





**Green Play Ammonia™ builds carbon-free ammonia in localized networked plants.**

**A better plan for today and the next century.**

**Local Energy for Agriculture, Transportation and Industrial Energy**

# A Problem Worth Solving

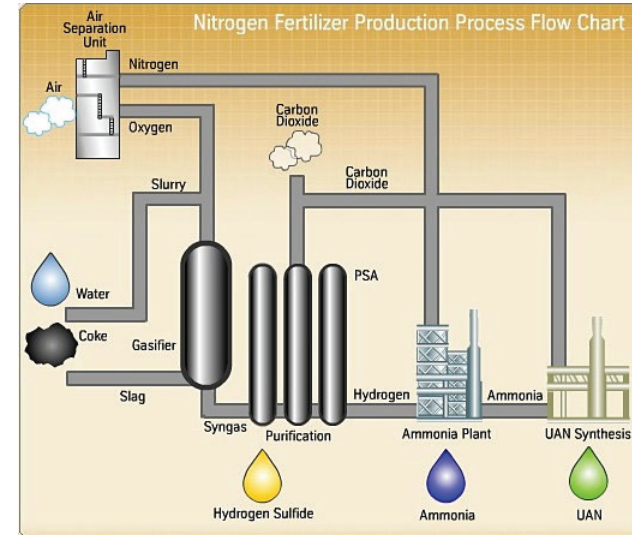
The world's largest industrial process with methane gas (NG).  
Donaldsonville, Louisiana, CF, 2.1 tons CO<sub>2</sub> per ton of NH<sub>3</sub> produced.



The CF Industries plant in Donaldsonville, Louisiana is the largest single source of nitrogen fertilizer in the nation, by far.

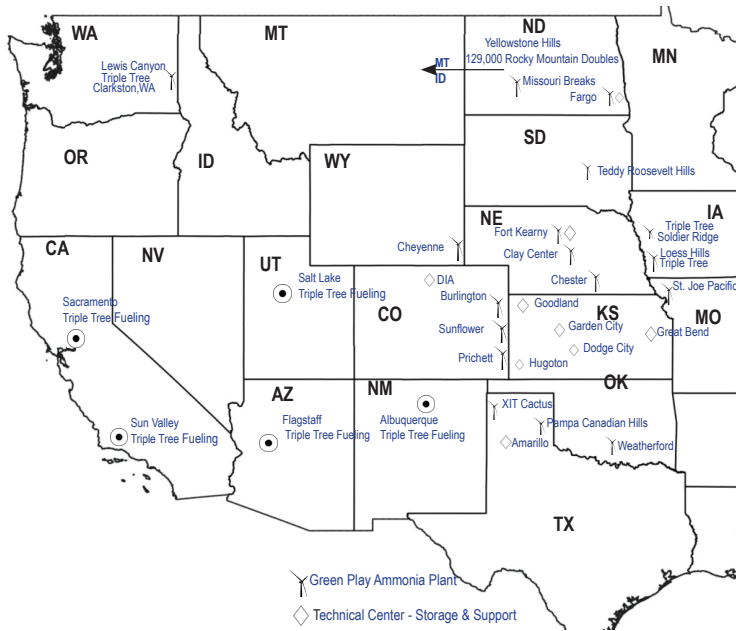


A coal dependent Mega Plant at Coffeerville, KS.  
The emission is double at 4.4 tons of CO<sub>2</sub> per ton NH<sub>3</sub> produced.  
China has the most coal fired plants at 68 out of 83 total.  
The US has 2 coal fired out of 35 total.



Current ammonia production is concentrated in just a few mega-plants that are fossil-fuel dependent.  
The mega-plants contribute massively to greenhouse gas emissions and their owners are resistant to change.

# Our Solution Is Highly Profitable



We manufacture renewable, zero carbon, ammonia or NH<sub>3</sub> and green hydrogen or H<sub>2</sub>.

We have a proposed 10 plant network linked, optimum scale, local plants that can expand to 200 Decagons in the US in 20 years.

Together, hydrogen and ammonia are storable, transportable, with a time proven futures market.

