

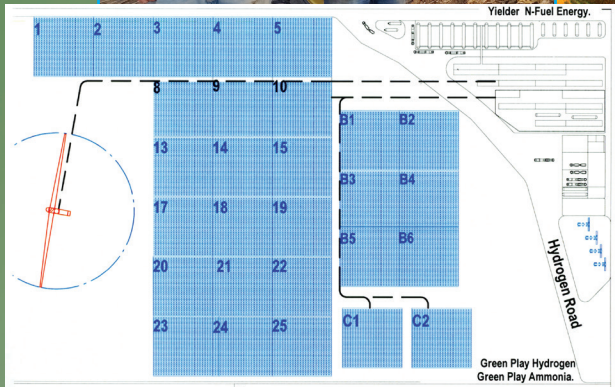
“Cooling Planet Earth”

A New Era

Emerging Energy, Zero Carbon
Local, Renewable, Gridless, Stable Prices

Partner and user introduction to Green Play Ammonia using well-established techniques for improving the environment, crop yield, and financial returns

Green Play Ammonia™
Yielder NFuel Energy®



Exactrix® Global Systems
Green Play Ammonia™
Green Hydrogen Power
Triple Tree Fueling H2, NH3, Green-Amps

August 3rd, 2023

From its beginnings, farming has always been about how to best grow and harvest the food our communities need. Consumers rely on us.

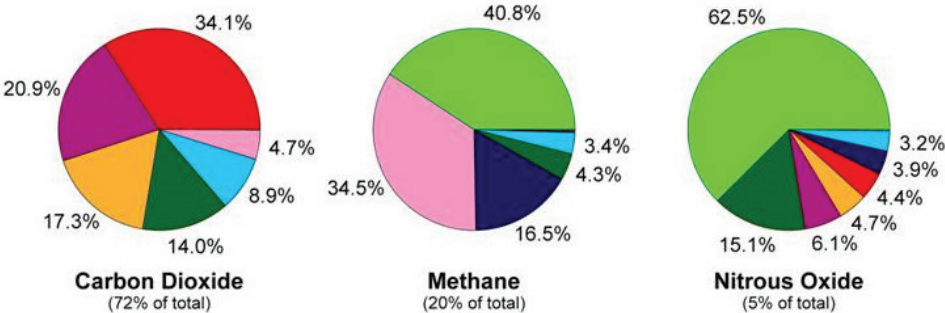
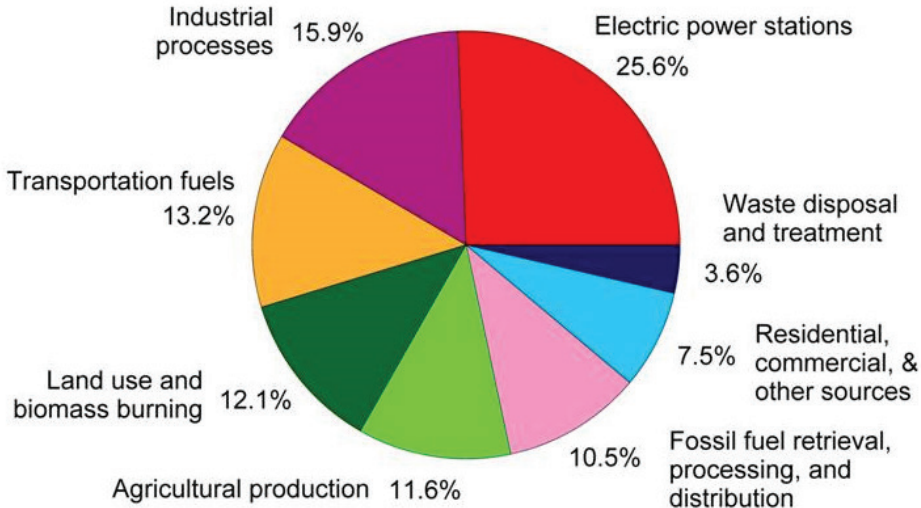
As a result, those in farming operations continually watch for ways to maximize yield and profitability while decreasing time, energy and costs. Exactrix® Global Systems was founded to meet those needs, and today the company is a leader in helping farmers substantially boost yield through beneficial compounds like Anhydrous Ammonia.

Unfortunately, the more the land is worked with today’s machinery and fossil fuels, the more greenhouse gas (GHG) is emitted. According to the Annual Greenhouse Gas Emissions by Sector chart below, agricultural production contributes 11.6% of greenhouse emissions. The emission from agricultural nitrous oxide, N2O, is 62.5% of the total N2O emission.

Why does this matter? While some use of nitrous oxide is safe, it is 300 times more potent than CO2 and can cause health issues such as fainting or heart attacks. GHG also traps heat and can contribute to climate change and respiratory disease. We can do better, and help protect the future of farming.

An overheated planet cannot raise good crops. Earth must have Green Play Ammonia™.

Annual Greenhouse Gas Emissions by Sector



While Exactrix already meets or exceeds University of Nebraska standards for reducing N₂O, the company plans to do more to help both farmers and the environment we all share.

Exactrix has the established technology and know-how; now it has a new vision that will take farming to a whole new level. Think big, green and transformative. Think revolutionary. Farmers can reap welcome gains in production and profitability, and continue to be good stewards, both of people and our earth.

First, a little about Exactrix.

Who is Exactrix Global Systems, and why do its products and vision matter?

Exactrix, and Yielder® before it, helped pioneer some of today's best agricultural solutions. The Exactrix roots can be found in the no-tillage application of commercial fertilizer nutrients beginning in the early '70s. The founder, Guy Swanson, combined an engineer's viewpoint and inventor ingenuity to design machines that maximize what farmers can produce.

Today, Exactrix builds no-tillage, deep-band NPKS+Zn,Mn application systems that provide the highest levels of uniformity and chemical availability based on triple super-ammonization techniques and streaming 1% CV flows. The techniques increase yield dramatically, and the systems have evolved under the intense scrutiny of producers.

Thanks to the technology, millions of tons of topsoil have been saved. The Exactrix Mustang Openers, P-51C and CUE have sequestered millions of tons of CO₂ using No-tillage Rotational Band Loading. Nitrous oxide has been reduced to its lowest levels by using carbon sequestration due to No-tillage.

To further help conservation, Exactrix reduces fuel consumption. Imagine the benefit of six times as little fuel needed to raise a crop. Imagine a 1% reduction of CO₂ worldwide as wind power and electrolysis manufacture NH₃ without fossil fuels. In the US, 2% of natural gas is used to make NH₃. A better future awaits.

So, how will this work?

Anhydrous Ammonia is a key component to successful farming, and NH₃ production is the third largest industrial process worldwide.

Exactrix will use its technology and wind-powered Anhydrous Ammonia to reduce GHG emissions to the lowest level possible, thanks to its Green Play Ammonia™ and Yielder® NFuel Energy. The company will adapt existing and advanced technologies of fertilizer manufacture, storage and handling.

Exactrix has improved the efficiency of Anhydrous Ammonia with high-pressure 300 psi injection of NH₃ as a liquid state in a liquid streaming flow. This is an environmental Triple Play resulting in the least amount of fertilizer used for each corn bushel produced.



The company will continue to focus on high-pressure fertilizer application with timing in deep and very narrow no-tillage bands, the highest quality fertilizer chemistry in liquid streaming flows, gravity-defying flows to 300 psi pressure, and uniformity of application at 1% CV.

Most significant will be the root pattern geometry or Binary Banding. The reduction of nutrient requirements using No-tillage Rotational Band Loading will allow both present and future crops to access biologically stable and available bands of nutrient.

The most efficient primary nutrients are NH₃, Ammonium Poly Phosphate, Ammonium Thio-sulfate or Thiosul®, and the significant KTS® or Potassium Thio-sulfate. These are so efficient in liquid streaming flows when ammoniated that over 12-15% more net income per acre is moved to the bottom line by raising yield and reducing the NPKS use by 50% or less.

Depending on acres applied, a \$350,000 investment in a 40-foot Exactrix Mustang Tool Bar is often paid back in the first irrigated corn crop produced.

What will be required?

First, any acidic soil should be modified immediately for 6.8 pH using commercially available limestone. Further modification of soil pH to the 7.0 to 8.0 pH range should be independently reviewed to confirm if soil microbiology is further enhanced at the natural pH of 7.4 pH. This is the same pH as buffalo or a coral reef or the human bloodstream.

Second, No-tillage Anhydrous Ammonia should be applied at 4" to 9" depth in the topsoil. The application would be made at 1% CV pattern of multiple openers of tool bar width, crystallized and reacted in the soil.



The highest levels of nutrient efficiency are achieved by crystallizing the fertilizer materials using very moderate amounts of Thio-sulfates and micronutrients like zinc and manganese to stabilize applied nutrients for present and future crops.

The right balance of NPKS+Zn,MN is like Goldilocks' happy comment, "This porridge is just right."

Cover cropping and improved three- and four-year rotations will help lower GHG by keeping the soil alive in areas with more rainfall than the crop needs. At higher altitudes and west of the 100th meridian, more diverse winter cropping is used without requiring cover cropping.

