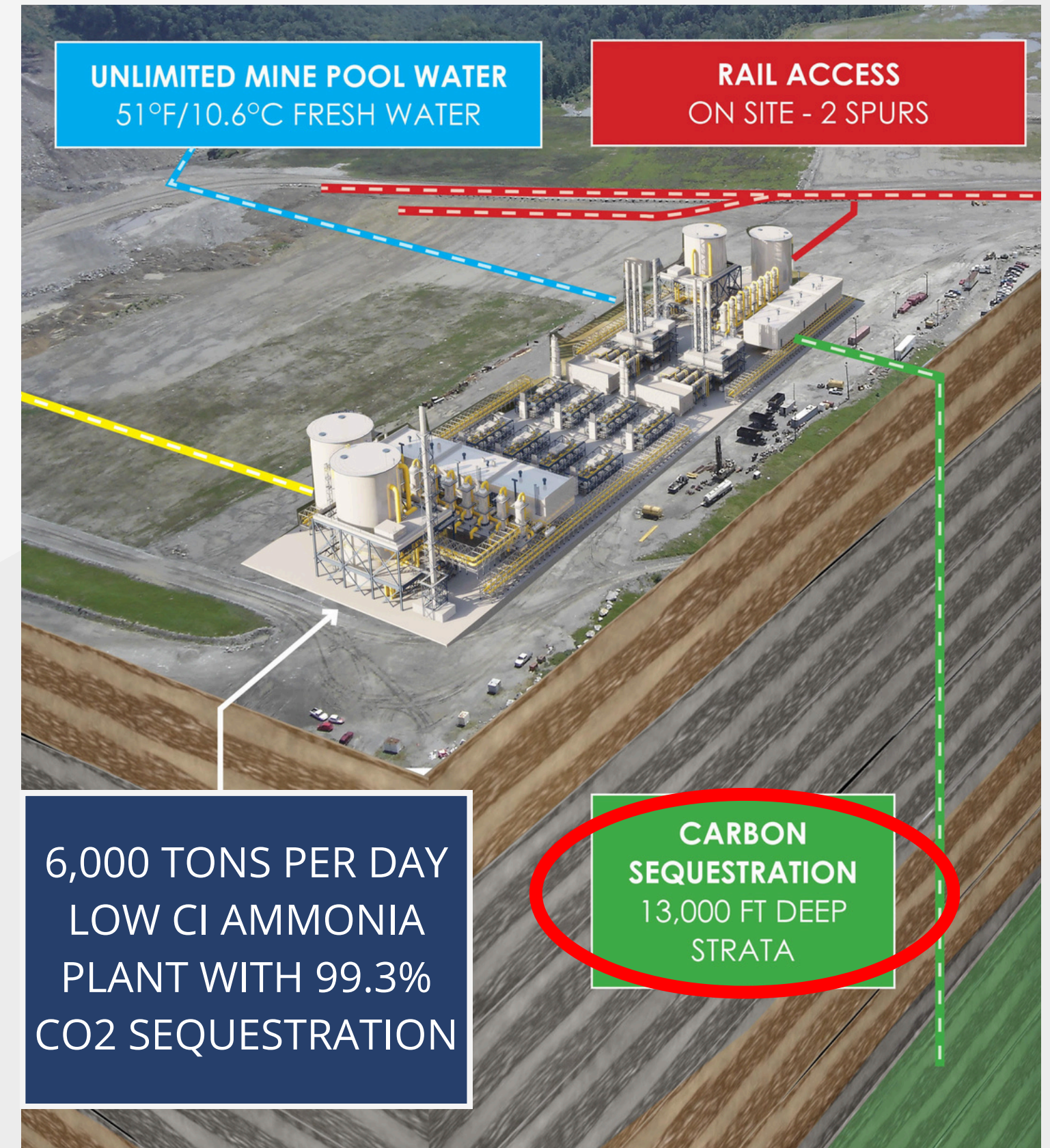
# CO<sub>2</sub> CAPTURE & SEQUESTRATION

Full ammonia production also produces 2.873MM tons per year of CO<sub>2</sub>

Adams Fork sits atop a suitable geologic structure

CO<sub>2</sub> removed and captured can be permanently sequestered on-site

Identified in a United States Department of Energy, National Energy Technology Center Report





# ***TECHNOLOGY***

Haldor Topsoe SynCor™ Ammonia Technology is uniquely designed with one CO<sub>2</sub> removal section in the process (pre-combustion)

