

Exactrix Goes North with Green Play Ammonia, Clean and Green

Fossil Ammonia Manufacturers are headed south as Green Play Ammonia Takes Over in 10 years.

A Major Announcement for Farmers and Merchants.

"Finally somebody can explain the fertilizer business and the clean energy business and where my production margin is going". "Now is the time to go North while others must go south." GJS

"Green Hydrogen can now be made locally at \$1.50 per Kilogram. The Green NH3 Zero Carbon Opex is now \$191 per short ton with a complete modern and safe plant in optimized local scale. **Get Off The Grid for your power and nitrogen.**

This will improve National Security in Optimize Size. The plant is next to your business or farm. Ammonia is no longer a stranded commodity and hard to get. It is built 24/7 with local people at just about any location on the Great Plains and the Pacific Northwest with 2,000 plants." GJS.

The North American Fertilizer Companies and managers are going south with Ammonia service and delivery as they make the biggest mistake of their careers.

About 100 Oligarch managers and large fertilizer dealers have made a very big mistake in their promotions.

But maybe not for you, the low cost producer. This could be the ideal time to transition to Green Play Ammonia with a stable price, built locally next to your needs, and with large following across the Great Plains.

What is happening? Why are these big mistakes?

Green Ammonia pricing is now at \$1.50 per Kilogram of H2 in Australia at 40.35 KW per Kilo H2. This is with the Barrett electrolyzer technology of H2O to H2 which now being scaled up to be operated in multiples.

- This is locally built with wind and solar.
- Wind is 3 cents per KW, Solar is 2.9 cents per KW.
- This is 50 cents per pound H2 at \$1.17 per Kilogram H2.

The Oligarchs of Ammonia can-not compete as the trend is towards 1.25 to 1 dollar per kilogram H2 and it has Zero Carbon...totally Green.

Yes, the so called "moon shot" or "Hydrogen Shot" is headed to Zero Carbon, \$1.00 per Kilogram or .4535 cents per lb. That is .4535 cents per pound or H2 with 352 lbs. H2 (17.6 percent) in a ton of NH3....that is \$159.62 per ton of NH3.

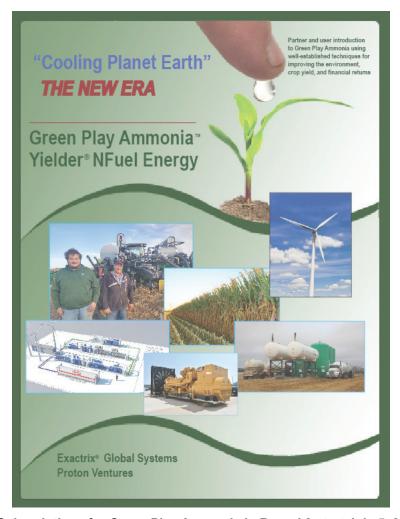
- Including the Capex following the Opex Green Ammonia can be built locally with new equipment and tanks for less than \$300 per ton.
- The Oligarchs face a problem of long term contracts for fossil gas.
- The 44 SMR plants are about gone with up to 33 plants ready for the bone yard at age 50 years.
- There are no green ammonia plants in the US in the game of marketing Green NH3.
- Around the world all sizes of Green Ammonia plants are popping up everywhere from Saudi Arabia to Australia to Europe. The growth is now headed to 10 times more ammonia on this planet by 2042. Even in oil rich Saudi Arabia? Yes, because that is what the customer wants.
- Green Play Ammonia plants will provide Green Hydrogen and Green Ammonia at 2000 sites by 2040.

The failure is on across North America at fossil pricing of \$1,600 per ton Ammonia at \$7.08mmbtu gas currently. This means the Opex of fossil ammonia is \$260 per ton at the Mega Plant.

"In your lifetime you are about to see the fossil ammonia (Blue and Grey hydrogen) go to the bottom."

"The Oligarchs loose pricing and supply control when ammonia is built locally and you own the plant."

"You have 82.4% Green Ammonia, Not Blue and not Grey...but zero carbon Green."



