



**TARONIS**  
TECHNOLOGIES

**Cleaner – Safer – Smarter**

# 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>.

# Introduction



- Taronis, our new name is derived from Taranis, the God of thunder and lightning in ancient Celtic mythology. We feel this is a strong reference to our core technology, centered on the power of the plasma arc.
- Taranis is also associated with the wheel, which also linked to the modern concept of a sustainable, circular economy.
- Taronis is now a technology-based resource conservation company.
- We help address global constraints on two of our most precious resources: fuel and water.

# Corporate Summary



Founded in 2007, based in Phoenix, Arizona. 130 Employees.  
22 Distribution locations: California, Texas, Louisiana, Florida.



Taronis has two core technology applications:

- 1) Renewable Fuel Gasification
- 2) Water Decontamination



30+ years to develop by MIT & Harvard faculty. Deep IP patent protected portfolio. Multiple trade secrets.



HARVARD  
UNIVERSITY



- ✓ Commercially active & rapidly scaling US gasification business.
- ✓ Fluid decontamination launched grant-funded pilot Q4 2017.
- ✓ Launched European grant funded biofuels pilot Q3 2018.

# Cleaner – Safer - Smarter

**As a key component of our rebranding, Taronis has developed a new corporate mission statement:**



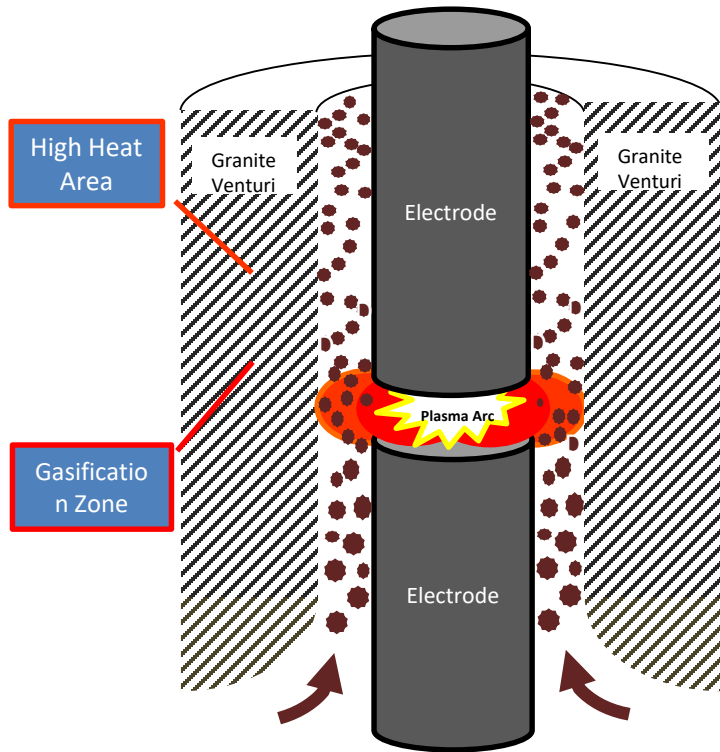
**Cleaner:** All aspects of our technology offer a superior alternative to prevailing industrial solutions when it comes to environmental footprint and human health.



**Safer:** Every measurable aspect of our technology also offers a demonstrably safer alternative to the incumbent solutions on the market today.



**Smarter:** We strive to deliver the simplest, most robust technological solution for the most pressing global needs facing humanity today.



## Submerged Plasma Arc Flow System Overview

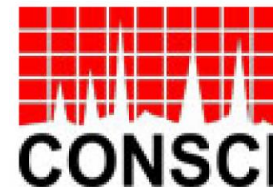
- Our patented system enables fluid to efficiently pass through a submerged plasma arc.
- To create a synthetic fuel, the fluid must contain hydrogen and oxygen, carbon supply can be facilitated by the electrodes.
- As the fluid passes through the arc, hydrogen, carbon and oxygen molecules are liberated and gasified.
- A wide range of feedstocks can produce different gases, with differing flame and heating properties.
- Typically, our fuels are 40-60% ionized hydrogen and 30-40% other synthetic hydrocarbon and carbon compounds.