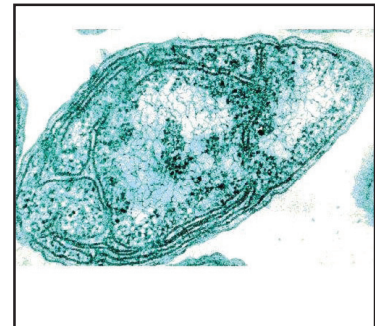
In North America, NH₃ plants must be built. The Anhydrous Ammonia must be stored and applied differently to meet the environmental needs of long-term crop production, clean air and clean water. This economic shift requires a departure from carbon-based energy such as natural gas and coal to build syngas and in turn build the primary nitrogen, ammonia.

Wind-powered green ammonia is now outcompeting natural gas at Yara and BP's large and small plants in Australia. North America is next with Green Play Ammonia.

What benefits will farmers see?

Less is often more, especially when it comes to cost and resources. For example, use of the no-tillage process can reduce diesel fuel usage from 6 gallons per acre to less than 1 gallon per acre to raise a crop. Use of Exactrix technology with No-tillage Rotational Band Loading can reduce nutrient usage by 1/3 to 1/2 of the economic rates applied. A much lower rate of ammonia in a low CV application helps all nutrients to be utilized.

Decrease in GHG remains a plus. The chance that applied ammonia will convert to nitrous oxide, N₂O, is greatly reduced when Exactrix TAPPKTS+Zinc/Micros are banded up to 9" in depth. The conversion is avoided by associating Zinc with the bacteria Nitrosomonas co-factor Copper, which is the host of nitrification. The elemental lockup techniques avoid transporting bacterial stepped-up proteins that are converted from placed NH₄ to secondary nitrite (NO₂), nitrous oxide (N₂O) and nitrate (NO₃).



The highest levels of fertilizer efficiency can be reached when soil-borne Nitrosomonas bacteria is controlled. The critical link converts nitrite to nitrous oxide, and micronutrients in very small amounts, implemented with a reactor design, can help reduce nitrification. With the assistance of Exactrix technology, NH₄ becomes even more efficient using Zinc NP and Zinc+2 as a co-factor binder of copper.

The Green Play design reduces P₂₀₅ application rates by 2 times **and sometimes even greater** using No-tillage Rotational Band Loading in 7.4 to 8.0 pH soils. Soil test P is actually increased at these 50% rates. Exactrix placement of TAPPS with Zinc formulation is known to be 200% more crop available.

The Details behind the Plan

The Green Play Ammonia, Yielder® NFuel Energy plan is big, like ground-breaking proposals before it. Using existing Excatrix technology and wind-powered Anhydrous Ammonia, the plan will change the agricultural landscape like no other—and help farmers, consumers and the environment. Almost every industry will be changed for the better.

What will change?

A reversal of GHG—also resulting in more widespread fertilizer access and profitability—requires a big change in the fertilizer industry. Past systems of manufacture, tillage systems, surface application of nutrients, poor regulation and selective education will eventually be made obsolete by the new Green Play Ammonia™, Yielder® NFuel Energy approach. Changes will occur in NH3 transportation, storage and application systems.

The country will experience an N type acreage change, including a complete reversal from secondary Urea and a third product, Uran. UAN nitrogen is anticipated with Green Play Ammonia, Yielder NFuel Energy. The Third World products cannot reduce GHG and contribute to it, especially N2O. This was especially noted by Yara in December 2018 as Urea, Uran, and UAN products being contributors to N2O.

In the USA, ammonia is now applied directly to 27% of all acres. We anticipate that only Green Play Ammonia can control GHG. Other nitrogen products like UAN, Uran and Urea will give back their market share that increased substantially during the Oligarch era of NH3. Green Play Ammonia could reach 80% of the acres as the total N applied as NH3.

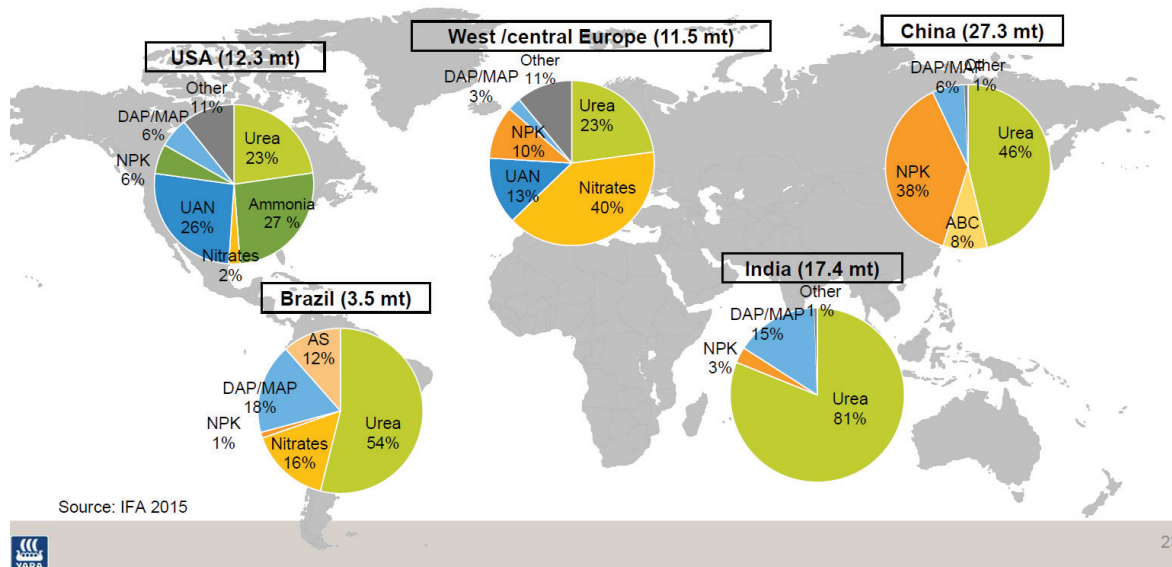
Why is NH3, directly applied, not used in Europe, Africa, or Asia? Simply stated, there were better investment strategies for producers in the USA following World War 2.

Also, the gigantic land mass of North America and cheap energy source, fossil fuel, natural gas and coal was mined. The country had an availability of Land Bank credit to buy land and pay for it much faster with the technology of Anhydrous Ammonia.

A large fertilizer industry eventually evolved as North American farmers drove up land values using NH3 directly applied. The fertilizer industry made sure there was budget money to pay for the fertilizer with a bank operating line.

The oversupply of natural gas in Canada brought on the development of Urea for export to the Third World in 1980. Urea was then adapted to lower value land in North America. The Urea and Uran program soon backfired in North America on large acreage farms. Urea is not primary nitrogen and may not convert from Urea to NH4 in time for the plant to use it.

Nitrogen fertilizer application by region and product



Who will be involved?

Innovation requires expertise, and Exactrix and Proton Ventures will collaborate closely to build the sure foundation needed for success.



Exactrix Global Systems will provide the deep-banding NH₃ application machinery, the delivery and the storage systems for NH₃, and formulations of TAPPKTS plus Zinc.

Proton Ventures will build and deliver Haber Bosch process equipment that builds NH₃ from wind power and PV sources of hydrogen using electrolysis.

Scientific help comes from Kansas State University, University of Nebraska, Washington State University, and the University of Idaho. On the Northern Tier, North Dakota State University and the USDA-ARS have also assisted broadly by buying our machinery and carrying out tests.



Tessenderlo Kerley, Inc. has been contributing to the stabilization of nitrogen.

How will fertilizer shift?

The Oligarchs of Fertilizer currently control the ammonia market and have since 2003, when the Koch Brothers bought farmer-owned Farmland Industries of Kansas City. Since then, the Oligarchs have moved aggressively away from ammonia.

The Oligarchs now manufacture alternate high-margin, wasteful fertilizers such as top-dressed or surface-applied Urea and 32-0-0. The ammonia price is now almost 8 times higher than it was 25 years ago, yet the material to manufacture ammonia costs the lowest in the 25-year history of natural gas.

As a result of this shift, most non-owners of Exactrix equipment have experienced an opportunity loss of \$60-\$150 per acre of net income every year for the last 14 years. The Oligarchs continue to move away from ammonia. Their bottom line does not help the farmer bottom line or the environment. That's where Exactrix and Proton Ventures step back in.

Partners in the development of Exactrix equipment come from the era of Tennessee Valley Authority (TVA) involvement in American agriculture. Unlike the Oligarchs of Fertilizer, these partners are highly educated—and skilled—regarding nutrient power.

**Exactrix® reaches out to solve the GHG problem.
A fresh start to move away from the Oligarchs of Fertilizer.**

Farming with the wind for generations to come.

**Building the strongest agriculture
economy in the world.**

Sharing a better environment for our society.