Subscriptions for Green Play Ammonia in Round 2 start July 5, 2022.

A Great Business Opportunity Exists on the Great Plains and Pacific Northwest.

The price spread between the Opex and Market is at least 6 times instead of 2 times. A competitive price would be \$520 per ton.

- The Mega Oligarchs are trying to force ammonia out by pricing as high as possible.
- At \$1.00 per pound of N the price spread to Urea and 32-0-0 is not correct.
- Urea should be \$1.32 per lb. of N
- Solution 32 should be \$1.50 per lb. of N.
- The price of wind and solar does not change....a major factor is that Green Play Ammonia can be locally supplied 24/7 in a 10X growth market.

Koch Bros, Nutrien, Mosaic and CF will not be players in agriculture fossil ammonia much longer.....and thus they are promoting other Nitrogen materials loaded with CO2 that can not be fall banded.

Their promotion is on for Solution 32 and Urea and heavy on the carbon dioxide, methane and also part of the problem with Nitrous oxide when nutrients are top dressed.

The problem is the big four, the Oligarchs, are facing a reality check. They must make major investments in transportation pipelines and rail cars, storage tanks, application equipment and control emissions of Methane, CO2 and Nitrous Oxide.

The biggest problem for Mega Plant Oligarch is, it is too difficult to build a fungible green product.

- 1. The North American Ammonia Pipelines are not being rebuilt after 40 years of service.
- 2. The railroad cars are not being replaced after 40 years of service.
- 3. The barges are controlled by the Oligarchs so import up the rivers is not possible on the Mississippi, the Missouri and the Columbia.
- 4. The boiling storage tanks at terminals are not being replaced.
- 5. The fertilizer companies are looking for something to blame for their environmental problems.
- 6. The have picked fossil ammonia as the culprit of their problems and are driving coops and fertilizer dealers to Urea and Solution 32 which are loaded with carbon and an environmental disaster with nitrate.
- 7. The energy companies left the fertilizer business many years ago because of the liability of soil quality and dropping soil pH requiring copious amount of lime to neutralize the soil back to the original pH which may take up to 10 tons per acre. Mined out is the term.
- 8. Energy companies left the fertilizer industry in the dust in the early 80's. The soil quality was the issue (fungal diseases). Big oil folded their tent and sold off assets. You might recognize these companies. Union 76, Shell Chemical, Phillips 66, Chevron Chemical Co. Gulf, Shamrock, Cominco and several other small firms that were responsible for the soil pH problem.

A new company like Green Play Ammonia [™] and Yielder® NFuel Energy can take over at \$100 to \$300 per short ton at 6.1 cents to 18.3 cents per lb. of N. Furthermore the accomplishment is made with Low GHG and Zero Carbon, Zero Methane....and a chance to clean up Nitrous Oxide.

Green Play Ammonia starts the game over. SMR or fossil ammonia, Steam Methane Reformation at 44 plants is aged out due to failing infrastructure and the 10X growth in Green Ammonia over next 20 years. The Solar and Wind Powered electrolysis Green Play Ammonia uses clean and green ammonia with new tanks, new trucks, new attitudes and a fresh approach to building 82.42% Nitrogen locally and always available 24/7. The application is now very keen at 1%CV in liquid streaming flows with Exactrix Technology formulating TAPPKTS plus Zinc.

No Pipelines or Railcars are required with Green Play Ammonia. Storage is on farm with improved safety when applying.... there are no mega plants with boiling ammonia tanks. National Security can be improved with less strain on the power grid using Yielder NFuel Energy. The boiling ammonia tanks do not need to be replaced.

Making Green Play ammonia locally at 2,000 locations will make Green Play Ammonia the leader with Exactrix accuracy and powerful deep band application of Green NH3. The Exactrix TAPPKTS plus Zinc and Mustang tooling to apply the ammonia is so efficient that no other approach can compete.

Why should Ammonia be built locally? Because it can.

Why should you want to own a local Ammonia Plant? Because you can. Farmers and merchants optimistically ask the Oligarch's to remove themselves from Agriculture.