# Independent Technology Validation

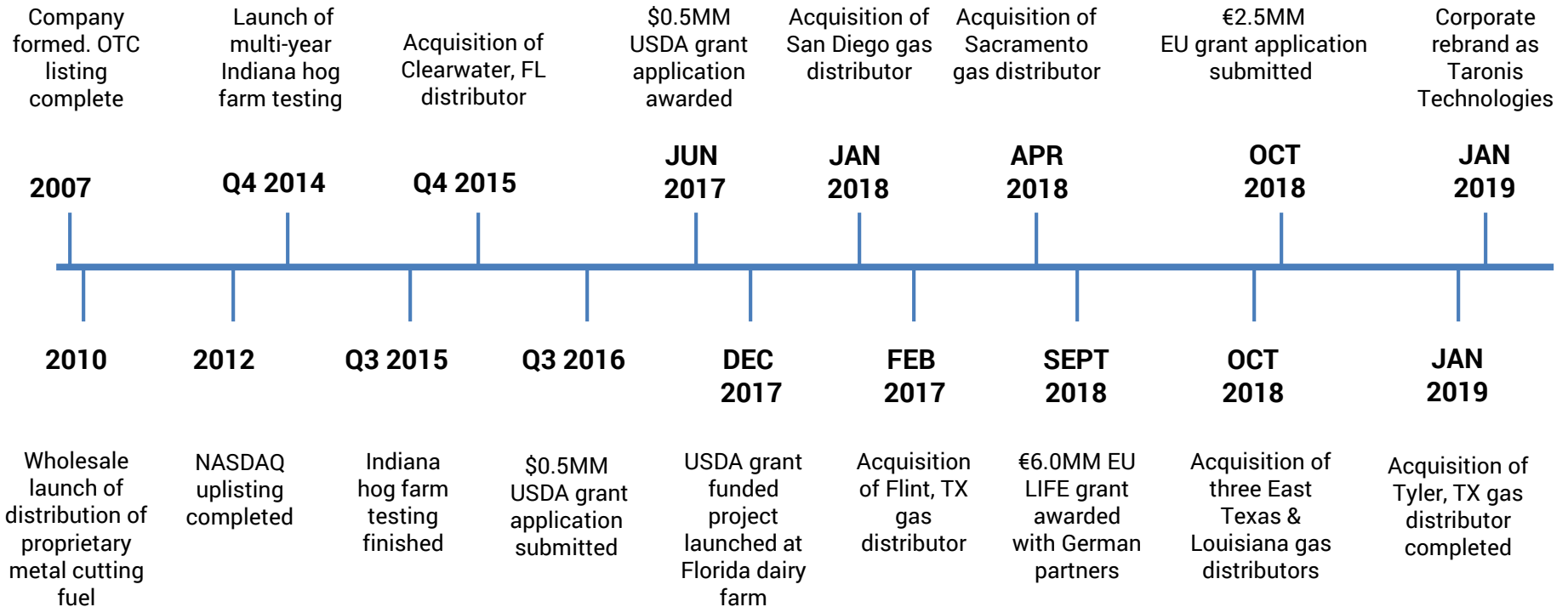


The City College  
of New York

RESEARCH ORGANIZATION	TESTING	REPORT PRODUCED
ATLANTIC ANALYTICAL	GAS COMPOSITION	GAS ANALYSIS REPORT
CALIBRATION TECHNOLOGIES	GAS COMPOSITION	GAS DENSITY MEASUREMENT TEST RESULTS
CHEMIR	GAS FEEDSTOCK TESTING	GAS CHROMATOGRAPHY AND MASS SPECTROMETRY ANALYSIS OF FEEDSTOCK SAMPLES
CITY COLLEGE OF NEW YORK	GAS REACTIVITY	MAGNEGAS FLAME TEMPERATURE RESEARCH RESULTS
CONSCI	GAS COMPOSITION	GAS COMPOSITE CERTIFICATE OF ANALYSIS
DEKRA	GAS REACTIVITY	ADIABATIC COMPRESSION AND SHOCK SENSITIVITY TESTING FOR MAGNEGAS
DEKRA	GAS REACTIVITY	INVESTIGATION INTO POSSIBLE CAUSES FOR ENEREGY RELEASE
DEKRA	GAS REACTIVITY	REACTIVITY AND SENSITIVITY RESULTS FOR MAGNEGAS2 GAS MIXTURE
DEKRA	GAS REACTIVITY	SENSITIVITY TEST RESULTS - MAGNEGAS DROP TESTING
EDISON WELDING INSTITUTE	GAS APPLICATIONS	EVALUATION OF OXYFUEL GAS CUTTING FUELS
ELEMENT MATERIALS TECH	GAS COMPOSITION	REFINERY GAS ANALYSIS
GAS TECHNOLOGY INSTITUTE	GAS COMPOSITION	MAJOR COMPONENT ANALYSIS BY GAS CHROMATOGRAPHY
GEORGIA TECH	GAS REACTIVITY	HEAT OF REACTION AND ADIABATIC FLAME TEMPERATURE
GEORGIA TECH	GAS REACTIVITY	MAGNEGAS SPARK IGNITION AND DECOMPOSITION TESTS
NASA WHITE SANDS	GAS COMPOSITION	GAS COMPOSITION ANALYTICAL REPORT I
SAYBOLT	GAS COMPOSITION	GAS COMPOSITION ANALYTICAL REPORT II
SAYBOLT	GAS COMPOSITION	GAS COMPOSITION ANALYTICAL REPORT III
TEXAS OIL TECH	GAS COMPOSITION	REFORMED GAS COMPOSITION BY GAS CHROMATOGRAPHY AND MASS SPECTROMETRY
UNITED STATES NAVY	GAS APPLICATIONS	ALTERNATIVE METAL HOT CUTTING OPERATIONS FOR OPACITY
WHA INTERNATIONAL	GAS REACTIVITY	PRESSURE AND ENERGY STABILITY COMPARISONS BETWEEN MAGNEGAS2 AND MAGNEGAS2B
WHA INTERNATIONAL	GAS REACTIVITY	PRESSURE AND ENERGY STABILITY MEASUREMENTS ON MAGNEGAS2



