

# **MagneGas Corporation**

## **Investor Presentation – Q4 2018**

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# Forward Looking Statements

This presentation forward-looking statements as defined within Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements relate to future events, including our ability to raise capital, or to our future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. You should not place undue reliance on forward-looking statements since they involve known and unknown risks, uncertainties and other factors which are, in some cases, beyond our control and which could, and likely will, materially affect actual results, levels of activity, performance or achievements. Any forward-looking statement reflects our current views with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, growth strategy and liquidity. We assume no obligation to publicly update or revise these forward-looking statements for any reason, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

For a discussion of these risks and uncertainties, please see our filings with the Securities and Exchange Commission. Our public filings with the SEC are available from commercial document retrieval services and at the website maintained by the SEC at <http://www.sec.gov>.

# MagneGas Corporate Overview



Founded in 2007, based in Clearwater, Florida.  
80 Employees.  
10 Distribution locations:  
FL, TX, LA, CA



MagneGas has three technology applications:  
gasification, sterilization & waste to energy.



30+ years to develop. Deep IP patent protected portfolio.  
Multiple trade secrets.

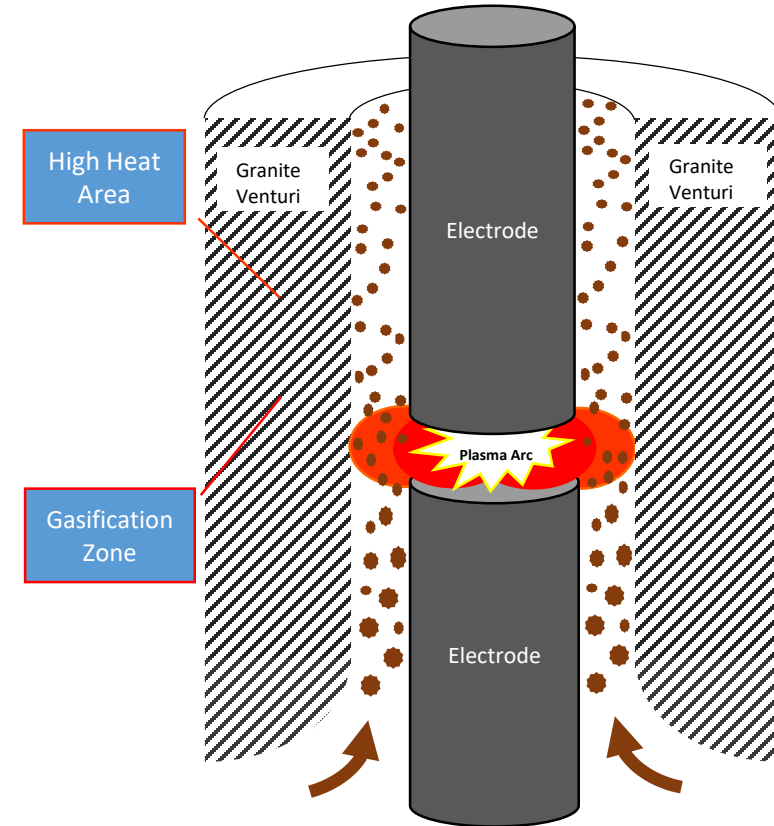


Commercially active in FL, TX, LA, CA.  
Launched UK-EU operations June 2018.

# Our Technology

## Submerged Plasma Arc Flow System Overview

- Our patented system enables any fluid to efficiently pass through a submerged plasma arc.
- As the fluid passes through the plasma arc, hydrogen, carbon and oxygen molecules are liberated and gasified. This process creates our renewable synthetic gas, MagneGas2™
- A wide range of feedstocks can be used. Different feedstocks, produce different gases, with differing flame and heat properties.
- Typically, our gas products are 40-60% ionized hydrogen and 30-40% other hydrocarbon and carbon compounds. Trace liquid hydrocarbons are filtered out in the refining process.
- Our end product can be used for a wide range of heating uses.