- Let the energy market compete on level playing field by keeping ammonia available easy to get and always locally built.
- Let Green Hydrogen move as Green Zero Carbon ammonia for energy and non-grid electrical power.
- The cost to move ammonia on the pipeline from Oklahoma to Minnesota is \$250 per ton. The Magellan pipeline is now closed and total US pipeline capacity has been reduced 30%.
- The cost to hydrogen as ammonia when it is distributed into the market is .62 cents per Kg,H2. The goal is to build hydrogen for \$1.00 per KG so distribution cost are way too high from Mega Plants.
- A local Green Play ammonia plant has distribution cost of \$30 per ton or 8.6 cents per lb. or 18.8 cents per Kilogram in a 60 mile radius or about \$750 per 25 ton (10,800 to 11,500) transport load.
- Locally built Green Zero Carbon Ammonia transportation and distribution costs are lower by at least 3 times over a Mega Plant design. Super B and Rocky Mountain doubles are reduced to less or 15 cents per Kilogram over long distances of 600 miles.





Never, Never let your ownership of the Green Play Ammonia be sold or combined into an acquisition with Wall Street Investors and Hedge Fund managers running the show.

The land values must be protected.

The federal government is subsidizing the Oligarchs indirectly with bail outs and federal crop insurance.



Where are these Green Play Ammonia Plants? Great Plains Plant Sites. Broadcast 03_03_2022 (exactrix.com)

The Big Picture

Factoid: Our fossil based world economy emits each year 55 trillion tons of Carbon dioxide into the atmosphere which takes 100 earth years to build. Fossil Ammonia at 180 to 200 million metric tons is 500 to 550 billion tons (coal and methane) of the that Carbon emission annually.

World-wide Green Ammonia will grow to 1,500 million metric tons by 2040. There is room for everybody. Coal provides 4.35 tons of Carbon per ton of fossil NH3 with high mining and storage losses. Methane or NG provides about 2 tons of carbon per 1 ton of fossil ammonia.

The annual contribution of carbon Fossil Ammonia is 1 year of all living carbon built on the planet for 2022. No-tillage deep banding of NPKS plus Zinc is key to success.

2024 to 2040, 2,000 Green Play Ammonia™ plants supplying locally. Locally Supplied, On Farm Storage Required. March 03, 2022

Seven Strong Legs And A Beating Heart. The Rainbow Effect.

Industrial Heat and Process. On Site Green Ammonia Turbine Power. 50% of production Free Market.

Horizon to Horizon First Priority, 50% production goes to landowners.

Subscriber pricing at \$100 to \$300 per ton, Seven year contracts.

Fossil Ammonia Blue or Gray is parked. Future use not ruled out.

Zero Carbon Manufacture.

Zero Carbon Green Play.

Proper and Improved use of Ammonia, Banded Deep No-Till.

North American Farmers Have Green Play Ammonia.™ Competitors are not able to follow.

Lowest cost of production, driving land values. Strongest exporters with cleaner water and cleaner air.

Application Equipment, Ultimate Timing, Exactrix®

1. Wind Combined Process

2. Solar Combined Process

3. No-Tillage Renewable Oil, Combined Process

4.Built 24/7, Locally, 10 plant backup.

5. Quick Build Out. Lower Interest Costs.

6. No Grid Connection. National Priority Secret.

7. National Security Star.

Many optimum plants assure the food supply is stable.

Stable Price, seven years. Supported Internally. Owned by Land Owners.

The Beating Heart Land Ownership. Green Play Ammonia™

- 1. Exactrix® No-Till Application Zero Carbon Fertilizer Products
- 2. Lowest production cost of all fertilizer programs, Placement is key.
- 3. Lowest Methane with application to pasture land.
- 4.Lowest Laughing Gas or Nitrous Oxcide emission.
- 5. Builds OM up to 1% in 10 years. Excellent Carbon Storage Sink.
- 6. Returns up to 12% to 25% more net margin.
- 7. Land values increase or stay stable. Oligarchs stay away.

Developer, Executive Engineer.



Guy J Swanson

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