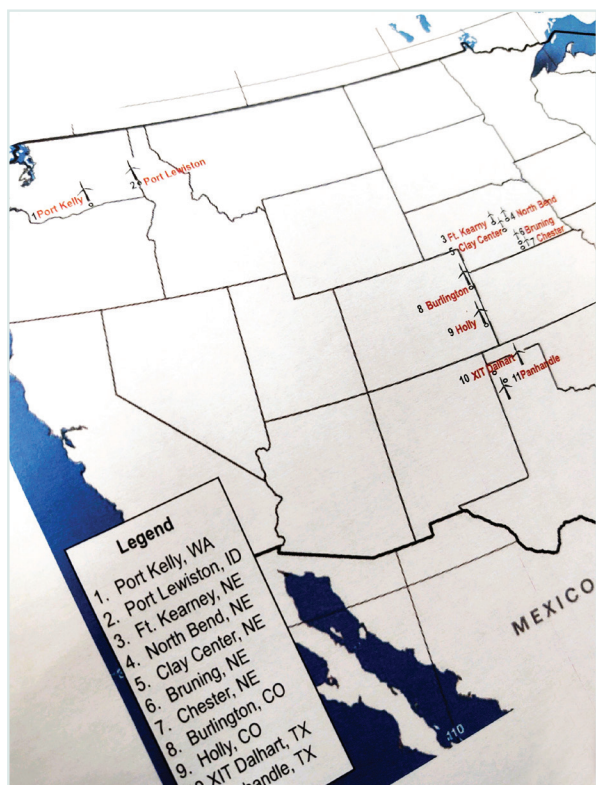
The conversion to Green Play Ammonia™ will require billions of dollars of investment over a 10-year period. The NH3 processors, the storage, and the application system can be 20% complete by 2030.

How will this all come together?

First, a move back to ammonia—without the middleman, oligarch pricing, and poor supply.

Anhydrous Ammonia supercharges crop yield, and at a fraction of the fertilizer cost to farmers. Exactrix and Proton Ventures are forming a joint marketing agreement for small-scale ammonia plants using low-cost wind power.

The goal is to build 10 optimized plants, and these will supply 700,000 to 1 million acres initially in typical crop rotations with legumes. In irrigated Platte River Valley scenarios, one plant will be dedicated to 36,000 acres of irrigated corn production. The plants will be considered optimum scale compared to mega-sized NH3 plants.



- The Anhydrous Ammonia is producer owned the minute it is built, so the ammonia is always available. Plants are controlled from a safe, central location.
- Small-scale ammonia plants generally supply 1,000-4,000 tons of nitrogen annually, and the plants' wind power will cost 1.2 cents to 1.7 cents per KW. This is the least expensive power in American agriculture.
- Farmers get the lowest transportation cost to the use point. Transports are by Yielder NFuel Energy.
- The NH3 futures market is broader and more stable, not subject to Oligarch interference or the price of NG.
- GHG is reduced greatly when using wind power and Exactrix application technology in no-tillage farming.
- Application safety is improved by using DOT hazmat trucks and drivers to the delivery point. Drivers and others are trained carefully similar to propane delivery.
- The plants use high-quality pressure vessels and the safest, most advanced technologies to deliver the NH3. Untrained drivers are removed. Light-duty towing pickups pulling 1,000 gallon, 40-year-old nurse trailers are prohibited. Only the best equipment is used.

The goal is to start building ammonia immediately with existing technology with an official planning start date of September 2020 and production in 24-36 months at 10 locations.

In 48 months, 50 additional plants will be constructed. An anniversary date of 60 plants is set for the 2025 operating year. By 2030 to 2032, a total of 500 plants will supply Green Play Ammonia with 2,000,000 metric tons of production in a price range of \$100 to \$300 per ton.

No doubt resourceful farmers can help break the Oligarch hold and bring ammonia back from \$300 per ton to \$100 per ton by 2030.

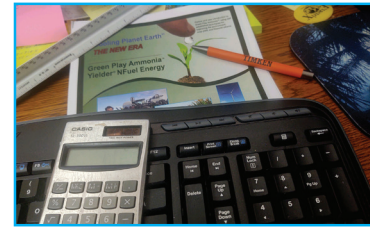
Farmers can ease processes with NH₃ readily available at the farm site and common and guaranteed analysis at 82.42% N as NH₃. The highest quality ammonia will be the norm, with no problems with compressor oils and pipeline contaminants. All-new infrastructure with the most modern of equipment will be centrally controlled.

Now is the time to bring on the hydrogen economy with practical NH₃. Farmers can work together to help use Anhydrous Ammonia for irrigation engines, diesel engine dual fuel designs, and as a heat source for buildings and dryers. Fuel cells can also use NH₃.

Ammonia is the low-cost performer with great storage and handling techniques. Anhydrous Ammonia is a dense material with a triplex hydrogen molecule. Since NH₃ has no carbon, it is not a carcinogen.

The value of the storage tank has been doubling from the original cost at the last auctions in Nebraska and North Dakota at \$1.80 to \$2.00 per gallon for 38-year-old Trinity Tanks. The 30,000 gallon storage tanks and 60,000 gallon storage tanks hold value for many years.

The NH₃ pressure vessel tanks are 2.2 lbs. per gallon and cost \$3.50 to \$3.75 per gallon, installed \$6.00 per gallon with pumps for 30,000 gallons on the farm.



The need for serious capital to seed the agricultural revolution

Scaling up to meet the North American need of 400 million acres requires tremendous capitalization to change how nitrogen fertilizer is built, stored and applied. Proper funding of \$300 million from the Bezos \$10 Billion Earth Fund gets the project up and running, helping production, farmers, and the environment at the same time. Cooling down the planet starts in 2022.

Small-scale, wind-powered ammonia plants supplying stored NH₃ locally have great potential to improve land values up to \$1,000 per acre in the Corn Belt. This is considered a major technology jump ahead and is like the initial introduction of Anhydrous Ammonia in the '50s and '60s.

For the agricultural producer, costs go down with ammonia built and stored locally. Yields go up with Exactrix nutrient placement techniques in No-till Rotational Band Loading™.

For the investor in a technologically advanced company, this is a business opportunity like the period of the '60s and the "Green Revolution." An investment now in plant, storage and application equipment is estimated to be approximately 10 times more than the original investment in the '50s to '60s.

With the first 10 plants, an initial \$700 per acre investment is required to produce another \$150 per acre of annual and additional net income for the producer. This drops to about \$400 per acre in the second set of plants.

Where will the money go?

Using tested values of Exactrix allows Green Play Ammonia™, Yielder® NFuel Energy to apply tested numbers, improving net producer returns per acre of \$150. This time-proven advantage is calculated with the 10-year historical average corn price and an average 8% yield increase (4-25% based on crop). Rotations may be changed and double cropping applied.

The investment in one plant includes NH3 storage and Exactrix TAPPKTS application machinery at \$25,400,000, about \$700 per acre on 36,000 acres. Proton Ventures reports the first 10 plants will cost nearly double at \$13.5 million. The windmill adds \$4 million, along with \$4 million for storage and handling and \$4 million for application. By 2024 we expect costs to be reduced as the volume moves to 100 and on up to 500 units per year.

The Green Play Ammonia anchor plants will have a setup cost of \$25 million and require an additional \$5 million to cover marketing development costs, legal maneuvers and consumer incentives to ensure ethanol, cattle feed, and corn oil are produced totally green or at lowest GHG available.

The first 10 anchor Green Play Ammonia plants need \$300 million to start the ball rolling. No orphan designs are planned.

The need is for 10 identical Green Play Ammonia plants to provide consistency and support from a central location. Building as many as 10,000 plants in North America locally would be a smart financial move. The last “100 tons per day” small-scale fossil fuel plant built by Fortigen at York, Nebraska had plant costs alone of \$80 million. The plant was put together with a used single train compressor and supporting components.

A key point of Green Play Ammonia, Yielder NFuel Energy is the storage of manufactured ammonia in much lower risk, lower cost and insurable pressure vessels at 10,000 total locations across the US. The requirement will be 30,000 and 60,000 gallon storage vessels of the highest quality.

Every ammonia plant will be anchored on the goal of getting hydrogen or syngas costs as low as possible. Proton Ventures states that in their plant design using Haber Bosch electrolysis each 1 cent per KW is equivalent to \$100 per ton of ammonia. It is thus critical to drive down wind power costs to the lowest possible levels of 1.2 cents to 1.7 cents per KW. No power will be used from the grid. The plan includes excess NH3 to be supplied to the grid using Caterpillar or MAN gas engines set up with crackers to deliver electrical power with pure hydrogen fuel with near zero carbon emissions.

When the first round of financing closes, a second 20-unit round of Green Play Ammonia, Yielder NFuel Energy plants are planned for Manning, Alberta; Peace River, Alberta; Red Deer, Alberta; Shelby, Montana; Williston, ND; and Hettinger, ND. An expansion of two additional plants will be made on the existing plant marketing areas. Plants in Kansas and Oklahoma will eventually be added. The plants in Texas (at least 40 are needed) will be located at the Texas/Oklahoma border, allowing producers in Kansas to access low-cost ammonia. South Dakota and Nebraska will be expansionary areas. The third round of plants will cascade from the load-sharing features of multiple plants.

The initial locations of the 10 Green Play Ammonia optimum scale plants include:

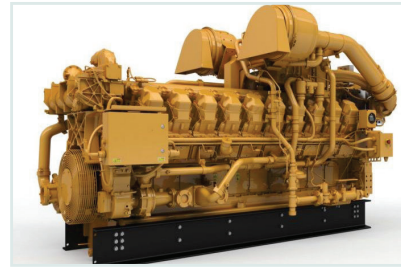
- Nebraska
- Colorado
- Texas
- Idaho
- Oregon
- Washington State

Four plants will be in Nebraska to study plant load sharing techniques and no-till adaption to Exactrix P-51 Mustang technologies.