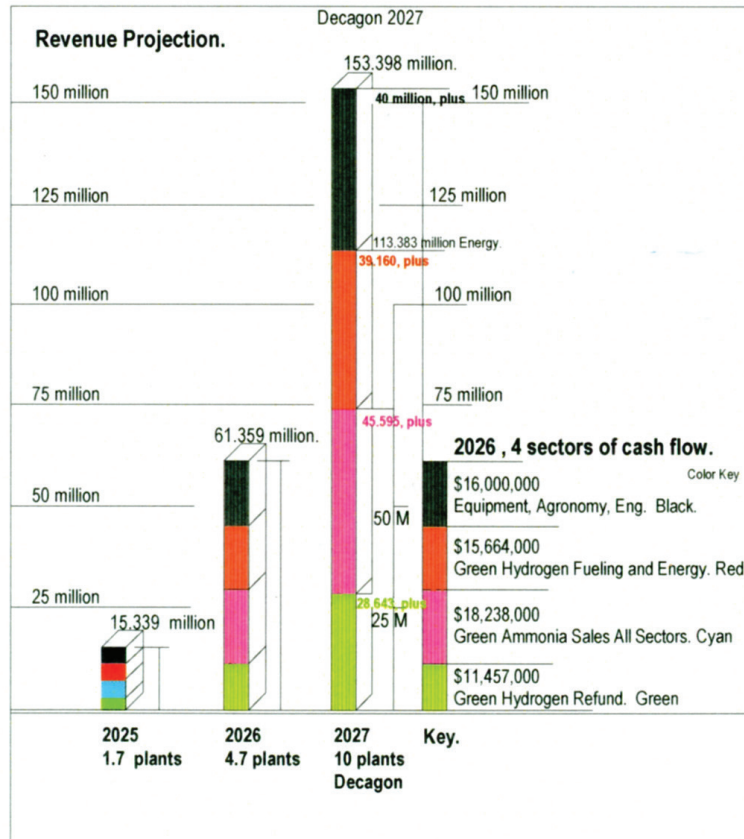
The clean hydrogen economy is on the way because of this low-cost synergism of two zero carbon energy products.

Note: 1,

- A fossil fuel ammonia Mega Plant today costs 5 to 6 billion dollars to build in 2023. They can produce, 2,500 ton of NH<sub>3</sub> per day. The fossil plants take 5 to 7 years to complete.
- The fossil fuel ammonia Mega Plant must harvest CO<sub>2</sub> emissions or pay about 315 dollars per ton of NH<sub>3</sub> produced for a carbon credit of 2.1 tons CO<sub>2</sub>.
- The Green Play Ammonia plants cost 5/8 of Mega Plant per ton Green Zero Carbon NH<sub>3</sub> produced. The plants require about 2 years to build.
- The Inflation Reduction Act of September 2022, IRA program pays Green Play Ammonia \$480 per ton of Green NH<sub>3</sub> as immediate cash payable support program to develop the market for Green Zero Carbon Ammonia.



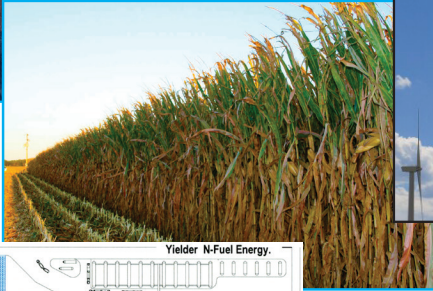
## Revenue Projection



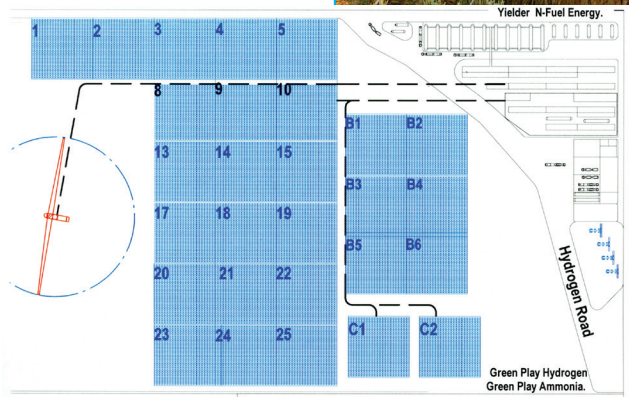
- Four markets
- Locally built for local use
- Ease of transportation