# Corporate Timeline



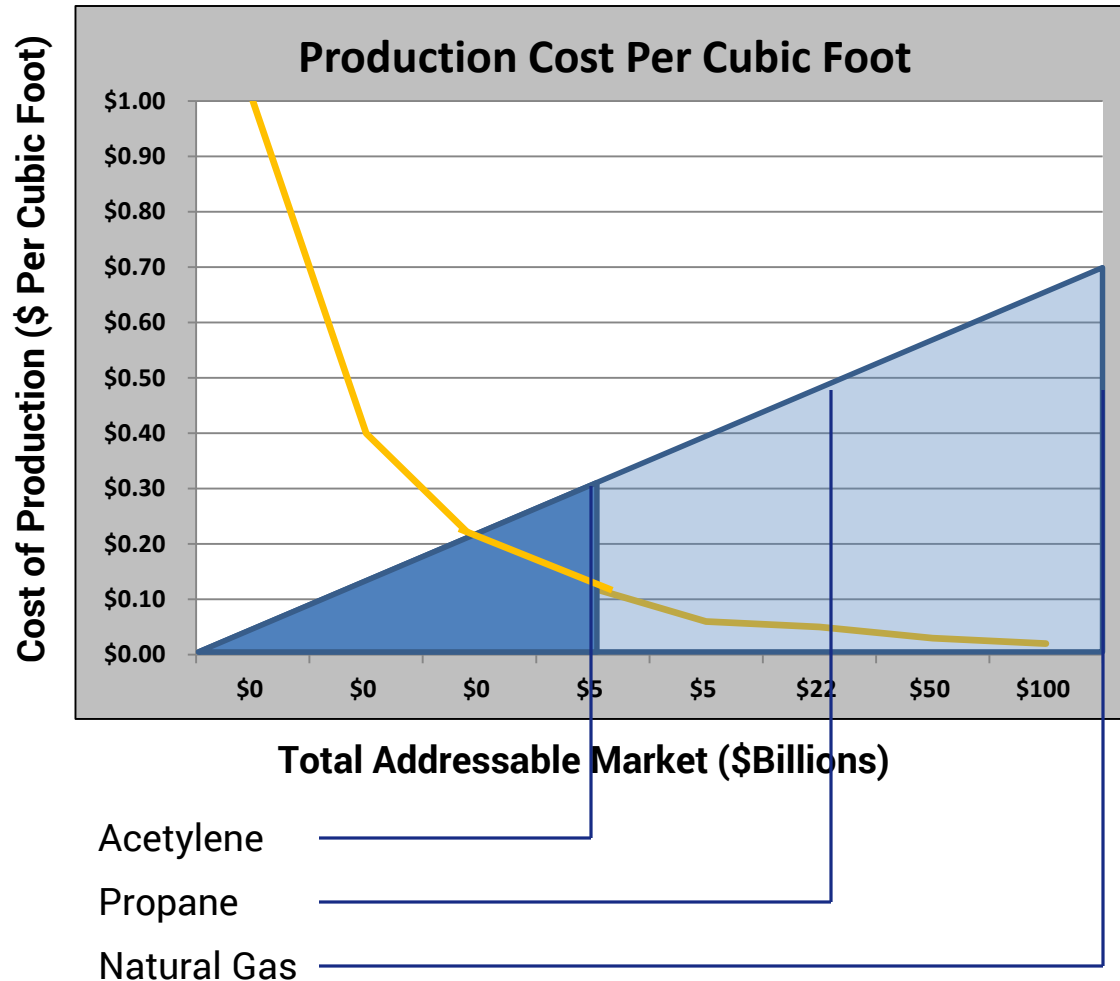




## Renewable Fuel Gasification Mode of Operation

- In this mode, the unit operates as a closed loop.
- Renewable feedstock is continuously re-circulated up to 7-10 times to completely gasify all materials.
- The feedstock is repeatedly exposed to the arc to achieve the maximum possible gasification rates.
- Common feedstocks: vegetable oil, soybean oil, ethanol, butanol, ethylene glycol used motor oils, diesel, etc.
- Commercial applications: renewable substitutes for acetylene, propane, natural gas, and a wide range of traditional fossil fuel products.

# Production Costs Influence Addressable Markets



- From 2012 to now, we have reduced our production costs by 88%.
- We project to reduce our costs by another 50% in the next 12 months, and by up to 75-80% in 2 years.
- We are on the verge of simply out-pricing acetylene producers.
- We have plans to offer propane and liquid natural gas substitutes.

# Renewable Fuels Gasification Timeline

The City College  
of New York

**EWI**  
We Manufacture Innovation



1<sup>st</sup> Generation  
production unit  
goes live.

10,400F Flame  
temperature verified by  
City College of New York.

Edison Welding  
Institute verifies 40%  
faster cutting speed  
vs. acetylene.

Company acquires  
first captive  
distributor in  
Clearwater, FL.

4<sup>th</sup> Generation  
prototype EU grant  
application filed.

**2007**

**2012**

**Q3 2014**

**Q4 2014**

**Q4 2018**

**2010**

**2012**

**Q2 2014**

**Q4 2014**

**Q2 2015**

**Q1 2017**

Company  
executes first  
wholesale  
distributor  
contract in US.

2nd Generation  
production unit  
goes live.

NASA completes  
gas analysis of 2<sup>nd</sup>  
generation metal  
cutting fuel.



US Navy verifies  
metal cutting  
speeds up to 100%  
faster vs. acetylene.



3<sup>rd</sup> Generation  
production unit  
goes live. 2<sup>nd</sup>  
Generation of  
gas produced  
using soybean  
oil feedstock.

3<sup>rd</sup> Generation  
of gas  
produced  
using butanol  
feedstock  
derived from  
corn.