# Plasma Arc System Configurations



## Gasification Mode

- In this mode, the unit operates as a closed loop.
- Feedstock is continuously recirculated.
- The feedstock is repeatedly exposed to the arc to achieve the maximum possible gasification rates.
- The objective is solely gas production.
- Commercial applications: waste to energy, renewable substitutes for acetylene, propane, natural gas, and a wide range of traditional fossil fuel products.



## Sterilization Mode

- In this mode, the feedstock is passed through the arc quickly, and normally only 1-2 times.
- The sole purpose of this process is to efficiently achieve the maximum sterilization effect.
- End objective is not gasification, but modest amounts of gas are produced as a by product of the process.
- Commercial applications: water reclamation, treatment of agricultural, pharmaceutical, industrial and manufacturing wastes.

# MagneGas Production is Environmentally Responsible

## MagneGas Production Has a Minimal Environmental Footprint



- MagneGas has no harmful byproducts in our gas production process.
- Our manufacturing process generates no harmful emissions or waste streams.
- Our process can eliminate pollutants and convert them to clean energy.

## Acetylene Production is Environmentally Damaging & Destructive



- Calcium Carbide ( $\text{CaC}_2$ ) is a key ingredient in acetylene. Highly toxic, contains arsenic and other other pollutants.
- $\text{CaC}_2$  forms explosive metals when exposed to copper, brass, mercury or silver. Highly explosive when combined with water.
- Lime waste stream is a key by product, harmful to humans if inhaled or contacted.

# MagneGas Production Supports Water Conservation

## MagneGas Production Does Not Use or Pollute Any Fresh Water



- Our gasification process does not use, contaminate or in any way harm fresh water resources.
- Depending on the feedstock, our production process can actually manufacture small amounts of water.
- MagneGas can help reduce fresh water consumption by 3BN gallons (24.4BN liters) annually if we discontinue global acetylene production.

## Acetylene Production Consumes Vast Quantities of Fresh Water



- Acetylene production requires 1 gallon of water for every pound of  $\text{CaC}_2$  consumed (6-10 liters of water for every kilogram of  $\text{CaC}_2$ ).
- Larger acetylene plants use 3,500-7,000 gallons (13,000-27,000 liter) per hour of fresh water.
- Roughly 3BN gallons (24.4BN liters) of water are consumed globally to produce acetylene each year.

# MagneGas2™ is A Safer Cutting Fuel

## MagneGas is Scientifically Proven to Be More Stable, Safer



- MagneGas2™ requires 4.5% by volume to ignite vs. 2.5% for acetylene for lower explosive limits (LEL).
- MagneGas upper explosive limits is 53%, vs. acetylene at 100%.
- Our gas naturally dissipates into the atmosphere as some of its primary components are lighter than air.
- The Compressed Gas Association has determined that MagneGas2™ is not toxic.

## Acetylene As a Metal Cutting Fuel Is Extremely Dangerous



- Acetylene is a highly unstable, reactive gas prone to decomposition and combustion.
- Acetylene is slightly heavier than air, with increased risk of pooling if there is a leak.
- Acetylene poses a major danger to the user, as open flames are in constant use for welding and metal cutting.
- 24% of all chemical explosions and 15% of all fatalities occur in the welding industry. \*

\*Source: U.S. Department of Labor, Bureau of Labor Statistics CFOI Research File



# MagneGas: A Disruptive Technology in a Massive Industry



MagneGas is the only known renewable a metal cutting fuel today.



MagneGas2™ has one of the hottest known flame temperatures.

Flame temperature: 10,500°F, as verified by City College of New York.

