



TalusAg Presentation - GHC Webinar - November 12, 2025

**talusag** 

# AMMONIA IS A RAW MATERIAL CRITICAL TO GLOBAL FOOD SECURITY

*Local green ammonia production lowers fertilizer costs, ensures reliable supply and has no CO<sub>2</sub> emissions*

**Ammonia is essential, but can be inaccessible:** Ammonia is an overlooked but critical raw material that feeds the world

- Feeds 7 of the 8 billion people in the world; the foundation for basic fertilizers that supports our global population
- Access to basic fertilizers is inequitable: unreliable supply chains, particularly in the developing world, makes fertilizers unaffordable or inaccessible, worsening the food security crisis
- Growing demand and volatile input costs has driven historic price increases and volatility, even in the developed world



Feeds  
**~2/5**  
of the world



Fertilizer cost in developing world

**~2-3x**  
of developed world



Fertilizer use can  
**~2x**  
Crop yields, 'overnight'



**Talus enables local production to lower cost, reliably and sustainably:** Talus has developed a containerized Green Ammonia system to locally produce low-cost, carbon-free fertilizer that can be economically deployed onto a commercial farm or rural farming community, improving access to basic fertilizers to make farming more resilient. Our first commercial system deployed in 2023 with accelerating deployments in 2024.



**~30%**  
Lower fertilizer cost



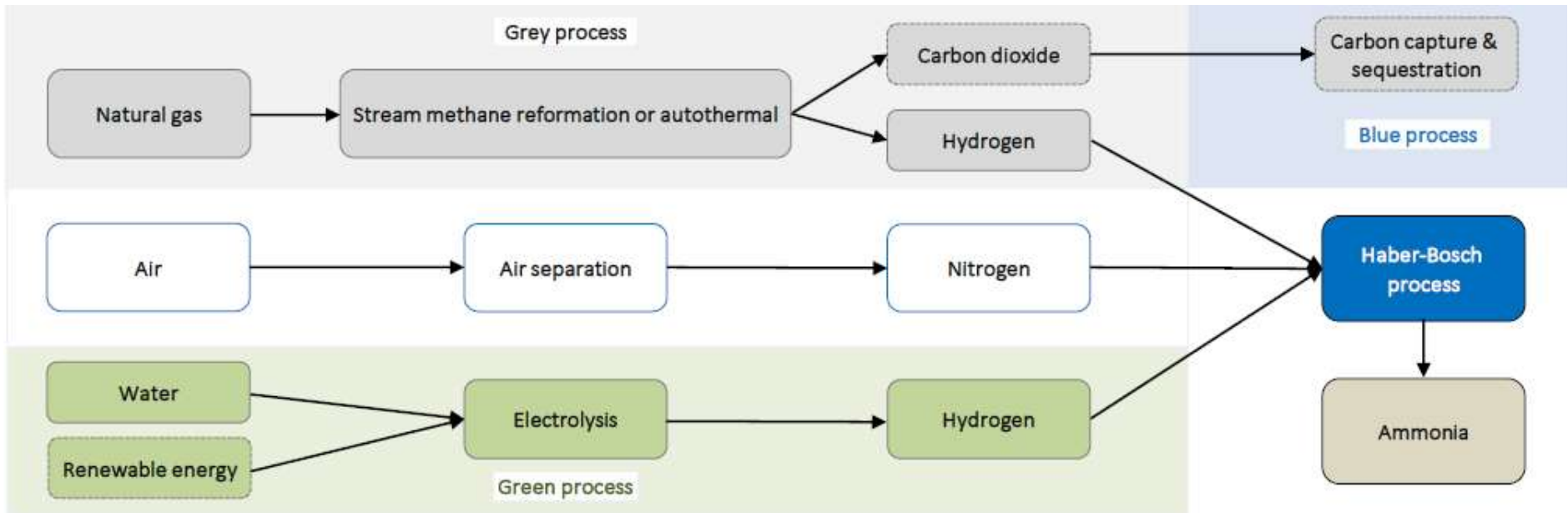
**6,000+ mile**  
Supply chain eliminated