# Our Fuels: Cleaner – Safer - Smarter

## Our renewable fuels technology is superior to incumbent solutions:



**Cleaner:** Our production process pollutes zero fresh water. Acetylene production contaminates 3 billion gallons of fresh water annually. Our fuel produces zero greenhouse gases. Fossil fuels used in industry account for 22% of US greenhouse emissions today.\*



**Safer:** Our proprietary synthetic gas is independently proved to be safe for storage and used as a compressed gas. In 2016, 24% of all chemical explosions and 15% of all fatalities in the welding industry occurred using products like acetylene and propane.\*\* \*



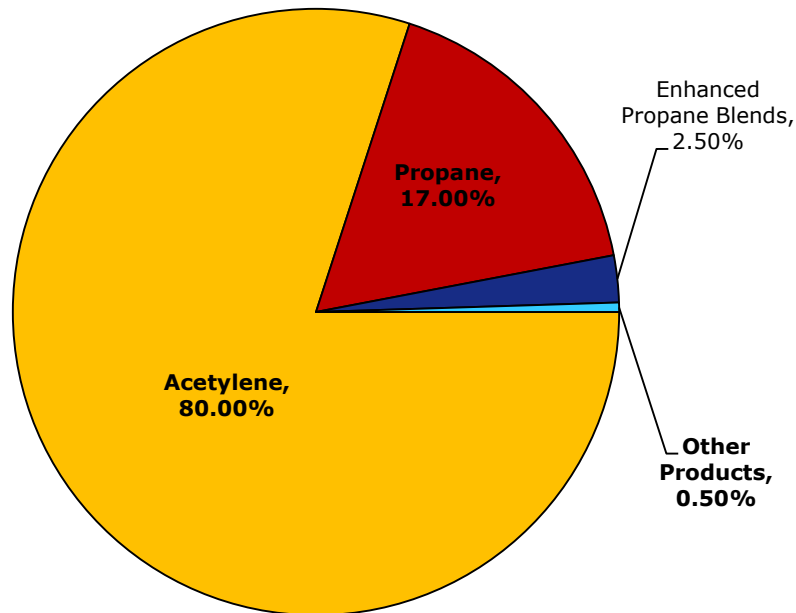
**Smarter:** We produce the only renewable metal cutting fuel product in use today. This product can reduce total costs to cut by up to 75% through the combined benefits of faster cutting speeds and reduced grinding and polishing.

\*Source: US Environmental Protection Agency.

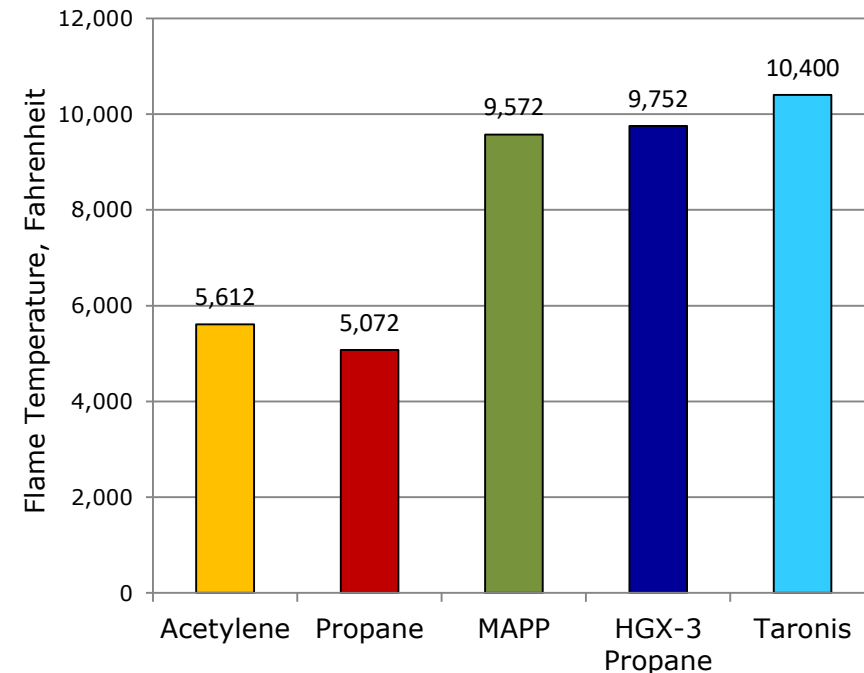
\*\*Source: U.S. Department of Labor, Bureau of Labor Statistics CFI Research File.

# Competitive Landscape for Metal Cutting Fuels

## Metal Cutting Fuels Global Market Share



## Metal Cutting Fuels Flame Temperatures



Other than Taronis, no alternative fuel solution can offer a superior flame temperature characteristics at a comparable price to acetylene or propane.

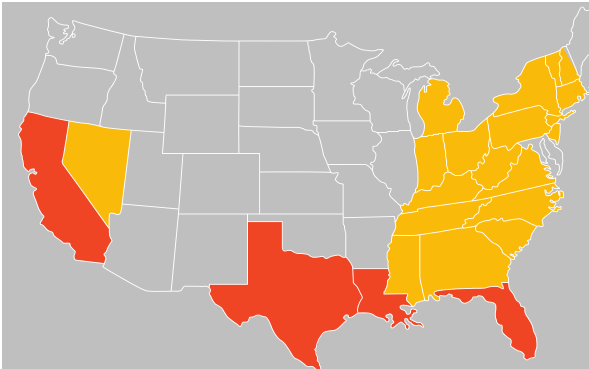
# Notable Client Adoption



We have increased our customer base by 10.0X in 13 months.  
We had less than 3,000 clients at the end of 2017.  
We have in excess of 30,000 clients today.