## Competitive Benefits of Our Gas:

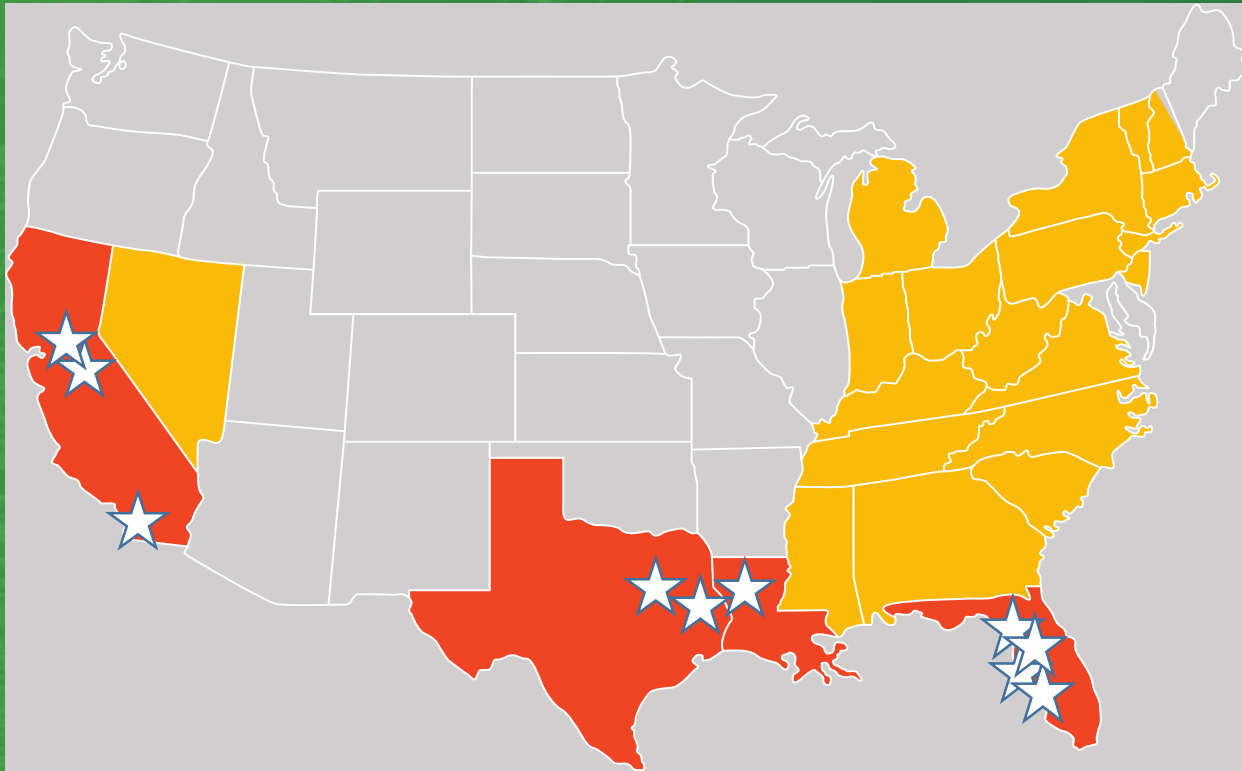
- Cuts 40% faster than acetylene or propane, as verified by the Edison Welding Institute.
- Higher flame temperature cuts with minimal slag and grinding.
- No carbon ring to clean. Reduces follow up labor by 50-75%.
- US Navy confirmed MagneGas 100% faster cutting corroded metals.
- Priced on par with acetylene, passing all the operating efficiencies on to the client.

## Global Industrial Gas Market is Massive and Stable

- The global industrial gas market is expected to exceed \$135 billion by 2020.\*
- Asia, dominated by China and India accounts for 70% of the global market.
- Europe accounts for 17% of the global market share.
- The Americas accounts for only 11% of the global market.
- The global market is growing at 5-6% annually.
- Demand driven by industrial, medical, agricultural, food and beverage applications.