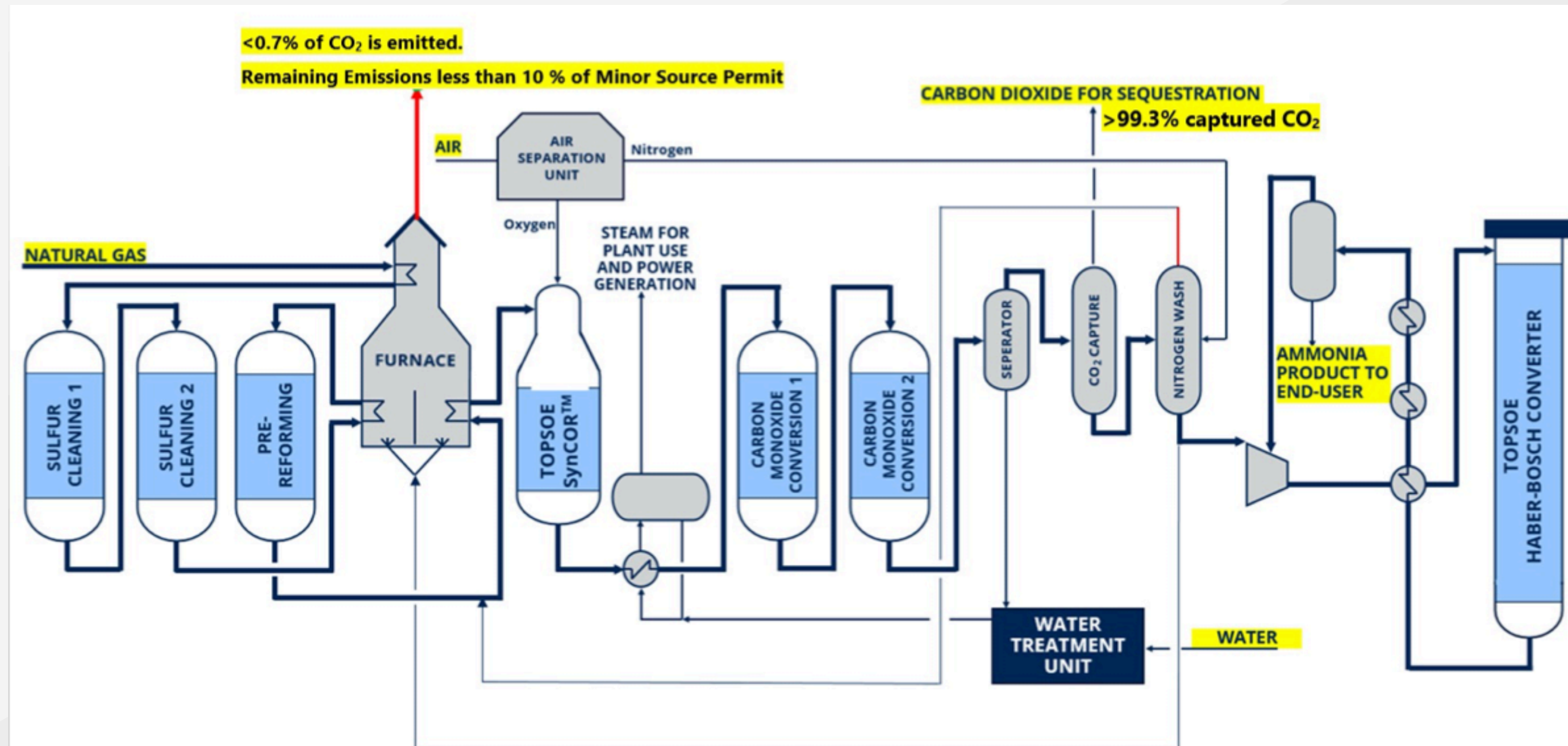
No requirement  
for external  
power

Demonstrated  
long useful life

Tried and tested  
technology, with  
over 248 active  
ammonia plant  
references