# US Market Strategy

## US Market Coverage



## Captive Retail Coverage

## Wholesale Relationships

## Retail vs. Wholesale Model

- The company adopted wholesale model 2010-14.
- Limited ability to drive new product adoption.
- No cross sales opportunity.
- Limited incentive for wholesale reps.
- Launched retail beta test in Florida in Q4 2014.
- Sales grew 58% CAGR 2015-2017.
- Strong cross sales leverage of 30.0X.
- Now using acquisition model to acquire new clients.
- Grew client base from 3,000 in 2017 to 30,000+.

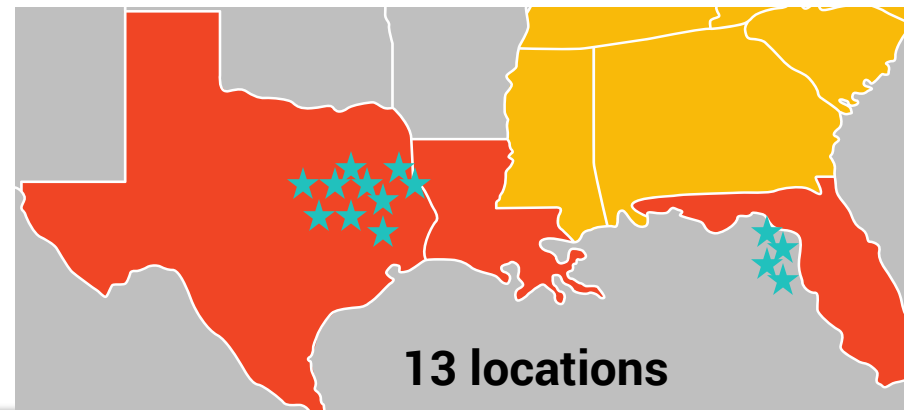
## Geographic Emphasis on High Growth Markets: West Coast & Sun Belt

- Industrial gases 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 overall state markets in US.
- We target the fastest growing markets in US overall.