\*Source: Persistence Market Research

# Rapidly Expanding US Industrial Gas Presence



## Target Geography:

- Industrial gases are heavily used in shipping, rail, super ports, utilities, oil & gas, demolition and heavy infrastructure.
- Houston and Los Angeles are the #1 & #2 metro markets for industrial gas in the US.
- CA and TX are largest markets in US by state.

## Rapid Geographic Expansion

### Florida

- HQ for R&D for 10 years in Clearwater.
- 1<sup>st</sup> distributor acquisition was in 2014, added 3 locations through organic growth.
- Revenue growth of 115%+ in 3 years.

### Texas & Louisiana

- ✓ Completed East Texas distributor acquisition in February 2018.
- ✓ Completed two Texas acquisitions in October and November 2018.
- ✓ Completed a Louisiana distributor acquisition in October 2018

### California & Nevada

- ✓ Completed San Diego distributor acquisition in January 2018.
- ✓ Completed Sacramento acquisition in April 2018.

### Tennessee & Mid-South

- Major regional distributor added in late 2016.

### New England & Mid-Atlantic

- Two multi-state regional distributors selling.
- 28 distributors across eastern US.

# Accelerating Financial Success

## Key Growth Drivers



### Lead Product Differentiation

- Our metal cutting fuel products gain access to prospective customers.
- Drives new client acquisition.
- ~3-5% of total client spending.



### Strong Cross Sales Opportunities

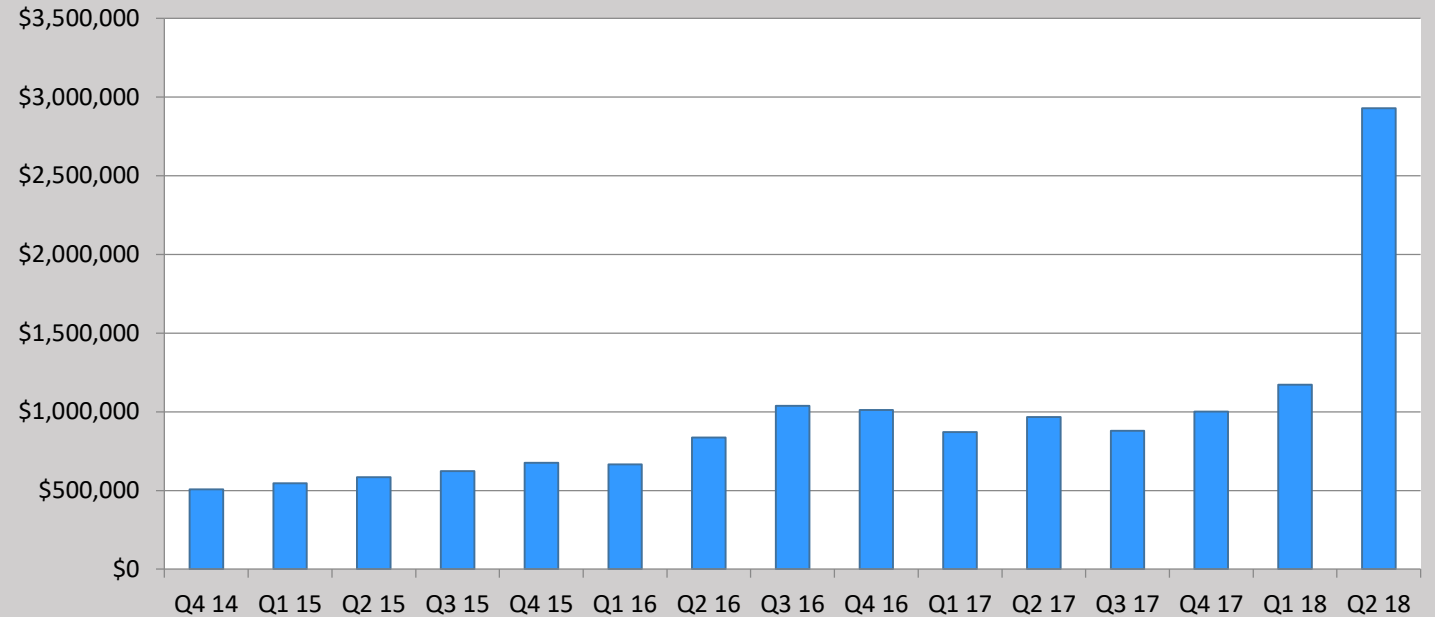
- Clients need a wide range of commoditized goods along with metal cutting fuel products.
- We have excellent track record capturing these sales.
- We deliver \$30-35 of ancillary sales for every dollar of proprietary product sold.