## Competitive Landscape

Benefits of the Green Play Business Model								
Company	Network Linked	Flexible	Local	Carbon-Free	Renewable	National Security	Gridless	Pipelines Required
Nutrien	NO	NO	NO	NO	NO	NO	NO	YES
CF	NO	NO	NO	NO	NO	NO	NO	YES
Mosaic	NO	NO	NO	NO	NO	NO	NO	YES
Koch	NO	NO	NO	NO	NO	NO	NO	YES
Green Play Ammonia	YES	YES	YES	YES	YES	YES	YES	NO



**Our Ask:  
A \$25 Million seed round.**



## Marketing & Sales

Green Play Ammonia's horizon-to-horizon business model means that we have already secured take-or-pay offtake agreements for our first plant's production through our deep-rooted farmer relationships. Green Play will continue to build off these relationships, in transportation, agricultural manufacturing and national security



### The demand is here for Zero Carbon Energy

DOT Transports

Low cost, safe transportation of 22 ton NH<sub>3</sub> at 150 miles = \$1000.

What about ammonia cracking?

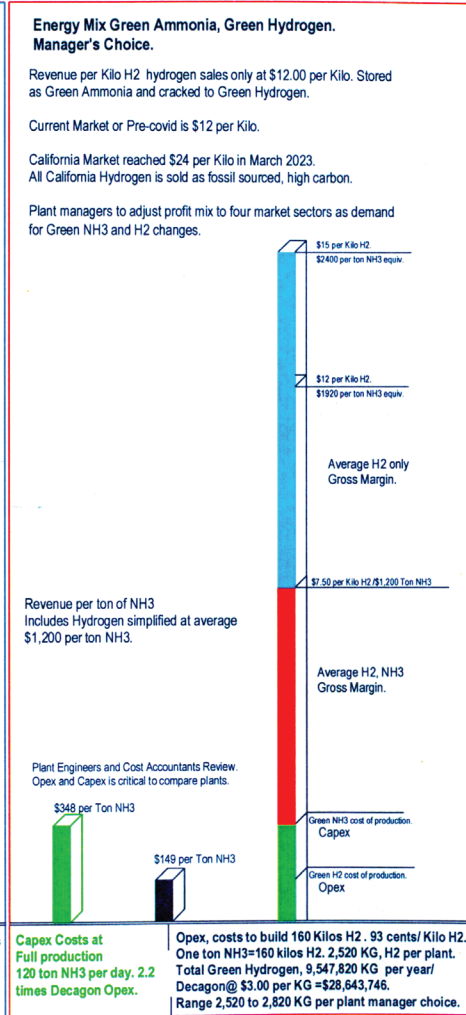
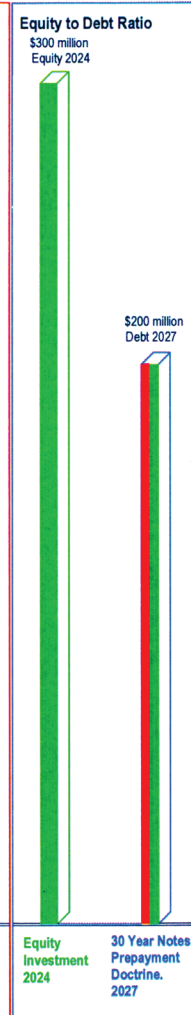
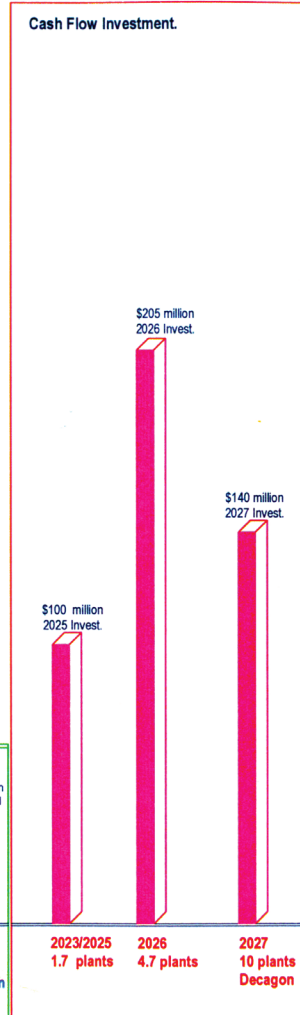
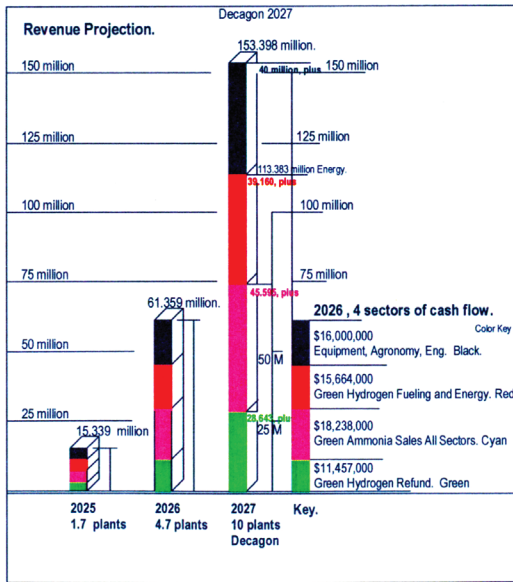
Hydrogen can move safely as ammonia. 3,500 KG at 150 miles = \$1,000.