**2-3 tons**  
Carbon dioxide avoided / ton ammonia

# GREEN VS. BLUE & GREY AMMONIA PRODUCTION PATHWAYS

*NH<sub>3</sub> is chemically equivalent when produced in green, blue or grey processes; source of hydrogen and CO<sub>2</sub> emissions different*

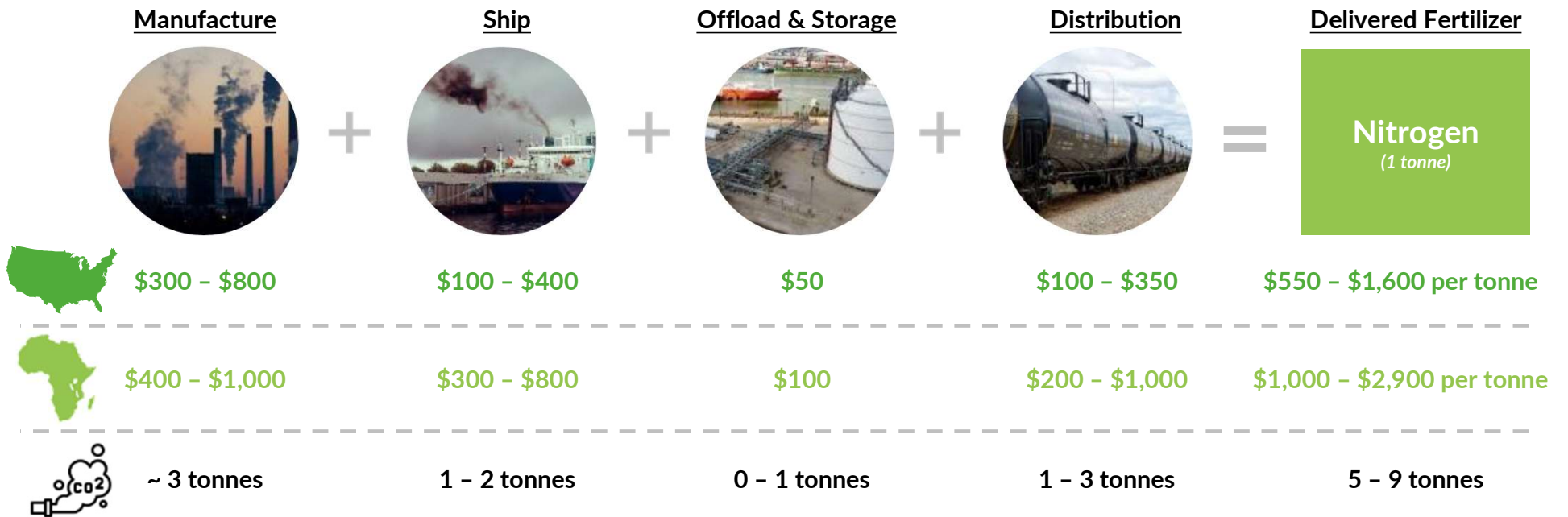


## Key Points

Nitrogen and ammonia production are identical in grey, blue and green NH<sub>3</sub> (same process, technology and equipment)  
Difference lies in the source of hydrogen and resulting emissions or lack thereof  
Co-product in green ammonia production using hydrogen made from water is O<sub>2</sub> (oxygen)

# AMMONIA MARKET PROBLEM: DEPENDENT ON LONG, MULTIMODAL CHAIN

Local production ensures food security by displacing a costly and unreliable supply chain



Fertilizer prices in the U.S. “more than doubled between 2021 and 2022 due to many factors including a Russia price hike, a limited supply of the relevant minerals and high energy costs, high global demand and agricultural commodity prices, reliance on fertilizer imports, and lack of competition in the fertilizer industry.” **U.S. Department of Agriculture**