Windmill costs for the 10 plants will add \$4 million per plant.

The need is for 10 identical Green Play Ammonia plants to provide consistency and support from a central location.



Natural gas powered engines are also fueled by NH₃ without carbon. NH₃ is available to also dual fuel a diesel engine. Yielder NFuel Energy provides fuel at a reasonable \$300 per ton, equivalent to gasoline fuel at \$1.75 per gallon. NH₃ is dense, octane is 130, and the compression ratio is 50 to 1.

How will the investment pay off for those vested?

Green Play Ammonia™ properly adapted to 400 million North American acres can supply \$30-\$60 billion of additional annual net income to North American producers. This income can increase land values up to \$1 trillion every 2 years.

At 10-year averages, the cost of irrigated corn production is reduced \$80 per acre with a typical yield increase of 8-10%, producing an average of \$150 per acre more net income in irrigated corn production.

Green Play Ammonia requires 8-12% of the producer's gross corn budget for TAPPKTS+Zinc fertilizer banded deep in the soil at 3-5 times aerobic planting depth using the advanced technologies of Exactrix Global Systems. The anaerobic depth is at least 4-9" in depth, which depletes the potential nitrification. The variation of 8-12% fertilizer cost is due to soil pH and longer-term Rotational Band Loading with No-tillage.

Currently corn producers are spending 18% of the cost of corn production and \$144 per acre of the total \$800 per acre to raise irrigated, high-yielding corn of the Corn Belt. Long-term Exactrix equipment owners currently spend 8% of their gross revenue with the pickup on yield potential at 8-12%. Less is truly more. A typical promotion is 12% more net income over any next best approach. Some applications of nutrients in tillage are 2.5 times greater on cost than Exactrix TAPPS, TAPPKTS+Zn banding with deep banding of all nutrients in No-tillage Rotational Band Loading.

Yielder® NFuel Energy has the potential to utilize up to two thirds of the Green Play Ammonia built. This NH₃ is dedicated for heating, fuel cells and NFuel Energy to power the economy. The NH₃ can be used for dual fuel diesel engines, coal-fired power plants using SCR, corn dryers, and any place hydrogen, propane, diesel and gasoline are being used.

The payback or return on 36,000 TAPPKTS with zinc fertilized acres is \$150 per additional net income in irrigated corn production of central Nebraska or \$5,400,000 annual net income to the producer in each 36,000 acre zone at the 8-year average price of corn since 2011.

Excess NH₃ will be supplied for Green Play Power through Caterpillar 3520 Gen Sets at a bid price of 4.5 cents to 5.5 cents per KW. About half of the capacity of each plant will be used initially for power generation.

In the second tier of plants, the payback is accelerated. The total payback period at these low interest rates is estimated at 3-6 years depending on the price charged, the rotation, the weather, and the markets.

The total payback period is not affected by the price of carbon-rich ammonia. The price of carbon-rich ammonia can be anywhere it wants to be because it is not competitive to the specific goal of lowest GHG and being built and stored locally.

National security is magnified with 10,000 small-scale plants of Green Play Ammonia, Yielder NFuel Energy.



3 powerhouse options for timely delivery of NH3

Delivery snags have met their match with three sizes available of delivery trucks with backup trailers:

Platte Valley, 425 hp, 2,500 gal. NH3 single-axle truck and dual-axle trailer, 1,000 gallons. 60 miles. *Short distance 1 hour out and 1 hour back.*

Great Northern, 500 hp, 4,500 gal. NH3 dual-axle truck and tri-axle trailer, 2,000 gallons. 120 miles. *Long distance 2 hours out and 2 hours back.*

Canadian, 650 hp, 8,000 gal. NH3 Tridem axle truck and tri-axle trailer, 6,000 gallons. 10 KM to 250 KM, *24 hours day and night.*

NH3 in the nick of time, and around the clock

Farmers are resourceful—they like to produce more with less. Exactrix TAPPKTS formulators have already proven that most applications are made at .5 to .6 of the fertilizer dealer recommendation.

But what happens when more fertilizer is needed, and fast? On-time delivery of NH3 sells the system.

The fact that the NH3 transportation system is on time takes away the leverage of the fertilizer industry to tighten supply when they want to. With local production of NH3, its delivery will be 45 minutes to 1 hour out of the plant, allowing 20 minutes for filling and 45 minutes to 1 hour back. Turnaround from an optimum-scale Green Play Ammonia, Yielder NFuel Energy plant will require 2.5 to 3 hours.

Each farm must have 30,000 gallons of storage to allow for DOT transport delivery within 45 minutes to 1 hour. Producers can maintain their own 30,000 gallon storage tanks at the windmill site when within 1 hour of travel time. Producers must own their own tanks at the plant site or at their farm site.

Portable NH3 storage is also available at each optimum-scale Green Play Ammonia, Yielder NFuel Energy site. Yielder NFuel Energy also maintains portable storage, often used for portable asphalt plants at 22,000 gallons.

On-site safety is greatly improved with pressurized NH3 storage and when older nurse tanks are eliminated. Improved safety brings on strong local support, unhampered by the political pressure often associated with the '60s design NH3 storage found at fertilizer dealers.

NH3 in a pinch, no panic required? The readily available Green Play Ammonia, Yielder NFuel Energy will become a model for other countries that want to evolve with NH3 applied directly to the land, reducing worldwide GHG to its lowest levels.



Mobility protects value.

Tanks—especially the 30,000 and 60,000 gallon capacities—hold their value as they are easier to move. After 40 years of service, tanks are worth more than the original cost.

Yielder NFuel Energy also provides portable storage, bringing capacity where needed at 22,000 gallons.



Solving the fossil fuel problem in North American agriculture

Scientists and Exactrix engineers have discovered that commercial fertilizer inputs are not efficiently applied or formulated to raise corn, wheat or cotton. Up to 400 million acres of farmland needs new management . . . and a complete restart of fertilizer emissions and immediate solution for highest quality ethanol at lowest GHG.

The Green Play Ammonia, Yielder NFuel Energy goal is to break away from the Oligarch dominance of the primary N sources. The secondary N source will become more expensive in relation to Green Play Ammonia. This means a supply of ammonia is local and at a price that involves no fear marketing from the fertilizer dealer. The fertilizer dealer is still in business and supplies other products like phosphate or potassium.

The technology exists to build the Green Play Ammonia plants, the Yielder NFuel Energy storage system, and the Exactrix equipment to control GHG. The technology exists to run the 3-10 nested plants remotely and supply NH₃ interconnected between the nested plants as required. A highly reliable system can be promoted to consumers of Yielder NFuel Energy.

It's time to bring greenhouse gases to their lowest levels while raising more food and earning more profit.

A good second goal is for the green consumer to pay a little extra for the ethanol or the beef, pork or cotton so they know they have purchased a sustainable product with the lowest GHG. This marketing technique is well proven. The Green Play Ammonia will put the Oligarchs out of the agricultural ammonia business. The steam reformation with natural gas will fade away since the US ammonia plants are old, and coal-fired plants in North Dakota and Kansas will be the first to go.



The fade away of steam reformation, single-train ammonia plants is due to the Oligarch long-term contracts for natural gas. It requires negotiation and long-term planning, and a major problem requires the Oligarchs to figure out the NH₃ transportation system from their old-fashioned ammonia mega plants to the Great Plains producer.

The biggest unsolved problem for the Mega Plants is the storage of NH₃. They store NH₃ in the cropland soils or build secondary and third process dry fertilizers that cannot be metered accurately. The problems become worse the more fertilizer manufacturers convert to other types of nitrogen, such as 32-0-0 and 28-0-0, which are unsafe environmental materials due to the nitrate in the mix. Guaranteed analysis is not possible . . . only estimates.

Fertilizer Dealers Recommend Exactrix Applications

Read the following for Exactrix solutions on increasing yield in an environmentally friendly way.

http://www.exactrix.com/Broadcast_01_27_2020.html 400 bushel per acre corn is coming. 300 bushel per acre corn can be achieved on sandy ground with TAPPKTS and help from TKI.

http://www.exactrix.com/Broadcast_02_25_2020.html Will Jeff Bezos' Earth Fund Like Exactrix?

Entering the Greatest Era of Environmental Regulation and becoming more efficient at the same time.

http://www.exactrix.com/Broadcast_12_10_2019.html Manufacturing NH₃ locally.



Think big. Think clean. Think bold.

The goal is to start building ammonia immediately with existing technology with an official planning start date of September 2020 and being in production in 24-36 months at 10 locations.

In 48 months, add 50 more plants. An anniversary date of 60 plants is set for the 2025 operating year.

By 2030 to 2032 we anticipate 500 plants supplying Green Play Ammonia with 2,000,000 metric tons of production in a price range of \$100-\$300 per ton.