# Financial Projections Triple Tree Fueling

Projected Revenues 2025 thru 2027,  
Triple Tree Fueling.  
Four Market Sectors.  
Federal Refunds of Hydrogen Green.  
Green Ammonia Sales Cyan.  
Green Hydrogen Fueling, Triple Tree.  
Machine Sales, Engineering, Agronomy.  
Aug. 26, 2023.  
Rev 2.2 Triple Tree Fueling, Outrider Technology, Aug. 26, 2023

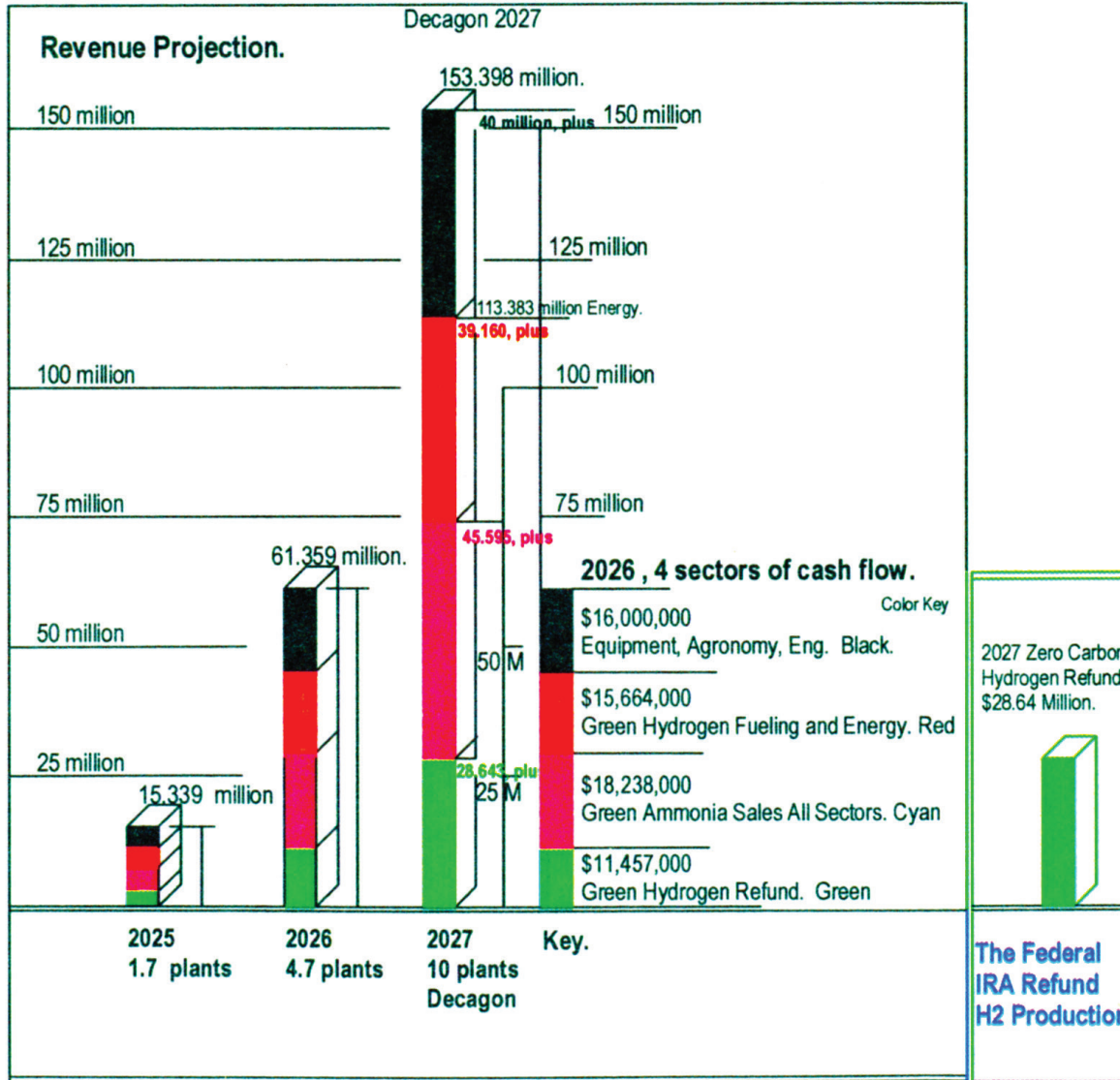
Next Three Decagons start August 2026 with orders and staffing.