# TALUS SOLUTION: A RAPIDLY DEPLOYABLE MODULAR NH<sub>3</sub> SYSTEM

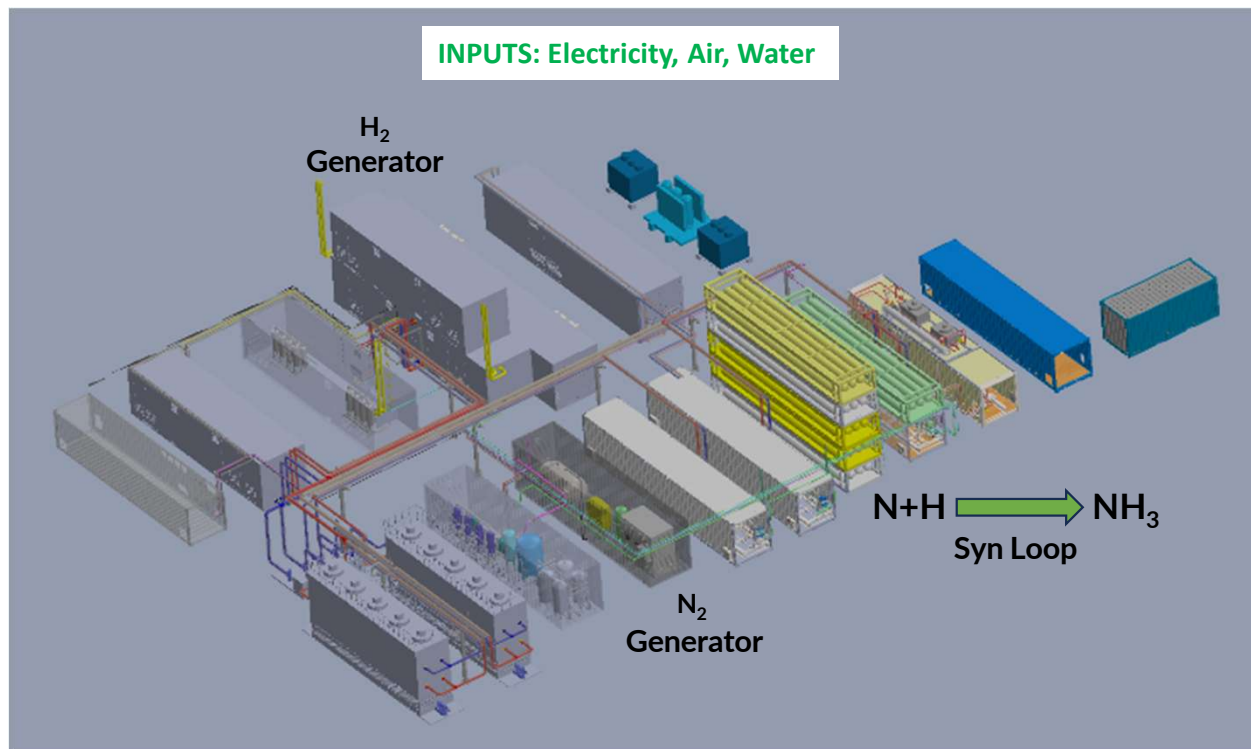
*Talus is building the world's first distributed network of modular green ammonia production systems to locally produce essential fertilizer and chemicals at POU*



talusTen is a standardized design for a containerized, integrated ammonia production



Manufactured on automotive OEM assembly lines with rigorous pre-Factory inspection pre-shipment



Lower capex than competing new-build green ammonia plants



Reduced site work and risk with pre-fabrication in factory and minimal civil, mechanical and electrical works required



Lower deployment risk with proven design and standardized deployment processes

# TALUS: 1<sup>ST</sup> COMMERCIAL DISTRIBUTED GREEN AMMONIA PRODUCER

Talus is delivering systems for Agriculture and Mining customers with 10+ year offtake agreements



**Eagle Grove, IA:** TalusTen under construction in Wright County, Iowa with commissioning planned for Q2 2026. Will produce ammonia to be used as N fertilizer for corn farming in Iowa.