Making Green Play Ammonia move ahead in 10 years for 400 million fertilized acres in North America will take \$1.6 current trillion at \$400 per acre that can build 11 tons per day or 4,000 tons per year per plant. Consider 10,000 plants to supply 400 million acres. The scope is huge—but so are the benefits and historic shift to do better for farmers and the world we all live in.

A brave prediction?

By 2030 ammonia will be selling for \$100-\$150 per ton in inland areas or Nebraska and even lower in coastal areas. Just as nice, the early Green Play Ammonia, Yielder NFuel Energy plants will be paid for. What a fantastic contribution to agriculture and society in general when 2030 arrives and we can point to an earth-friendly solution.

Plus, by 2030 the Anhydrous Ammonia commodity will finally have a diverse group of investors stabilizing the market with local manufacture of NH₃ being the key. Ammonia production at optimum-size plants will attract a diverse group of investors and market makers.



How critical is Yielder NFuel Energy to Green Play Ammonia storage?

The two support and strengthen each other. Green Play Ammonia is the production and crop production application of NH₃. For some plants, 50% of the production of green ammonia will be dedicated to clean energy above the soil surface.

Yielder NFuel Energy is the storage/delivery side of the business plan. The need to store ammonia is part of the cost of ammonia. Ammonia storage becomes the battery or the source of power for generator sets, fuel cells, the transportation industry or pipeline delivery at the lowest possible cost with the best safety record.

Are large storage tanks an “Achilles heel” when it comes to long-term value?

Anhydrous Ammonia storage tanks maintain their value over 50 years. In fact, at auction the 30,000-gallon pressure vessel tanks from the '80s bring in prices of 1.5 to 2 times the original cost for the 70,000-psi steel tanks with 109-inch bulkheads and rated at 250 psi for storage.

NH₃ is the only nitrogen source that has a value guarantee and can be stored in pressure vessels.

The guaranteed analysis of NH₃ means it is a good buy all the way to \$2,000 per ton. Producers will just not use as much.

Move over, fossil fuels.

Coal and natural gas have long fueled the world, often accompanied by carbon and also kerosene, methane and propane. While popular for being cheap and reliable, the fuels may also be impure and produce harmful emissions and increased global warming.

The Green Play Ammonia at 82% N or 82.42% has a guaranteed N value at every delivery point and is thus hedged on a futures market. Mass meters are utilized to meter accuracy of 20 lbs. on 10,000 applied.

Since Green Play Ammonia can be listed and promoted as 82.42% N, Green Play Ammonia, Yielder NFuel Energy is handled totally differently than a fossil fuel NH₃ mega plant, assuring the highest quality ammonia.

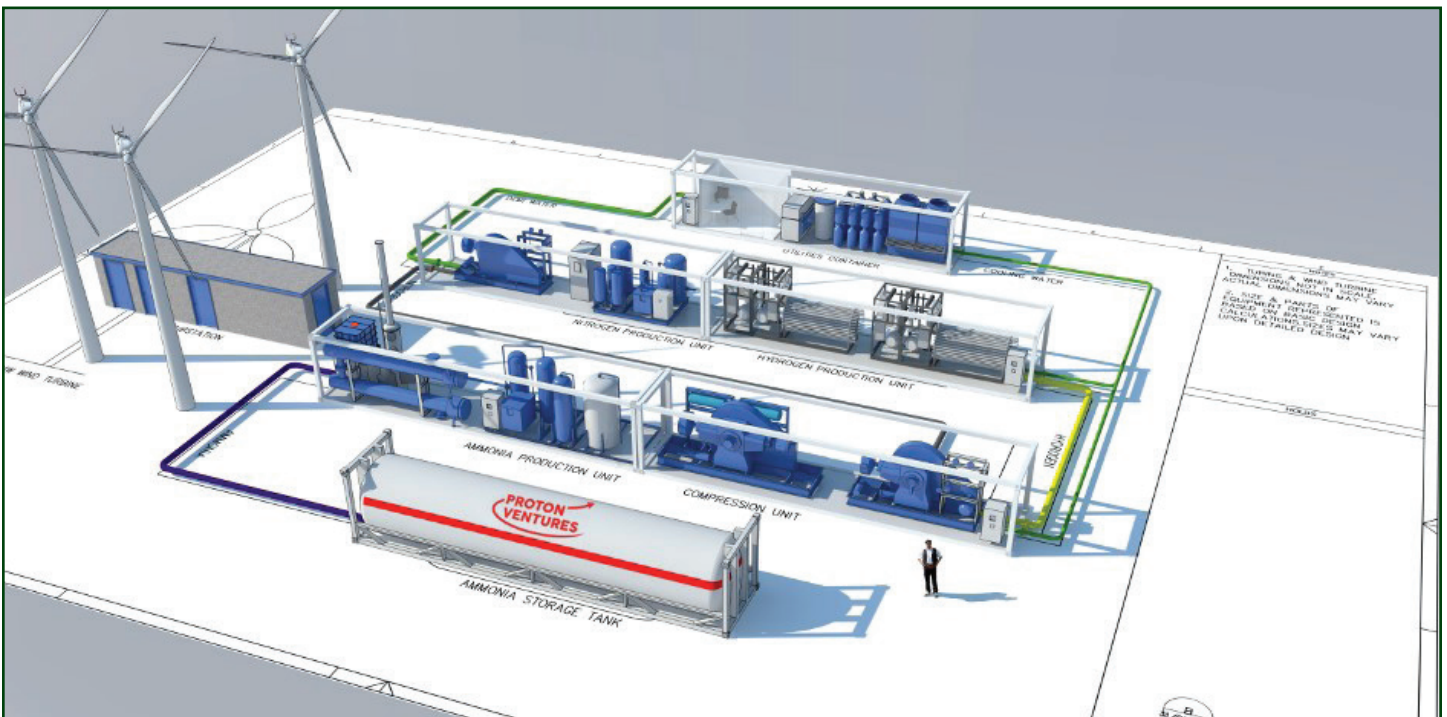
Investing in our future with the Bezos Earth Fund

In February 2020, Jeff Bezos announced that he was donating \$10 billion to create the Bezos Earth Fund to address climate change. In June 2020, his company, Amazon, launched The Climate Pledge Fund. Its goal? "To help companies reduce their carbon impact."

Together, Exactrix and Proton Ventures have the experience and will make the world a cleaner, safer place for people now and in the future.

Investments from the Bezos Earth Fund will go into plants and people. The Exactrix portion will include \$45 million for its plant and the production of 350 high-end tool bars. Proton Ventures will need \$140 million for its processing plants and to set up U.S. headquarters in Colorado. Another \$40 million will be needed to set up production with Trinity and Dragon tank manufacturers.

The \$75 million balance will be held by Green Play Ammonia, Yielder NFuel Energy to provide testing labs to measure GHG and develop new processes to more easily measure N₂O emissions. It will also be used for marketing and for legal and political support to drive the acceptance of Green Play.



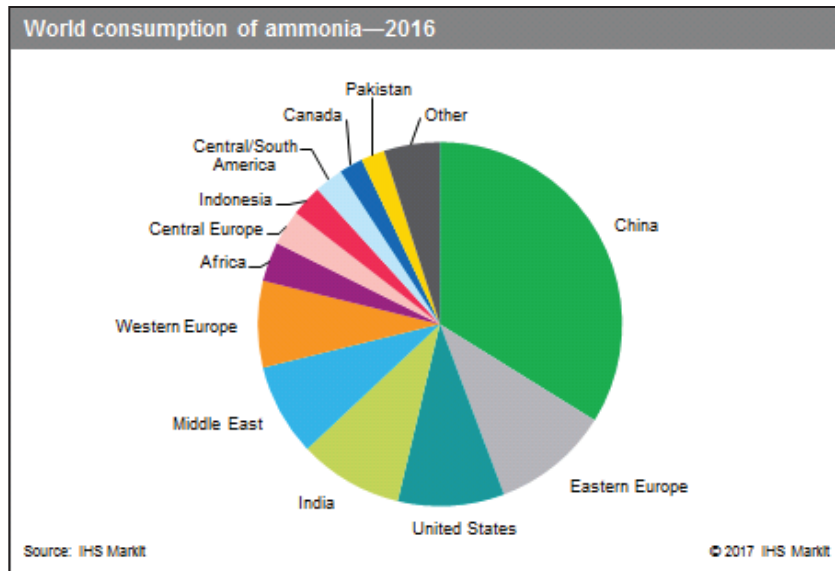
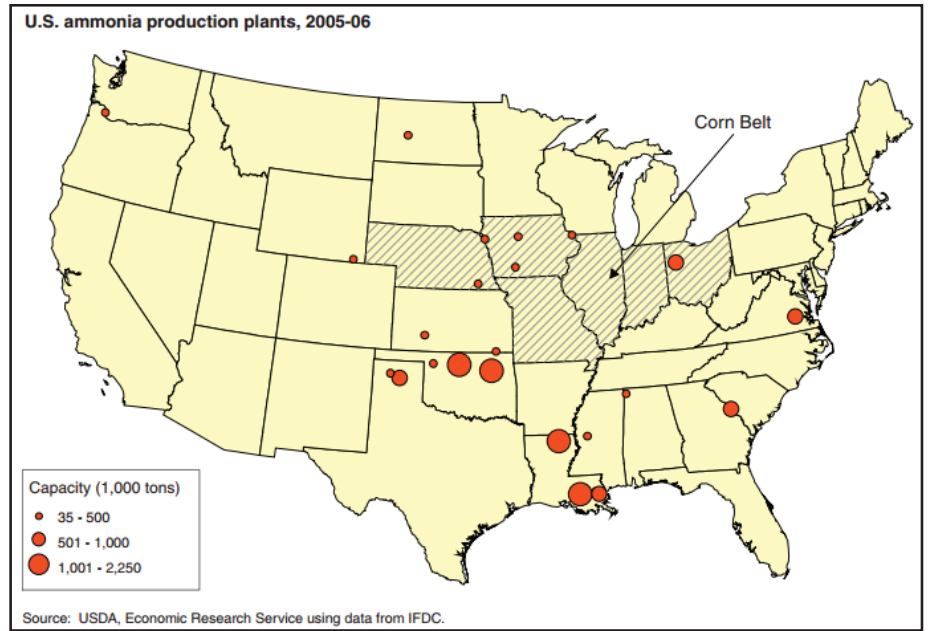
Each plant is carefully designed to include windmills, an ammonia storage tank, production units, and a compression unit.

