

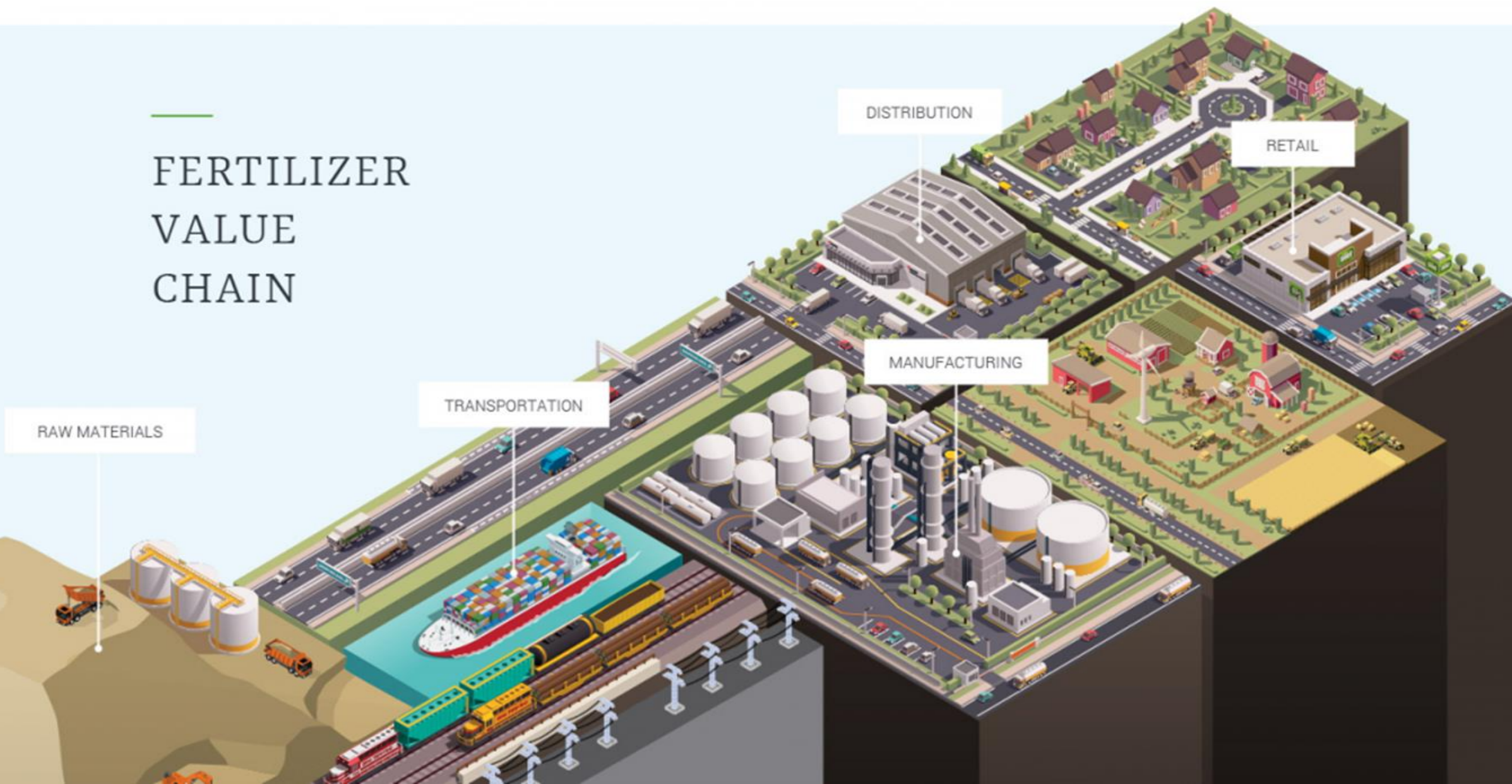
**THE
FERTILIZER
INSTITUTE**

Low Emission Ammonia Demand: Global Fertilizers

**“This is a basic problem, to feed 6.6 billion
people. Without fertilizer, forget it.
The game is over.”
— Dr. Norman Borlaug**