Cash Investment to build plants following standard industry guidelines of 40% Debt Equity 60%. Debt to be adjusted based on four revenue sources over 3 year construction period. Total 30 year amortization to be adjusted at 2027 year end. Revenues From Hydrogen and Ammonia Sales total \$170.082 million to construction deadline. Debt could be paid down rapidly as plant goes into production as a Decagon.

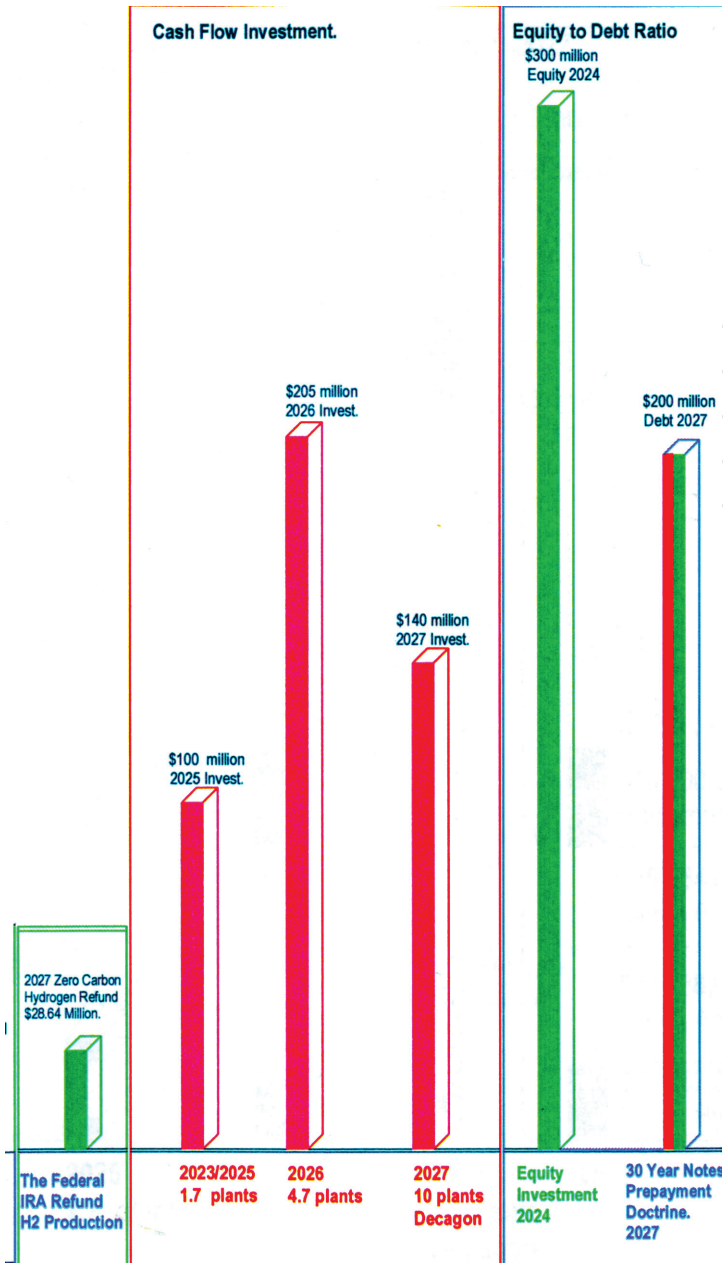
Next Three Decagons start August, 2028 with orders and staffing.