Who knew? Now you do.
Random facts at
your fingertips.

Plus, briefings behind
the scenes.

As a nitrogen-based liquid fuel, ammonia is cheaper to store and distribute than hydrogen and avoids the carbon dioxide emissions of other liquid fuels, which are expensive to capture.

—Brian Setzler, lead author and postdoctoral associate, University of Delaware



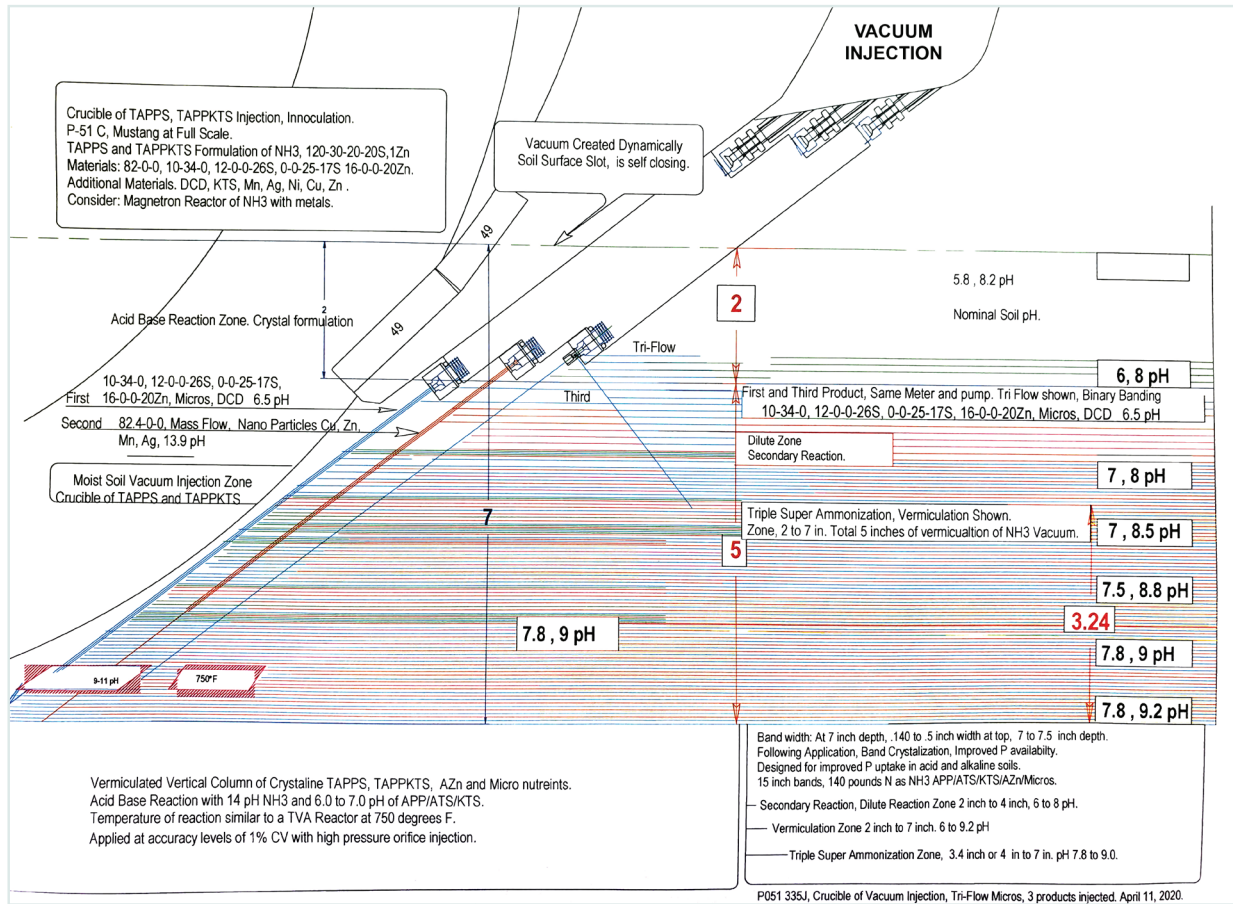
Wind-powered Anhydrous Ammonia is built locally and always available, at the lowest CO₂ and CH₄ emission.



Wind has been a major factor in Great Plains energy for years, as the circa 1910 windmill at left attests.

On May 19, 2020, Siemens Gamesa announced a 14 MW mill. The biggest mill **ever** built is approximately 15% bigger than the biggest GE mill. The total rotational swing is 2 feet greater than GE at 222 meters or 728 feet of rotational swing. The result? Wind power with more reach!

<https://www.greentechmedia.com/articles/read/siemens-gamesa-takes-worlds-largest-turbine-title>



The Crucible of TAPPS, TAPPKTS Injection, Vermiculation Column, P51-C, Mustang at Full Scale shows the increase in soil pH as Triple Super Ammonization is applied to supercharge nutrient levels with Exactrix technology.



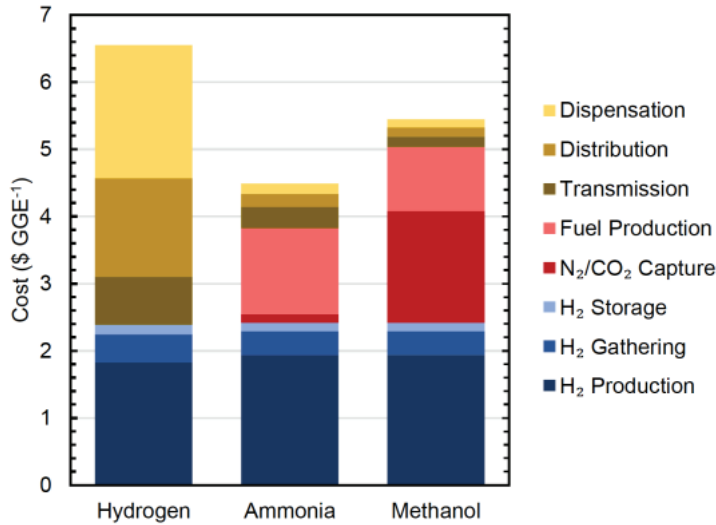
Only Exactrix No-tillage nutrient banding meets the promise of lowest GHG.

About 6% of the total GHG emission can be improved with Exactrix, Green Play Ammonia, and Yielder NFuel Energy. That is a 50% improvement of the total 11.2% agricultural contribution to GHG.

This is the NEW ERA to cool down the planet.

More facts on fossil fuel

Ammonia outperforms hydrogen and methanol on source-to-tank cost for transportation fuels.



DOT, Hazmat qualified drivers ensure safe delivery of NH₃. Pair that with on-time delivery and lowest production cost over a broad area for top results.

Relax knowing this delivery approach is especially ideal for heavy traffic areas or long-distance farms with big elevation changes.

	Energy Content (LHV) BTU/Gallon	Octane Number/ Cetane Number CN	Maximum Practical Compression Ratio	300 Mile Range Tank Size at 30 mpg	GHG Rating.
Diesel #2	139,600	8-15	23:1	8.3	
	Low Sulfur, 128,488	CN 40-50		9.0	
BioDiesel, Soy Ester Green Play	132,902	25 CN 45	23:1	8.7	3A
BioDiesel, Canola Ester Green Play	125,208	25 CN 54	23:1	9.2	3B
Gasoline	116,090	86-94	10:1	10.0	
LPG Propane	91,502	120	17:1	13.5	
Ethanol Exactrix Green Play	76,100	109	19:1	15.0	
Methanol	56,800	109	19:1	20.1	
NH ₃ , Green Play Yielder Flywheel Energy	40,571	130+	50:1	27.4	1
CNG (2,400 PSI) Methane, CH ₄	19,800 41,000 BTU at 3,600 PSI	105-122 120	17:1	27.8	
Hydrogen (10 Kpsi) H ₂	16,000	130		71.3	5
Hydrogen (5 Kpsi)	6,500	130		175.5	4
Lithium Ion Battery.	3,870	NA	NA	98.3	
Dual Fuel Green Play BioDiesel, NH ₃ , NFuel	70% Bio Diesel Green Play 30% NFuel NH ₃ =95,856	At 70/30 mix, 56.5 at full load.	23.1 to 35 est.	Synergism Not Known.	2A
Cracker, Dual Fuel BioDiesel, H ₂ , NFuel	90% Bio Diesel Green Play 10% NFuel H ₂ =120,261	At 90/10 mix, 36.5 at full load.	23.1 to 35 est.	Synergism Not Known.	2B
Cracker, Dual Fuel BioDiesel, H ₂ , NFuel	80% Bio Diesel Green Play 20% NFuel H ₂ =107,621	At 80/20 mix, 56.5 at full load.	23.1 to 35 est.	Full Load Test Required Synergism Not Known.	2C

NH₃ and Ethanol hold the highest GHG ratings in green, while other options fail the new standards for GHG reduction.