### Market Share Expansion

- Top 10 distributor in FL.
- Top 20 independent distributors in CA.
- One of the fast growing distributors in TX.

## Quarterly Revenues Under Captive Sales Model



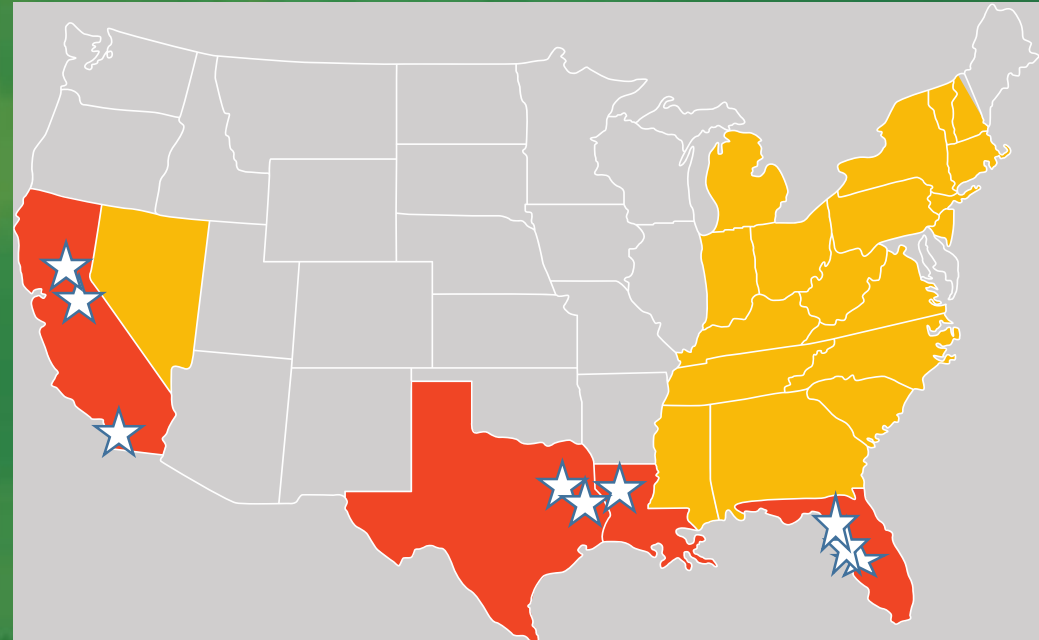
## Demonstrated Track Record of Growth

- 6.0x in 3.5 years
- 50%+ CAGR in Florida over 3+ years
- 30%+ in TX in 5 months, 50%+ in San Diego in 6 months
- Industry Growth Rate: US GDP ~2.5 - 3.5%

# US Acquisition Strategy

## Acquisition Vs. Organic Growth:

- US Industrial gas consumers demand a streamlined supply chain.
- US clients want one-stop solutions for metal cutting fuels and other welding supplies.
- US model requires experienced sales and support team.
- Distribution capabilities require sizable infrastructure investment: cylinders, trucks, storage, facilities.
- Organic growth without an existing hub is cost prohibitive.
- Demonstrated industry ability to scale via acquisition.
- We add proprietary products to accelerate and improve on proven growth strategy
- Acquisitions can be structured with limited financial risk: asset rich, limited goodwill.