## West Coast Market Presence

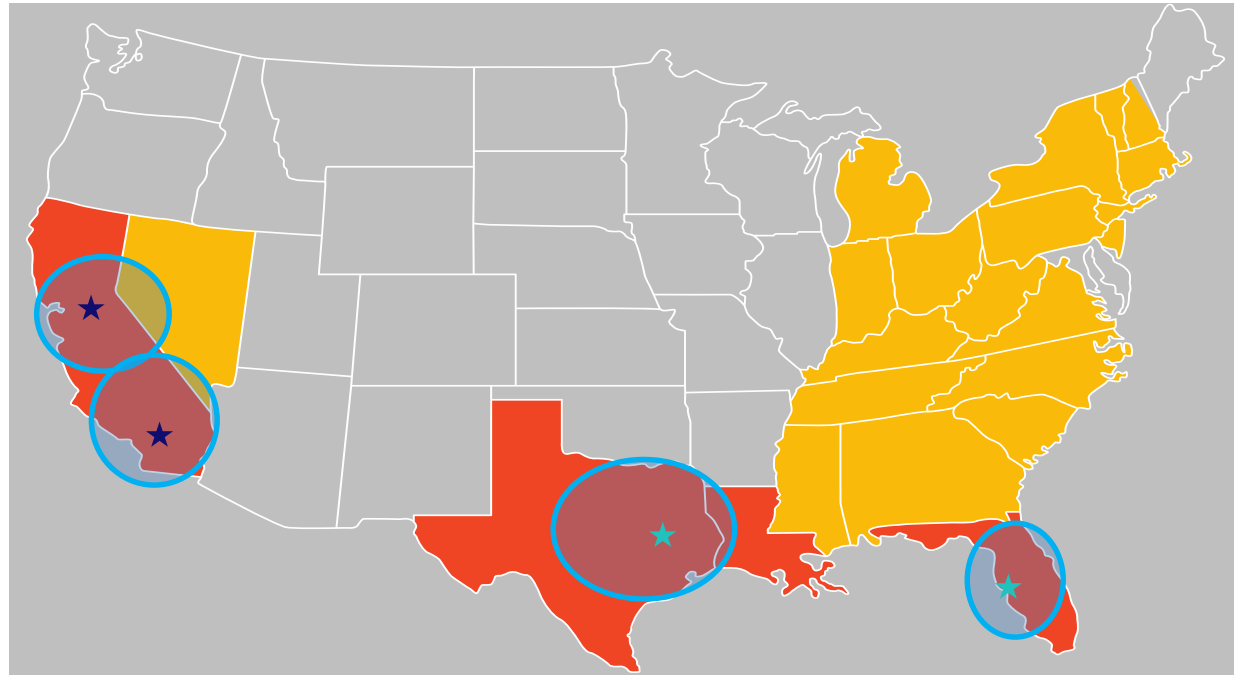


## Sun Belt Market Presence



# Expanding US Distribution Capabilities

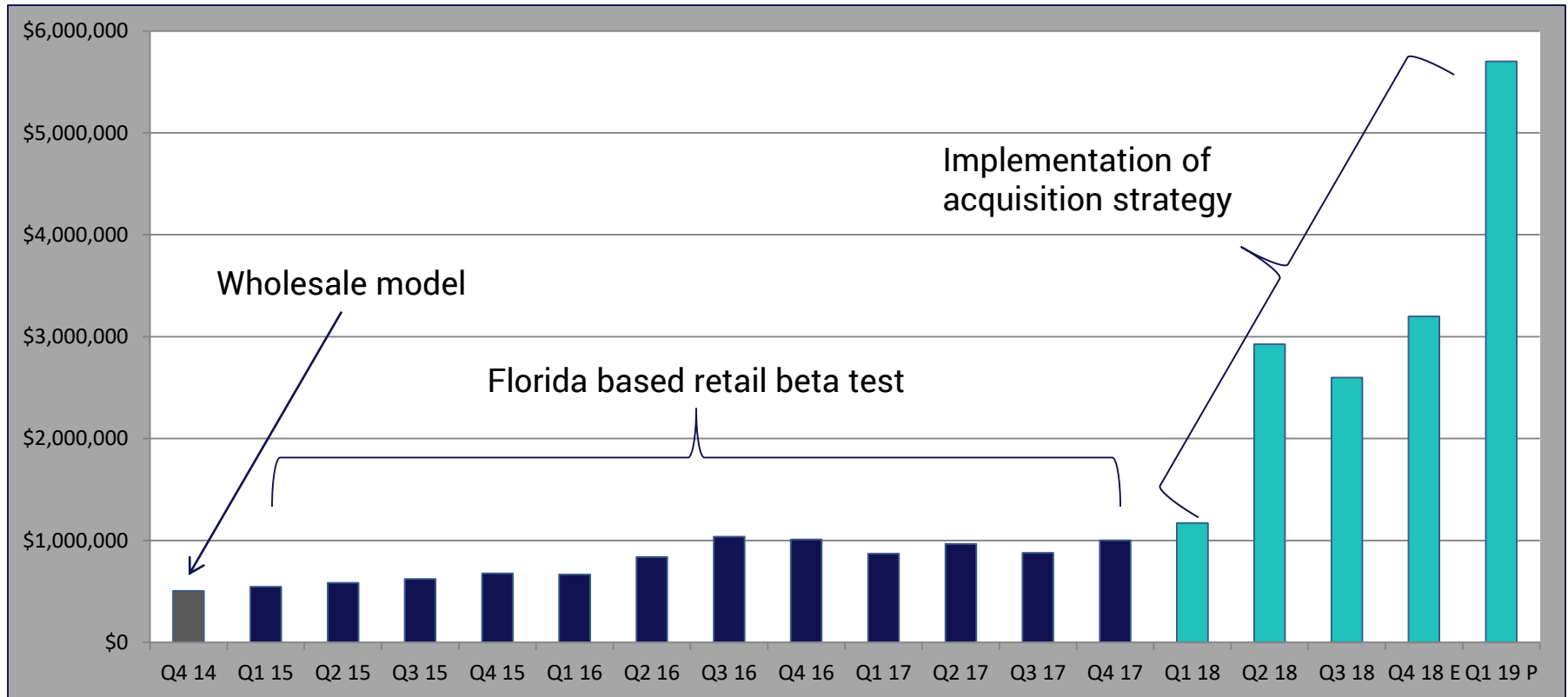
- From 2007-2018, the Company could only profitably distribute metal cutting fuels within 250 miles of our Tampa facilities.
- Today we can profitably address a 500-mile+ radius of our production hubs selling to directly to end users.



- We have doubled our production capabilities with our 2018 expansion into the Texas markets.
- We have plans to expand California markets using our mobile gas production platform in the next 12-18 months.
- From 2018-2020, we will expand our addressable market by almost 400% as measured by US GDP by state.
- This is the equivalent of adding the entire economy of France and Brazil to our addressable market.



# Quarterly Revenues Under Captive Sales Model



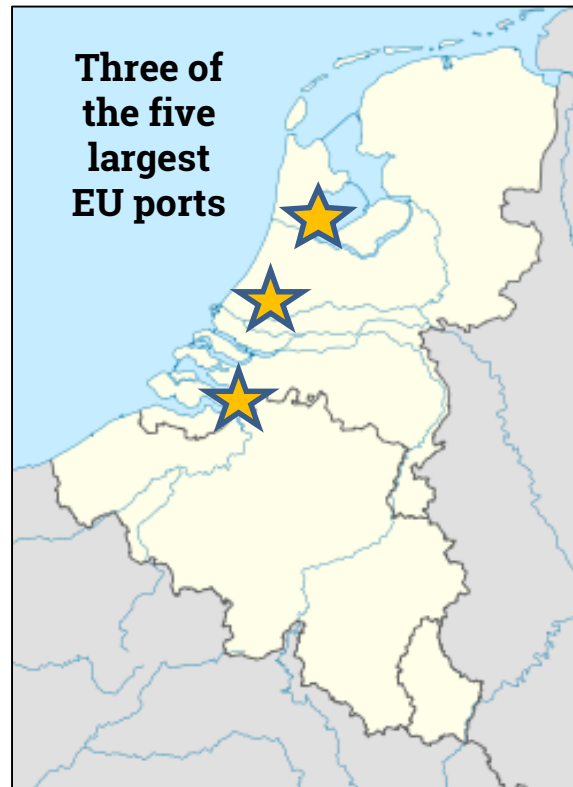
## Acquisitions Driving Momentum:

- ✓ JAN 2018: Acquired San Diego, CA distributor with 1 location.
- ✓ FEB 2018: Acquired Flint, TX distributor with 3 locations.
- ✓ MAR 2018: Acquired Sacramento, CA distributor with 2 locations.
- ✓ OCT 2018: Acquired 3 single location distributors in Shreveport, LA, Longview, TX and Paris, TX.
- ✓ JAN 2019: Acquired Tyler, TX distributor with 3 locations.