What happened to regulation and education?

President Franklin Delano Roosevelt signed the Tennessee Valley Authority Act in 1933 as part of the New Deal. The goal was to make the Tennessee River easier to navigate, reforest lands, operate a dam, and improve farming techniques.

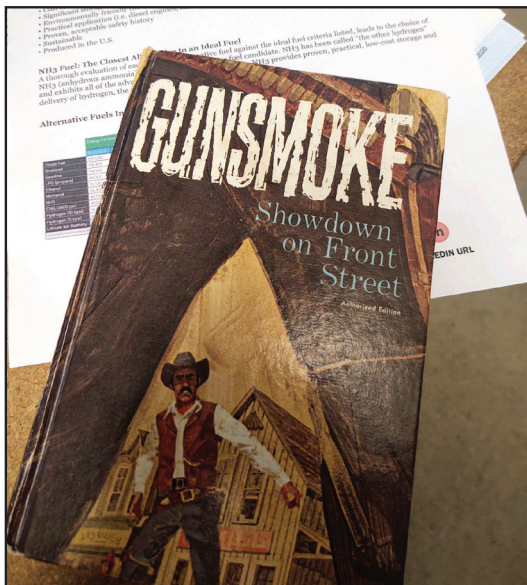
Until 1987, the TVA at Muscle Shoals, Alabama, oversaw regulation and education for fertilizers and the American crop producer. The focus then turned to electricity instead.

Since then, the fertilizer leadership has been closed off by Fertilizer Oligarchs such as the Kochs Bros. of Wichita, KS; CF of Deerfield, IL; and Nutrien of Calgary, Alberta. Leadership has dissipated due to competing interests, and it is now almost impossible to make any kind of progress in the existing fertilizer industry.

Currently, the fertilizer industry is not regulated. Many of the trade practices would be considered illegal in the financial game of stocks and bonds. The customer does not come first. Fossil fuel ammonia does not meet GHG emissions standards.

Let's call the environmental flop the Wild, Wild West of the Fertilizer Oligarchs. The grip on the industry remains tight, but there's a new sheriff in town.

Watch for a showdown in Dodge City when Bezos takes on the billionaires of fertilizer. Their days of waste and dirty air are over.



More good news about ammonia

The average price of ammonia over the last 20 years is \$300 per ton. This cost is equivalent to \$1.75 per gallon on gas.

Ammonia can be produced from zero carbon energy (hydro, nuclear, wind) and with significant CCS at the lowest cost of capture for any hydrocarbon process.

Ammonia diesel engines are proven and essentially equivalent in cost, either with diesel blending, pre-cracking or advanced engines.

Ammonia turbines with pre-cracking to produce hydrogen as a component of the fuel are efficient and flexible.

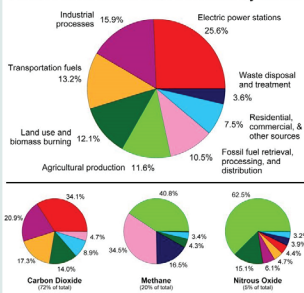
Ammonia fuel cells are highly desirable for remote power for cell towers. Operating at roughly half the cost of diesel fuel with a 57% energy conversion efficiency, the cells provide 4 KWH of power at 48 volts for 1 year from a 12-ton supply in a 5,000 gallon storage tank. Very low emissions and zero CO2 result.

A pre-cracker is both efficient and easy to use.



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Annual Greenhouse Gas Emissions by Sector



Pg. 1 - Kedar Karki. Effect of climate change in agriculture and livestock production.



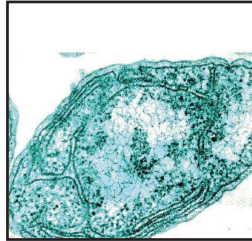
Pg. 2 - Side dressing winter wheat at Marshall, Mo., Feb. 2014. Surgical cuts at 7" depth with vacuum injection. One of the best ways to reduce greenhouse gas. No-Till, into growing roots for banded NPKS targeting, timing and uniformity of TAPPS and TAPPKTS+Zn.



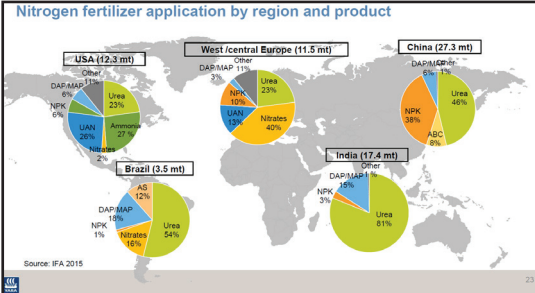
Pg. 6 - Winter wheat, No Tillage. Mustang Tool Bar on 15" centers. February Banding TAPPS. Highest chemical availability with TAPPKTS+Zn.



Pg. 3 - Tri-Ammonium Poly Phosphate Thio Sulfate @1% CV application. TAPPS Crystallized by Exactrix.



Pg. 3 - Nitrosomonas. A common nitrifying bacteria that must be held in a static position. The responsible bacterial processor for nitrous oxide N2O and NO3 nitrate.



Pg. 4 - "Only in North America is NH3 banded deep directly into the soil," YARA reports. Norwegian YARA is the giant of ammonia production using electrolysis and natural gas.



Pg. 5 - NH3 processing control. www.protonventures.com. Karel Doormanwegs, 3115 JD Schiedham, Netherlands



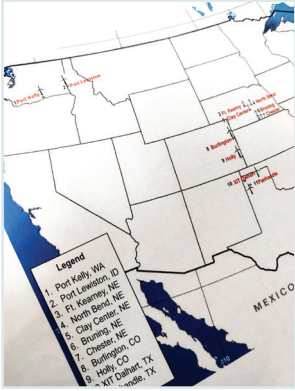
Pg. 5 - www.exactrix.com The World Leader in NH3 liquified application. 4501 East Trent Ave. Spokane, Washington 99212



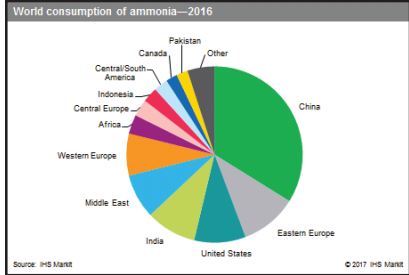
Pg. 5 - Potassium Thio-Sulfate. A major technical advancement. Exactrix rated as one of the best fertilizer developments in 60 years. A TKI development.



Pg. 5 - A large wind turbine provides off-grid power to build NH3 to be directly applied to the land.



Pg. 6 - First 10 Green Play sites for 360,000 acres. Balance of production goes to peaking power as green electricity.

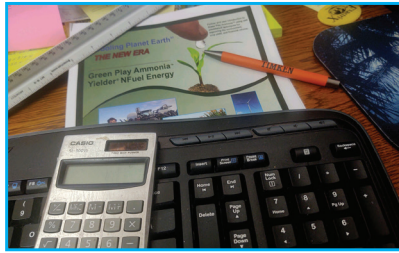


Pg. 14 - The end of an era. The fossil fuel era closes in 2020. The new era begins in 2023. 50% power generation, 50% agriculture. Green Play Ammonia is a growth market to 2050.

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Pg. 10 - A Tridem field delivery truck and trailer at Manning, Alberta, Canada. At 8,000 gallons filling twin 2,000 gallon NH₃ tanks. The trailer is 5,000 gallons of liquid fertilizer, APP, ATS, KTS, Zn. Operating day and night applying 14,000 acres in October, 1,000 acres per day.



Pg. 7 - Critical to success, information. Lowest cost of production with Green Play NH₃. Saving soil all the way. Always the correct choice.



Pg. 12 - Exactrix 2KC, Series 3 testing unit setup to stall Nitrosomonas. Standard commercial fertilizer such as Thiosul® and Trafix-Zn or zinc sulfate delays bacterial growth. Bacteriostat is the term. Zinc is a known Bacteriostat in human health.



Pg. 11 - A large grid wind farm on the Great Plains. The corridor of power on the Great Plains at the 100th meridian. Two windmills @ 3.85 mw are planned for each 11 ton per day plant.