**Kenya:** TalusOne commissioned in Fall 2023, producing ammonia used as N fertilizer for Kenya Nut Company.



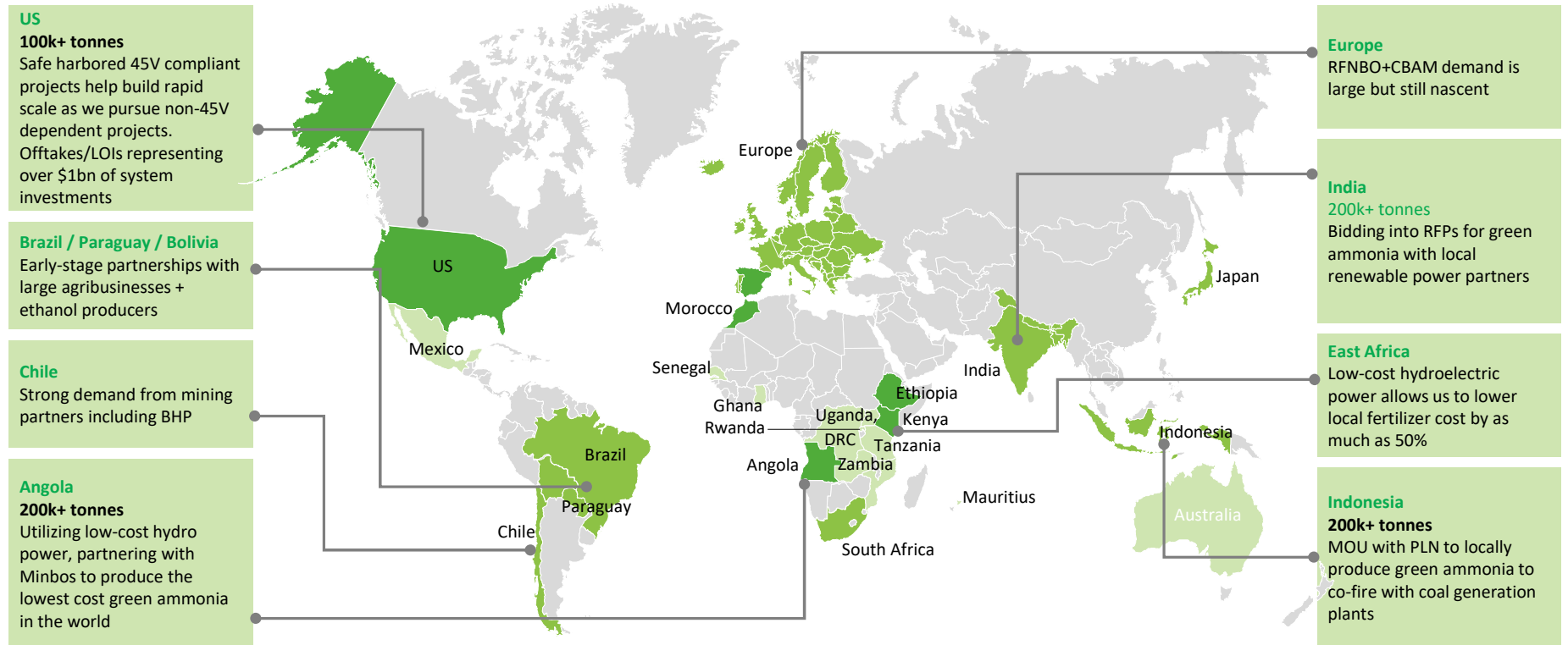
**Boone, IA:** TalusOne commissioned in December 2024, as part of a multi-system program with partner Landus Cooperative. Producing ammonia used as fertilizer for corn farming.



**Spain:** TalusOne commissioned in October 2025 in Burgos, Spain with partner Maxam. Producing ammonia used to manufacture ammonium nitrate blasting materials for global mining giant BHP.