## Acquisition Criteria:

- Highly experienced, motivated sales team.
- Modern asset base, infrastructure.
- Deep, stable, profitable customer base.
- Ability to cross-sell products.
- Quickly convert clients to proprietary products.
- Platform to take market share.

# European Expansion Strategy



## Why Europe?



- European Union has legislated a series of clean tech and renewable fuel initiatives that compel companies to prioritize environmentally renewable products such as MagneGas2™.
- Legislative pressure enables MagneGas is able to a adopt high-margin, lean staffing model to deliver scalable revenues.
- Port regions are generally the most industrialized regions in Europe. These ports have 500+ heavy industry prospective clients each.
- We have leverage several port-centric conventions and trade platforms to gain direct access to more than 20 ports across Europe.
- Focus on Benelux region for commercial launch in process today.



Port Authority	European Ranking	Global Cargo (Metric Tons)	Global Traffic (TEUs)
Rotterdam	#1	#5	#11
Antwerp	#2	#17	#14
Hamburg	#3	#29	#17
Marseille	#4	#46	#91
Amsterdam	#5	#41	NR



## Why the Benelux Region?

- Netherlands is one of the leaders in renewables, clean tech.
- Rotterdam is one of the global drivers in sustainability.
- 3 of the top 5 European ports are within a few hours of each other.
- Close to European Union hubs in Brussels, Luxembourg,
- Central to other major commercial hubs in Germany, France, UK.

# European Partnerships & Grant Opportunities

## EU Driven Clean Tech Example: Infinite Fuels BioFuels Grant

- IF has strong bio-fuels and waste to energy experience, launched startup in Hamburg in 2016 to leverage government initiatives, funding.
- Key engineers have 10 year scientific collaboration history with MagneGas.
- Together with MagneGas, secured a 6.0 million Euro grant with EASME, a division of the European Commission responsible for supporting a wide range of government-backed innovation initiatives.
- Largest grant issued by EASME's LIFE program in Germany in 2017.



- Horizon 2020 is 77 billion Euro grant program funding a wide range of innovation projects across the EU from 2014 to 2020.
- Applicants must be EU-based SMEs.
- MagneGas Limited is our UK-based subsidiary, and is eligible.

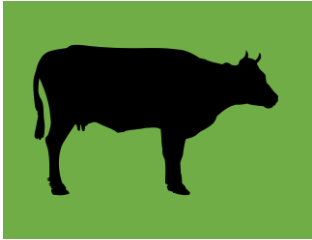


- The European Commission stipulates the nature, structure of grants.
- Must consist of a consortium, with SME, large corporate, research partner, and a standards body.
- Must represent at least 3 EU member countries.



- MagneGas has engaged EY in Paris to manage two grant applications, both with initial deadlines in early Q4 2018.
- If awarded, funding would be released in Q2 2018.
- Grants are for sterilization and waste-to-energy applications.

# MagneGas Plasma Arc Sterilization



## Technology Overview

- Our technology generates a combination of very high heat, ultraviolet light and ozone.
- These powerful sterilizers have a proven ability to eliminate virtually all living organisms.

## Sterilization Efficacy

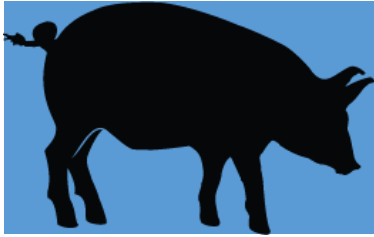
- Recent USDA results show 99.9% ability to eliminate e coli, fecal coliform, other EPA and USDA regulated pathogens.
- Our technology proven to break down pharmaceuticals and PCBs.
- Demonstrable reduction in NPK levels.

## Functionally Superior to Alternative Solutions

- Our sterilization unit has a small physical footprint , can easily fit in a one-car garage bay.
- Depending on the volume of waste to process, residence time can be as little as a few hours.
- Our unit is highly mobile and flexible configuration options for rural applications.
- Our patented process has little impact on the nutritional value of the source materials.
- Process leave all sterilized materials as ready for commercial end use.