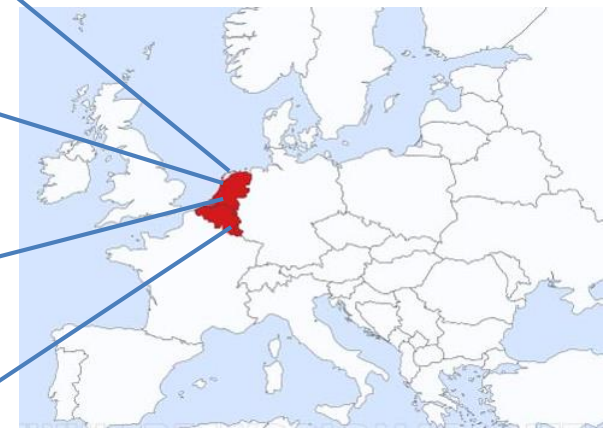
# European Expansion Model

## Why Europe

- European Union has legislated a series of clean tech and renewable initiatives that compel companies to prioritize renewable solutions.
- This regulatory environment should enable Taronis to adopt high-margin, lean staffing model to deliver scalable revenues to the EU.
- The port regions are the most industrialized regions in Europe. These ports each have 500+ heavy industry prospective clients for our renewable fuels.
- We currently leverage several port-focused conventions and trade platforms to gain direct access to more than 20 ports across Europe.



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.

# Dual-Pronged Approach to Commercialization

## **Operated Model:**

- In North America, Europe and select other global markets, Taronis will look to maintain a fully internalized operating model.
- This involves direct control of production, marketing, client support and logistics.
- This requires a clear understanding all aspects of the local market, including language, legal, tax, financial, marketing and regulatory environment.

## **Non-Operated Model:**

- Some international markets may be best suited for a non-operated model.
- This could include licensing, joint venture, partnership or other business platforms that enable Taronis to partner with exceptional counterparties that have a combination of industry, political, regulatory and financial ties that enable them to have a unique competitive advantage.
- Our model is moving to the sale of units, with long-term maintenance, supply chain, safety and training components that provide recurring revenue visibility.
- We believe that the Middle East, Africa and parts of Asia are prime targets for this model.

# International Expansion: Leading with Research

## Grant Funding to Drive Innovation

At Taronis, we have a successful track record leveraging grants to fund the development of new products and services. Here is a list of our active grant funding pipeline:

### Funding Organizations:



**USDA:** \$0.5MM grant funded an 18-month validation program for the sterilization of agricultural waste on a dairy farm in central Florida.



**EASME LIFE Grant:** €6.0MM grant funding a 36-month bio-diesel program in northern Germany. Grant is being amended to expand applications to include hydrogen production for transportation use. This grant is in conjunction with a German-led consortium.



**Horizon 2020 (Oct. 2018):** €2.5MM grant funding a 24-month program to develop a working prototype of our 4<sup>th</sup> generation gas production unit. Application in process, award not granted until Q4 2019. Partners included TWI, DTI, and NEM in Europe.

**Horizon 2020 (Feb. 2019):** €2.8MM grant funding a 24-month mobile waste water decontamination demonstration based in the Netherlands. Project would address agricultural, pharmaceutical and medical wastes. Partners to be disclosed upon application submission.

### Consortium & Research Partners:





## Water Decontamination Mode of Operation

- In this mode, the contaminated waste water is passed through the arc quickly, and normally only 1-2 times.
- The primary 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.
- Fuels produced in this operating mode, can be used as a cost offset for power generation or to enhance the sterilization process.
- Commercial applications: water reclamation, treatment of agricultural, pharmaceutical, industrial and manufacturing wastes.

## Our fluid decontamination & sterilization technology is superior to incumbent solutions:



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



**Safer:** Our 2018 USDA funded test results show 99.9% ability to eliminate e coli, fecal coliform, other EPA and USDA regulated pathogens. Our technology is proven to break down pharmaceuticals and PCBs. Demonstrable reduction in NPK levels. We are conducting tests now to verify we can also eliminate cyanobacteria commonly known as blue green algae.



**Smarter:** Our sterilization unit has a compact 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. This process has little impact on the nutritional value of the source materials.

# Fluid Decontamination Timeline



Indiana hog farm pilot program launches.

**Q2 2014**



Sterilization data provided to EPA, USDA for review.

**Q4 2016**



Awarded \$0.5MM USDA grant.

**Q2 2017**



Met with North Carolina DEQ and Army Corp of Engineers for piloting commercial waste service for hog industry.



**Q3 2018**

**Q3 2016**

Indiana hog farm pilot program completed.



**Q3 2016**

Application for \$0.5MM agricultural sterilization grant submitted.



**Q4 2017**

Launched USDA funded agricultural sterilization pilot at Florida dairy farm.



**Q4 2018**

Joined CEW, the leading applied water research organization in Europe.