# RAPID SCALING TO MEET GLOBAL FERTILIZER, MINING & INDUSTRIAL DEMAND

*Talus modular green ammonia systems well suited to deliver to both the developed world and Global South*

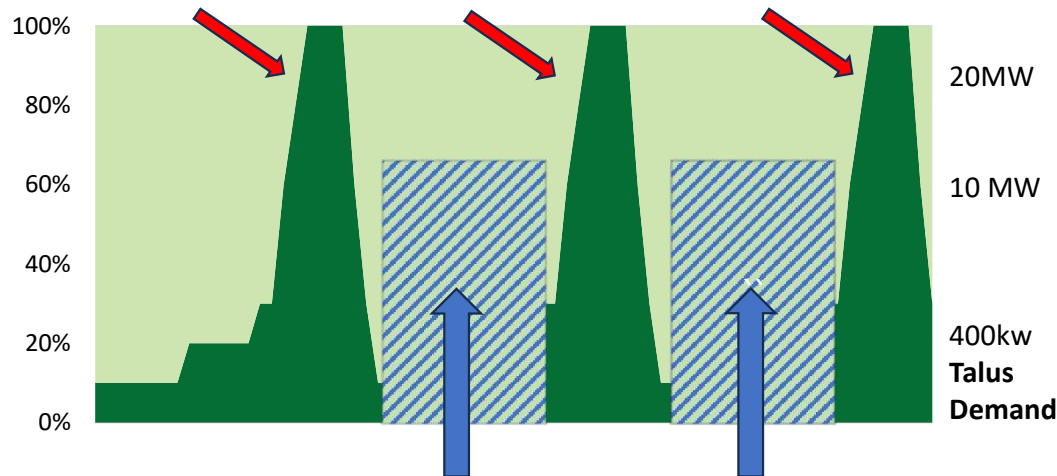


# TALUS OPERATIONAL FLEXIBILITY = GRID SYSTEM BENEFITS

TalusTen = 11 MW of fully interruptible, rapid response load

Electrical Grid System Benefits

Utility Transmission Systems are designed to meet system peak demand



- Improve reliability & stability
- Relieve grid congestion
- Accelerate interconnection
- Assist renewable integration
- Improve system utilization
- Defer capacity additions

- Talus operates “in the valleys” with operational control to ramp up or down rapidly to optimize cost & impact
- Talus models load factors of 40% to 95%, creating substantial flexible operating capability on hourly, daily or even monthly basis

# TALUS CAN SAFE HARBOR MOST US SITES TO MEET CONFIRMED 45V REQUIREMENTS

*OBBB tax credits enable low-cost production of local green ammonia*

## 45V Clean Hydrogen Production Tax Credit (PTC)

- If GHG emissions are less than 0.45 kg of CO<sub>2</sub>e/kg H<sub>2</sub>—
  - Bonus PTC = \$3/kg of H<sub>2</sub>
- \$3/kg H<sub>2</sub> PTC equates to ~\$540/ton of green ammonia
- 10-year credit duration for project begins when H<sub>2</sub> facility placed in service between 2023 and 2033

## 45V Implementation Guidelines

- Bonus PTC if prevailing wage and apprenticeship requirements are met
- Three Pillars of H<sub>2</sub> production and clean energy requirement:
  - **Incrementality:** 36-month lookback
  - **Deliverability:** sourced from the same “region” with some flexibility for demonstrating electricity transfers between regions
  - **Time Matching:** annual now, hourly starting 2030

## 45V Safe Harbor

- 45V extended! Requires projects begin construction and/or incur 5% of total project costs by YE27
- Talus can Safe Harbor the majority of its US project pipeline before YE27
- Talus would be one of the only producers of green ammonia in the country focused on domestic, agricultural use, positioning us for possible future expansion of the credit.
  - Talus worked with our large ag partners and electric coops to preserve the 45V credit through YE27
  - 45V supported by American farmers and energy companies as well as environmentalists