FERTILIZER VALUE CHAIN





33K

MANUFACTURING JOBS



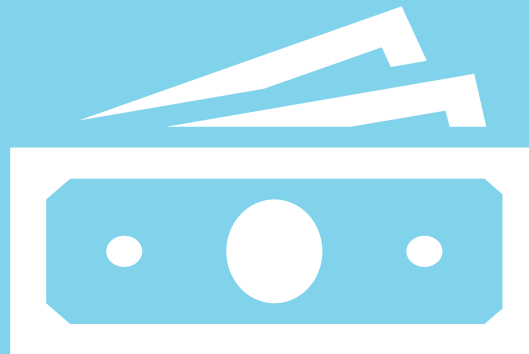
487K JOBS



104K DIRECT JOBS



**15K TERMINAL &
WHOLESALE JOBS**



**FERTILIZER INDUSTRY
ECONOMIC IMPACT**



**56K
RETAIL JOBS**

**\$130B
ECONOMIC
IMPACT**

TFI.org



PRODUCTIVE POLICY

Advance policies to support the fertilizer industry.

VISION

A world without hunger: ensuring food production and security for a thriving tomorrow.

MISSION

Empower the fertilizer industry to nourish our world.

HEALTHY ENVIRONMENT

Advance sustainable fertilizer production, distribution, and use.

STRONG INDUSTRY

Advance the economic and reputational health of the fertilizer industry.