# Revenue Projection



# Cash Flow Investment

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- Debt to be adjusted based on four revenue sources over 3 year construction period.
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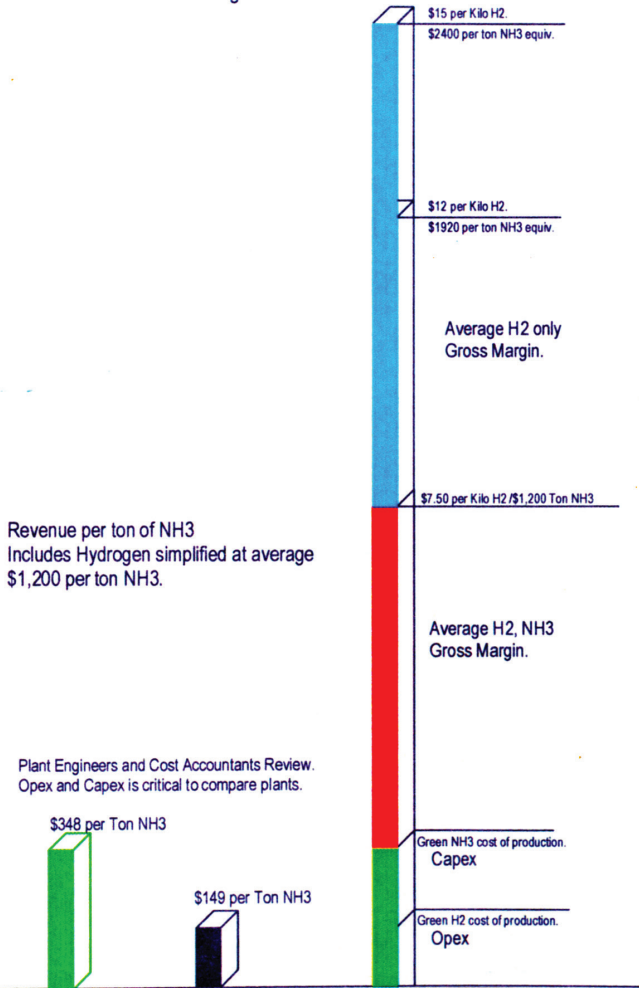
**Energy Mix Green Ammonia, Green Hydrogen.  
Manager's Choice.**

Revenue per Kilo H2 hydrogen sales only at \$12.00 per Kilo. Stored as Green Ammonia and cracked to Green Hydrogen.

Current Market or Pre-covid is \$12 per Kilo.

California Market reached \$24 per Kilo in March 2023.  
All California Hydrogen is sold as fossil sourced, high carbon.

Plant managers to adjust profit mix to four market sectors as demand for Green NH3 and H2 changes.



**Capex Costs at Full production 120 ton NH3 per day. 2.2 times Decagon Opex.**

Opex, costs to build 160 Kilos H2 . 93 cents/ Kilo H2.  
One ton NH3=160 kilos H2. 2,520 KG, H2 per plant.  
Total Green Hydrogen, 9,547,820 KG per year/  
Decagon@ \$3.00 per KG =\$28,643,746.  
Range 2,520 to 2,820 KG per plant manager choice.

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# Team and Key Roles



**Kent Oelkers**  
Plant Construction  
Site Selection



**Guy Swanson**  
CEO  
Engineering & Economics



**Carol Morgan**  
Administration



**Cyndi Bozarth**  
Finance and HR



**Randy Steinman**  
Public Affairs



**David Lommen**  
Director of Business Development



## Select Partners and Resources



**Vincent Amanor-Boadu, Ph.D.**  
Agricultural Economics,  
Kansas State University



**John Cornish**  
President  
EPC



**Peter Pfromm, Ph.D.**  
Chemical Engineering  
Washington State University



**Hans Vrijenhoef**  
President  
Ammonia Energy Association



**Jacco Mooijer**  
Project Manager  
Fichter



**Jim Schepers**  
USDA - ARS - Lincoln - Retired



# Thank You



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