***Talus is able to Safe Harbor projects today, accelerating US deployments***

# LOW COST AND 10 YR. FIXED PRICE AMMONIA: SUPPORTED BY 45V

Clean hydrogen production tax credit 45V enables local production of nitrogen fertilizer that's cheaper, more reliable and more sustainable - Talus only deploys systems where we can price ammonia at a discount to the long term average price of ammonia

Talus green ammonia is cheaper than commodity ammonia delivered to California farmers

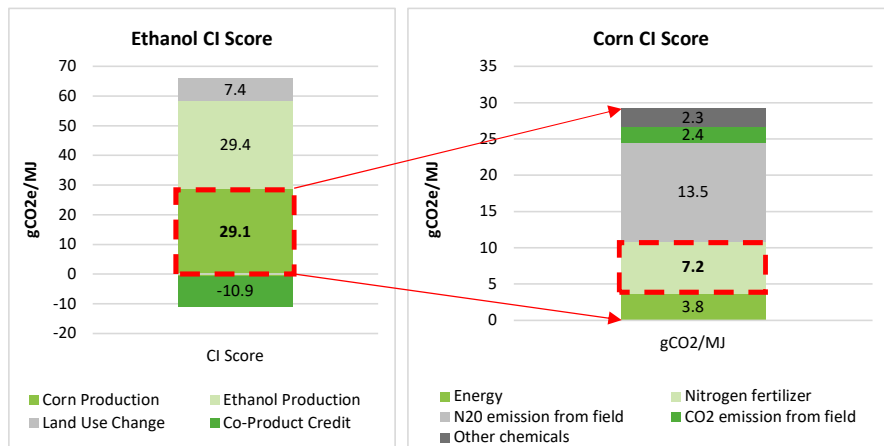


Source: Bloomberg Cornbelt ammonia price index as of 10/31/2025 adjusted for average storage and delivery to California growers of \$100/ton

# TALUS ENABLES DOMESTIC, LOCAL PRODUCTION OF FERTILIZER AND FUELS

## Talus systems enable clean fertilizer and fuels production in the U.S.

- **Nitrogen fertilizer is ~25% of Corn CI Score**
- Talus green NH3 has a CI score of 0 (zero)
- Requires no practice change and results in no yield loss
- Green ammonia unlocks 45Z for ethanol producers
- **ABF Economics report states that ethanol producers are expected to pay a 10.2% premium to farmers supplying low CI corn**



Source: FD-CIC, CARB, and American Coalition for Ethanol

## Domestic local ammonia production is a national security concern

- China is the world's largest ammonia producer and Russia is the world's largest ammonia exporter
- The U.S. imports >2mm tons of ammonia per year
- **With tariffs, more reliable and diversified domestic supply of NH3 is required and Talus enables domestic production displacing Russian imports and Chinese spare capacity**

## Total Ammonia Production vs. Demand by Region, 2023

Million Metric Tons

Country	Production	Demand	Net Exports (Imports)	Capacity Utilization
China	61.0	61.2	(0.2)	90%
Russia	14.3	13.2	1.0	70%
Europe	11.0	15.3	(4.2)	57%
US	16.4	18.5	(2.1)	98%
Trinidad	5.0	1.0	4.0	100%
Other	81.0	80.5	0.5	n/a

Source: Decision Innovation Solutions, UBS research, Agriculture and Biofuels Consulting LLP "Impact for the U.S. Economy from Implementation of \$45Z of the Inflation Reduction Act (IRA)"

## COMMITMENT TO SAFE OPERATIONS

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- Talus systems include automated emergency shutdowns, remote monitoring, and fail-safe containment.
- Talus works proactively with local fire departments on emergency planning.
- The facility is engineered to meet or exceed OSHA PSM, EPA RMP, and NFPA 55 standards
- Talus sites are fenced, monitored 24/7, and alarmed. Storage tanks are lockable and access-controlled.
- The plant is entirely self-contained with no hazardous wastewater, no hazardous runoff, and no smoke emissions.
- Talus provides customer and local authorities with an annual third party audit of the system. Any findings are addressed in a timely manner.

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