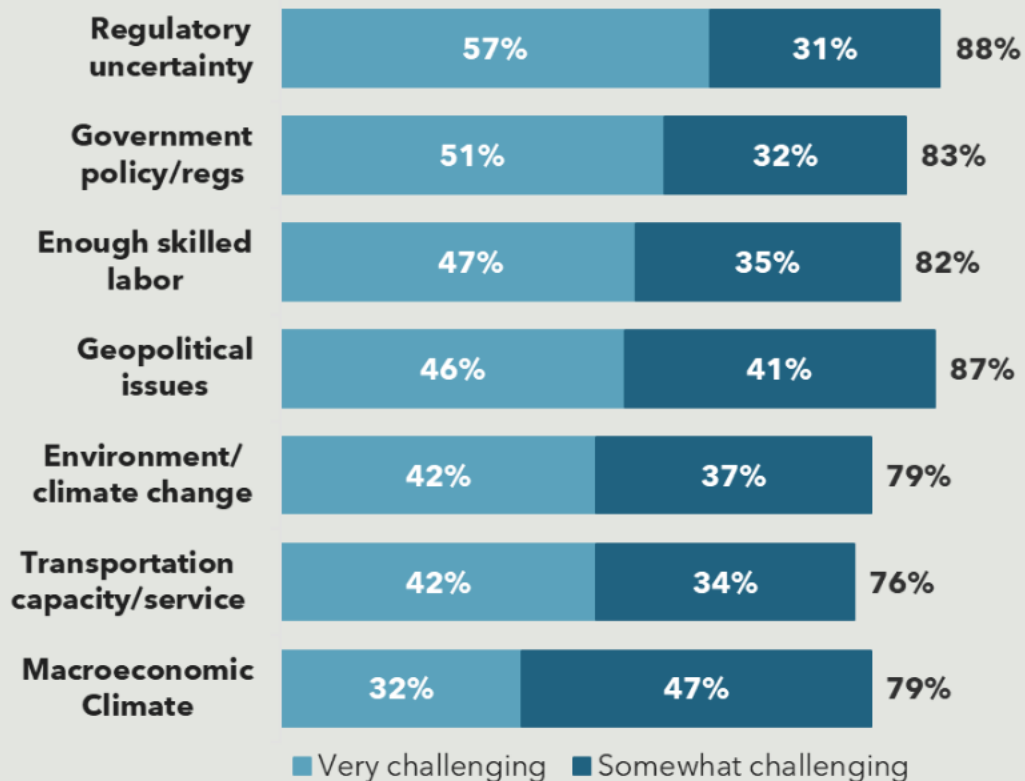
The Fertilizer Institute - 2024 - 2026

STRATEGIC PLAN

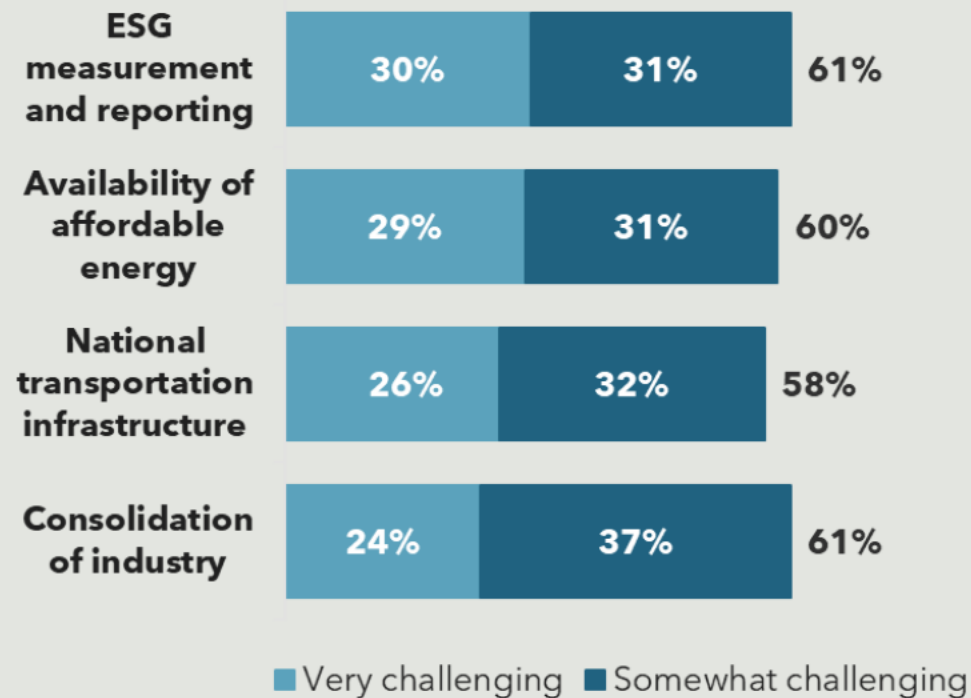


Industry Challenges

Top Industry Challenges



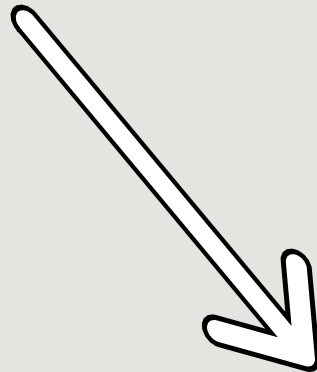
Mid-tier Challenges



Industry Reported Top Issues

2020

1. Government Policy and Regulations
2. Environment/Climate Change Pressures
3. Cost Pressures
4. Regulatory Uncertainty
5. Workforce Development