MagneGas Plasma Arc Flow  
System

# United States Agriculture Sterilization Progress



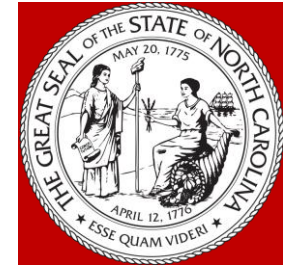
## Indiana Pilot Project (2014 – 2016)

- Conducted proof of concept testing with the largest hog farm in the state
- Verified our process works at scale, eliminates e coli, fecal coliform, impacts TSS.
- Meets EPA standards to be treated as a Class A waste.



## USDA Funded Dairy Project

- Awarded \$430k grant in Q217, launched project Q417. 18 month test project.
- Held 1<sup>st</sup> USDA Demo Day in May 2018 and 2<sup>nd</sup> Demo Day in Oct. 2018; both with highly successful results.
- Presented findings at 73<sup>rd</sup> Annual International Soil and Water Conservation Society Conference in August 2018.

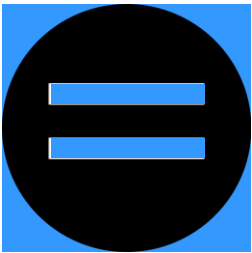


## North Carolina Commercialization

- Actively working with multiple NC agencies to secure permitting for a service based solution.
- Largest hog producer in the US. ~1,700 hog farms in local market for early adoption and scalability.
- 15MM tons of waste produced annually.



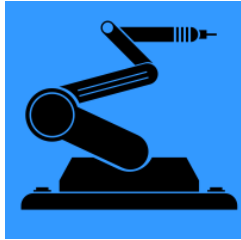
# Emerging Waste to Energy Solutions



## Medical Waste to Energy Solution

- Active consulting project with largest pharmaceutical gel-cap manufacturer in US.
- Testing commenced Q1 2018 to evaluate ability to convert various waste streams to a cost effective energy source.
- Successfully demonstrated ability to generate synthetic gas from medically contaminated ethanol, other waste streams.
- Currently evaluating the ability to dissolve additional medical manufacturing materials in the ethanol.
- We have demonstrated ability to break down and gasify their most expensive waste streams.
- Initial results very favorable, commercial model would include a savings participation, we would also generate power to sell back to the local grid.

# 4<sup>th</sup> Generation Technology: Waste to Energy Potential



## Comprehensive System Reconfiguration

- Increases length of plasma arc by up to 10.0x.
- Increases the surface area of the area by 5.0x or more.
- Multiple ports for materials injection into gasification chamber.