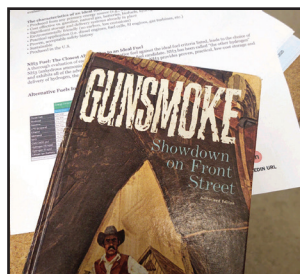
Pg. 11 - About 667 corn kernels per single plant. This means about 300 bu/a @ 36,000 population that is 16 rows around and 42 rows up. The tip is worth about 3 bushels/acre. Some Exactrix corn/ Pioneer has been observed at 18 and even 20 rows around and 50 rows up.



Pg. 12 - Farm storage at Hawk Hills, Alberta. Twin 30,000 gallon NH₃ tanks for 60,000 gallons Liquid App, ATS, KTS storage of 120,000 gallons is required.



Pg. 10 - Companies specialize in used tanks, and hauling tank sizes of 30,000 and 60,000 are considered ideal for Green Play Ammonia. Companies that specialize in used tanks are Total Energy, TransTech and DPA or Del Peterson & Assoc. auctions.

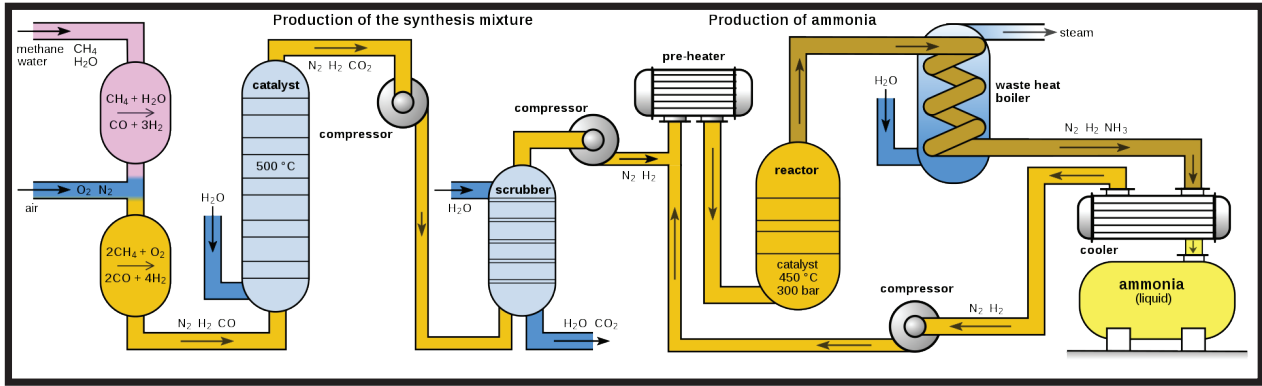


Pg. 17 - The faceoff of the billionaires Koch Bros. home turf, Dodge City, KS. An old Farmland, 1968 Mega Plant. Green Power versus Fossil Fuel Power.



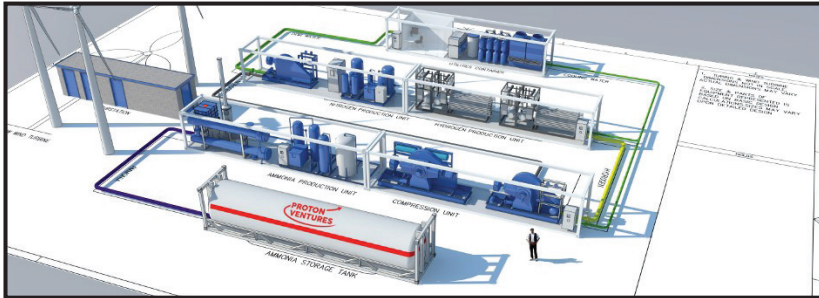
Pg. 17 - A cracker is used to shift NH₃ to H₂.

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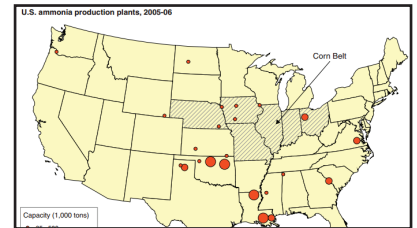


Haber Bosch process, 2,900 psi, 450 degrees C.

By Francis E Williams



Pg. 13 - Haber Bosch Plant @ 11 tons per day. 4,000 tons per year in optimum scale. Storage not shown. Rated 36,000 acres. Proton Ventures.



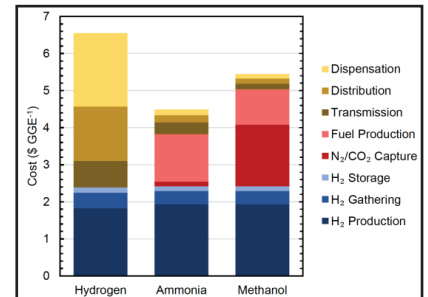
Pg. 14 - The Mega Plants of NH3. 2005-2006. A changing world by 2023.



Pg. 14 - The story of farming with the wind in Kansas.



Pg. 16 - A 3,000 gallon delivery truck operating in a 60-mile radius filling the applicator every 3 hours in Nebraska conditions.



Pg. 16 - Ammonia has a guaranteed analysis and is the best bet for storage.



Pg. 19 - Record crops in Nebraska. Exactrix TAPPS works every time.



Pg. 14 - Nurse trailers will leave the agricultural scene. Like propane, NH3 liquid delivery is made to a high quality applicator, tank mounted or towed.



Pg. 8 - Building equity with the wind at your local farm. NH3 at 82.42% is now local.

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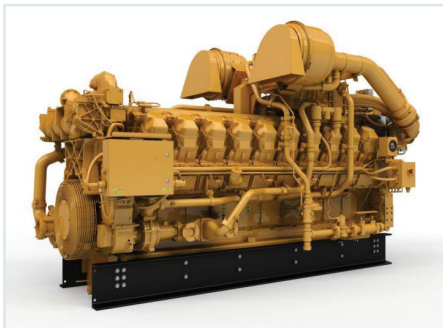
Cover - Leaders in the new Green Era of NH3. Greg and Blaine Sederstrom of Goodland, KS.



Pg. 17 - 30,000 Gallons An on-farm storage system headed for 120,000 gallons. Shelton, Nebraska.



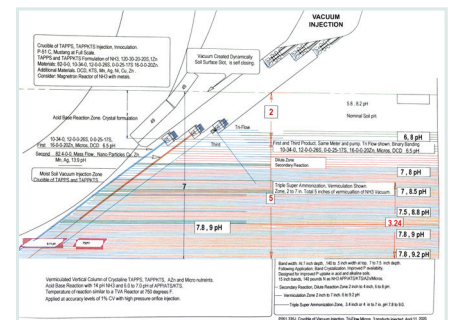
Cover - A September harvest scene at Shelton, NE. A long maturity corn at 120 days, plant to harvest, DeKalb.



Pg. 9 - Caterpillar 3520 Gas engine V-20 3,000 - 3,500 KW typical.



Cover - Caterpillar C-175-20 Diesel engine V-20 3,500 kw to 4,000 kw.



Pg. 15 - NH3 is injected at 300 psi to a depth of 7" in vacuum injection. This technique is accomplished only in No-Tillage Farming.



Pg. 15 - Mustang Tool Bar at 61.25 ft. 1 acre per minute at 8 mph. Banding deep @ 8" at Deerfield, KS.

	Energy Content (LHV) BTU/Gallon	Octane Number/ Cetane Number CN	Maximum Practical Compression Ratio	300 Mile Range Tank Size at 30 mpg	GHG Rating
Diesel #2	139,660	8-15	23:1	8.3	
Low Sulfur, V28.488		CN 40-50		9.0	
BioDiesel, Soy Ester Green Play	132,802	25	23:1	8.7	2A
BioDiesel, Canola Ester Green Play	125,208	25	23:1	9.2	2B
Gasoline	116,090	86-94	10:1	10.0	
LPG Propane	91,562	120	17:1	13.5	
Ethanol Exactrix Green Play	76,100	109	18:1	15.0	
Methanol	56,800	109	18:1	20.1	
NSR, Green Play, Exactrix Fuel Cell Energy	46,571	130-1	50:1	22.4	1
CNG (2.450 mpa)	19,800	105-122			
Methane, CH4	41,000 BTU at 3,600 PSI	120	17:1	27.8	
Hydrogen (19.Keel) H2	16,000	130		71.3	5
Hydrogen (5.Keel)	5,000	130		178.5	4
Lithium Ion Battery	3,870	NA	NA	98.3	
Dual Fuel Green Play BioDiesel, NH3, NFuel	70% Bio Diesel Green Play 30% NFuel NH3 = 95,656	A1 70:30 mix, 59.5 at full load	23:1 to 34 est.	Synergism Not Known	2A
Cracker, Dual Fuel BioDiesel, H2, NFuel	80% Bio Diesel Green Play 10% H2 fuel, 10% NFuel	A1 80:19 mix, 35.5 at full load	23:1 to 35 est.	Synergism Not Known	2B
Cracker, Dual Fuel BioDiesel, H2, NFuel	80% Bio Diesel Green Play 20% NFuel H2 = 107,621	A1 80:20 mix, 59.5 at full load	23:1 to 32 est.	Full Load Test Required Synergism Not Known	2C

Pg. 16 - Fueling strategies to build green electrical power in Nebraska, Colorado and Texas. Fueling in the Pacific Northwest with canola and hydrogen.