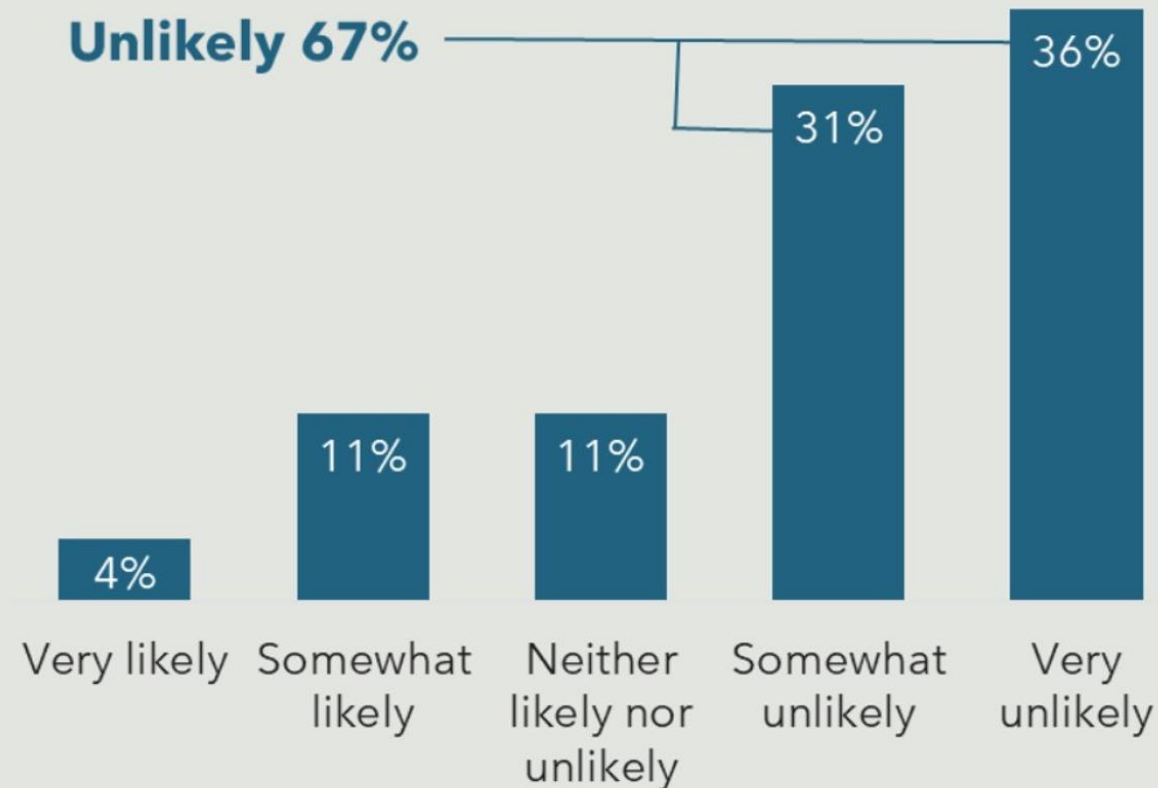
2023

- Regulatory Uncertainty
- Government Policy and Regulations
- Workforce Development
- Geopolitical Issues
- Environment/Climate Change Pressures



Incentivization for Responsible Nutrient Use

What is the likelihood that U.S. farmers will pay additional input costs without incentivization for using a low carbon manufactured fertilizer in the next 3-5 years (i.e., green /blue ammonia)?



Inflation Reduction Act

45V - *Hydrogen tax credit*

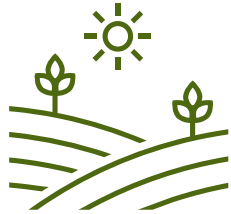
40B - *Sustainable Aviation Fuels (2024)*

1. Cover Crops
2. No Till
3. Enhanced Efficiency Fertilizers

45Z - *Clean Fuels tax credit (2025-27)*

45Q - *Carbon Capture & Sequestration*

SUSTAINABLE FERTILIZER



4RS & NUTRIENT STEWARDSHIP

TFI's efforts in 4R and other sustainable farming techniques



LOW CARBON AMMONIA

Reducing emissions in ammonia production through carbon capture and sequestration



ENHANCED EFFICIENCY FERTILIZERS

The role of innovative products in addition to conventional fertilizer to increase nutrient use efficiency



Low Carbon Claims: Lacking Clarity

- Are upstream methane emissions included in carbon-intensity calculations?
- Is enhanced oil recovery (EOR) a permissible form of carbon sequestration?
- Can voluntary offsets be used to produce low-carbon molecules?



WELCOME TO
THE VERIFIED AMMONIA CARBON
INTENSITY PROGRAM

Verified Ammonia Carbon Intensity

- Carbon intensity of ammonia production at a specific facility
- Voluntary
- Well-to-production gate: Does not include downstream emissions
- Commercially flexible: mass balance or book and claim
- Credible and transparent: Third-party audited
- Emissions Reductions: Permanent sequestration or carbon capture for the use of Enhanced Oil Recovery



Verified Ammonia Carbon Intensity