## Significantly Increased Production Efficiency

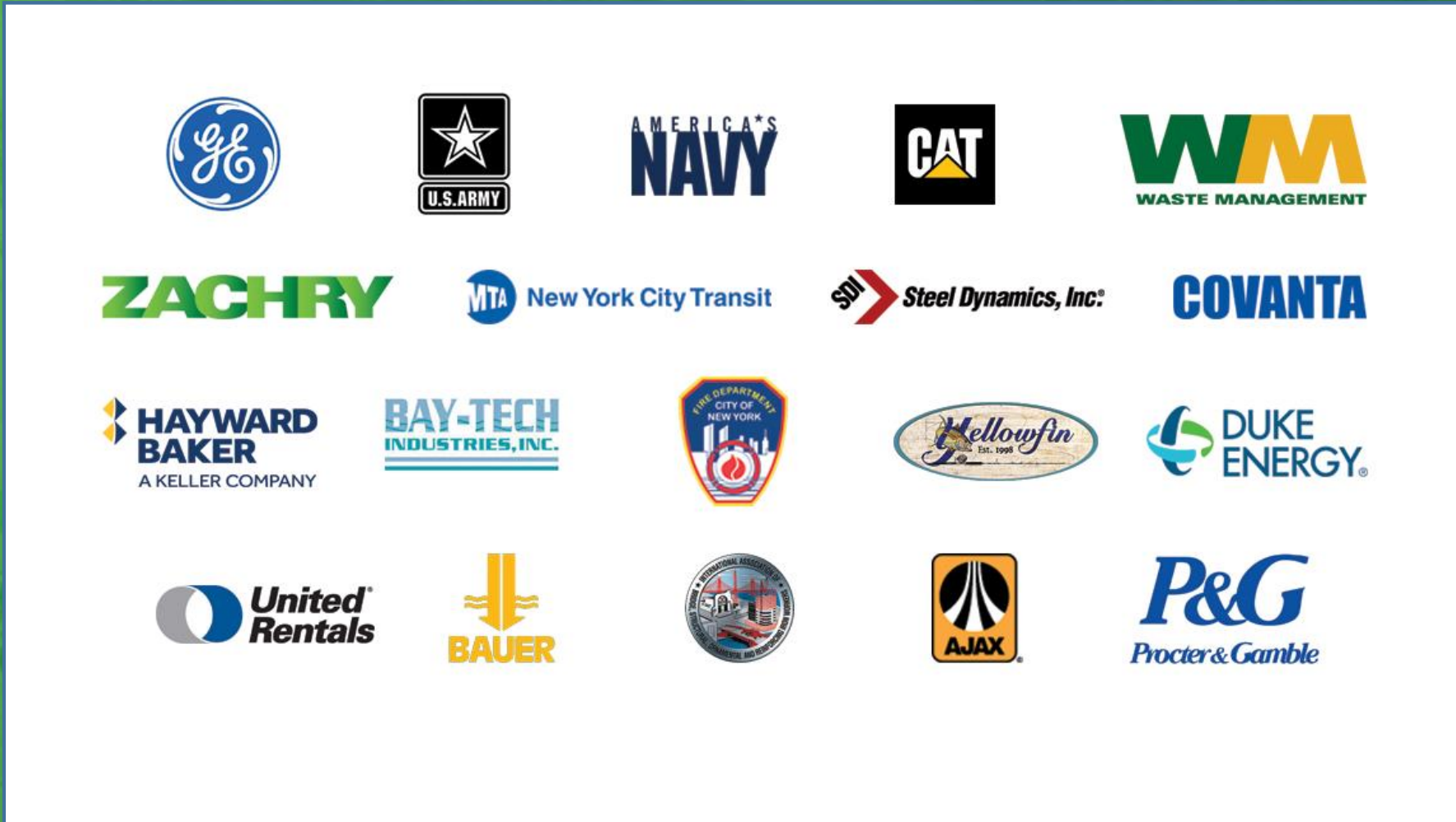
- 90%+ first pass efficiency.
- Eliminates 80-85% of processing time to fully gasify feedstock.
- Reduces labor, power consumption costs by 70-80%.
- Estimated to increase production rates by 3-5X.



## Potential to Unlock Waste to Energy Model

- Could produce gas at costs near LNG, propane, other cheap fossil fuels.
- Expand from liquids to “fluids” such as plastics, biomass, coal, etc.
- Expands grant funding opportunities with Department of Energy, California Energy Commission, Europe, etc.

# World Class Client Adoption



# Key Highlights

Exchange	NASDAQ
Current Price (11/7/2018):	\$0.29
Shares Outstanding:	33.0 MM
Market Cap (11/7/18):	\$36 MM
Insider Ownership:	3%
Fiscal Year End:	Dec 31

Headquarters:	Tampa, FL
Offices:	FL, TX, LA, CA
Revenue Run Rate:	\$15M
Research:	Edison Group HC Wainwright Maxim Group
Auditors:	Ernst & Young



**MagneGas**

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