99.3% of CO<sub>2</sub>  
captured and  
pressurized

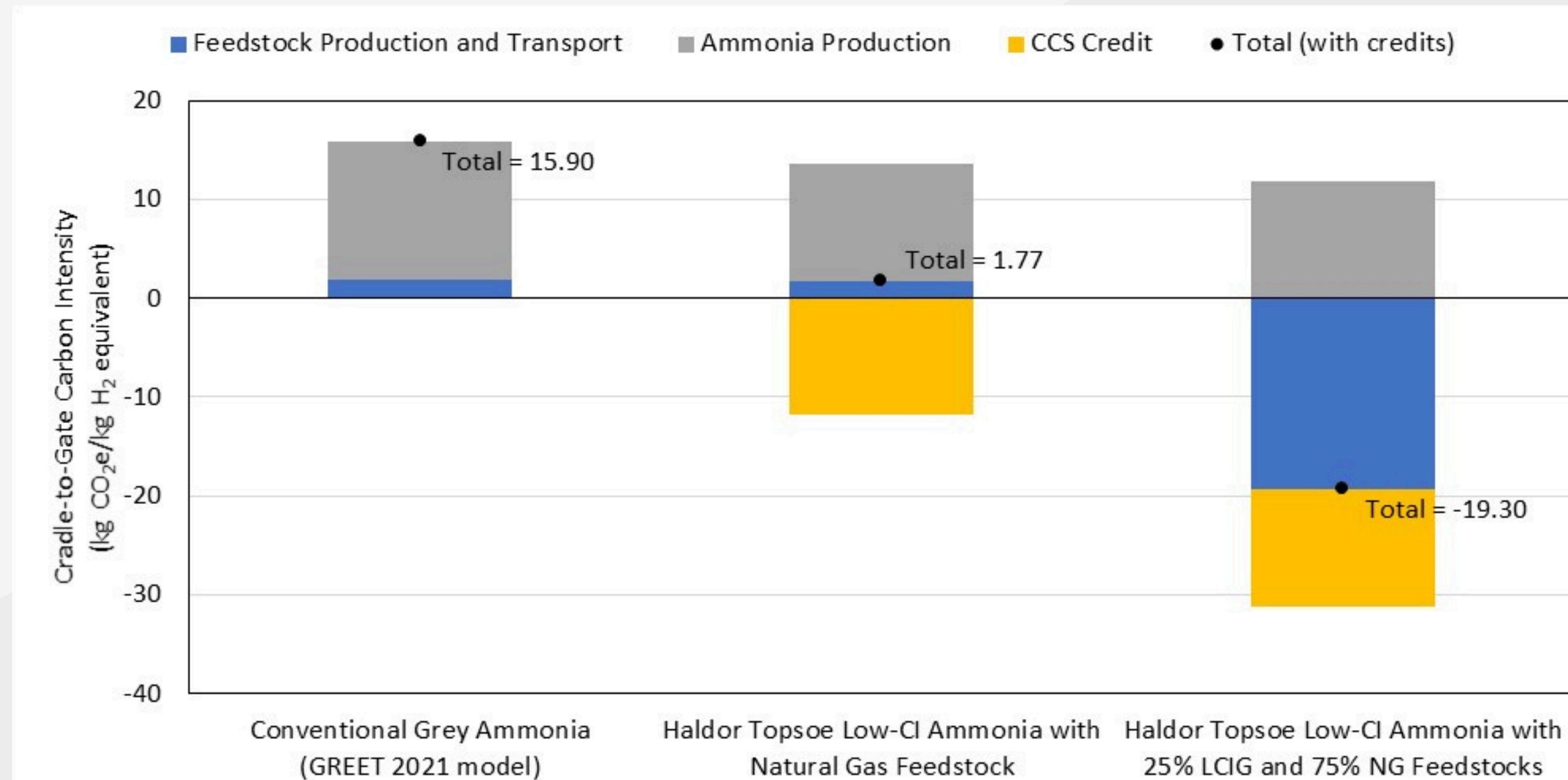
# TOPSOE SYNCOR™ AMMONIA FLOW DIAGRAM





# ADAMS FORK CARBON INTENSITY

Source: Indicative chart prepared by Adams Fork's methane supplier's carbon intensity consultant, Geosyntec Consultants



Inflation Reduction Act rewards low CI scores. Adams Fork anticipates qualifying for the entire \$3/kg\_H2 clean hydrogen “45V” tax credit which equates to approximately \$534/metric ton of ammonia.



# ***MARKET OPPORTUNITY***

The United States Geological Survey (USGS) estimates that in 2021, the United States produced 17 million metric tons (MMmt) of ammonia, behind China (47 MMmt) and Russia (19 MMmt)

Russia-Ukraine war affects major source of ammonia export

In 2021, nearly 90% of ammonia consumed in the United States was for agricultural fertilizer production

Production input cost spikes. Natural gas is a key ammonia input and the US imports 14% of its ammonia from European sources.

Highly sought for decarbonization boosting demand and creating a price premium for low-CI ammonia

# POTENTIAL CASHFLOW SOURCES

Adams Fork's site attributes will bring substantial cashflow flexibility, including long-term and/or merchant arrangements

## AGRICULTURAL FERTILIZER

Secure supplier

## 45Q TAX CREDITS

Monetization of 45Q tax credits  
>\$85/metric ton of CO2  
12 year

(or)

## 45V TAX CREDITS

Clean hydrogen tax credit  
Direct pay  
Up to \$3/kg\_H2  
10 years, with escalation

## HYDROGEN CARRIER

Ammonia efficiently transports hydrogen

“Crack” upon arrival into hydrogen

## STEAM BOILERS

Retrofit steam boilers  
Proprietary technology  
No “cracking” into hydrogen  
Utilize carbon incentives

## SHIPPING

Transportation Fuel





# ***USING LOW-CI AMMONIA IN RETROFITTED STEAM BOILERS***

Examples: district steam systems, in cities, hospitals, and universities

- Displacing a carbon-based fuel
- Capturing any available local carbon incentives

Our strategic technical partner developed pure ammonia combustion technology

- Completely combust pure ammonia
- Very low NOx emissions,
- No significant loss in efficiency
- Doesn't separately "crack" the ammonia into hydrogen
- Dual fuel capability

Low initial capital cost, including equipment and related handling facilities

Low capital intensity way to displace carbon emissions

Text

***EXISTING  
COMBUSTOR  
IN OPERATION***





## ***NEXT STEPS***

Adams Fork continues development :

Equipment pricing proposal from Topsoe

Anticipated construction period of 30 months

Finalizing input cost arrangements

Not dependent on long term off-take  
arrangements, will consider



# THANK YOU

*We look forward to your interest.*

**ADAMS FORK ENERGY**



info@adamsforkenergy.com



www.adamsforkenergy.com