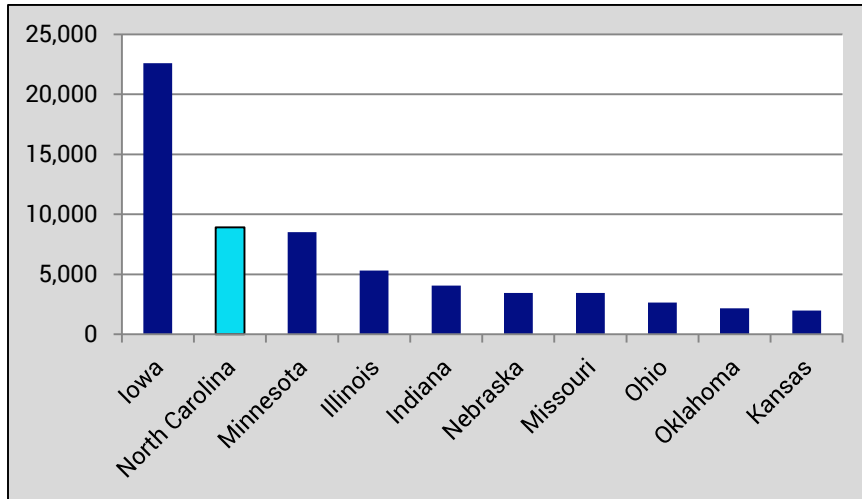
**Q1 2019**

Expected filing of €2.8MM EU grant.



# North Carolina Business Case

## US Hog Population Density By State



Source: US Dept. of Agriculture: National Agricultural Statistics Service

## Health Concerns and Environmental Impact

- North Carolina's population has approximately doubled during the last 30 years, with residential development encroaching on a scaling agricultural industry.
- What was once "out of site" is now offsetting suburban development.
- Airborne pollution, water contamination, insect vectors, and antibiotic resistance are all serious health risks.
- Anemia, kidney disease, blood infections and uterine cancer rates all increase significantly in correlation with residing in proximity to hog farms.\*\*

## Massive, Growing Industry

- North Carolina is the second largest hog market in the US, with 11.4MM hog head slaughtered in 2012, and 2,800 farms in operation.\*
- The North Carolina Hog industry generates 15MM tons of animal waste annually.
- North Carolina hog industry grew 315% from 1990-2012 (as measured by head of hogs).\*
- North Carolina hog industry grew 373% from 1990-2012 (as measured by pounds of hog meat produced).\*

## Taronis' Technology is Ideally Suited to Combat the Negative Health and Environmental Issues

- The composition of hog excrement is uniquely majority water and thus as a fluid can pass through our plasma arc process, sterilizing 99% of USDA-recognized pathogens and working to combat the health problems that have occurred due to that water contamination

\*(Source: USDA /NASS QuickFacts and BLS QCEW )

\*\*Duke University, 2018: "Mortality and Health Outcomes in North Carolina Communities Located in Close Proximity to Hog Concentrated Animal Feeding Operations."



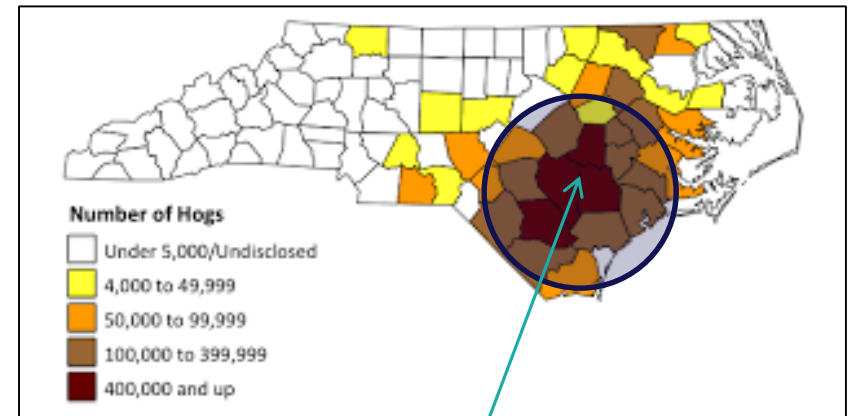
# North Carolina Business Case

## National Ranking of Largest Hog Producers in North Carolina

National Rank	County	Hog Inventory
1	Sampson	1,858,801
2	Duplin	1,733,026
11	Bladen	650,749
13	Wayne	637,481
18	Greene	510,510
30	Jones	366,159
39	Onslow	321,871
40	Robeson	320,291
42	Columbus	317,515
48	Lenoir	287,583
74	Pitt	224,123
80	Pender	203,873
<b>Represented NC Hog Population</b>		<b>7,431,982</b>
<b>Total NC Hog Population</b>		<b>9,000,000</b>
<b>NC Population in These 12 Counties</b>		<b>82.58%</b>

Source: 2012 Census of Agriculture.

## NC Hog Population Density By County

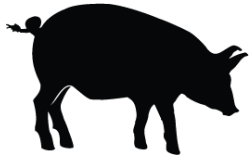


Source: University of North Carolina, Chapel Hill.

Target location and site selection for first Taronis decontamination center.

- North Carolina hog industry generates 15MM tons of animal waste annually.
- This represents \$2.63BN in annual disposal fees and \$25MM in raw manure value.
- This ignores the value of nutrient rich Taronis treated water for agriculture.
- 82.58% of this market is concentrated in a tight geographic area that can be readily serviced from a limited number of scalable treatment facilities.

# North Carolina Business Model



## Agricultural Waste Producer

- Farms are not impacted other than possible ease on herd limitations
- No switching costs, no compliance risk to the farmer.
- Easier for Taronis to focus on limited number of waste haulers.

## Waste Disposal Service Provider

- This is the key financial leverage point.
- These businesses can be readily incentivized to deliver waste materials.
- Minor discounts to their current cost structure can double their operating profits.
- Limited impact to landfill owners.

## Taronis Waste Processing Facility

- Taronis establishes a centralized location in the Sampson-Duplin corridor.
- 80%+ of the North Carolina market can be served from one scalable location.

## North Carolina Recurring Revenue Streams:

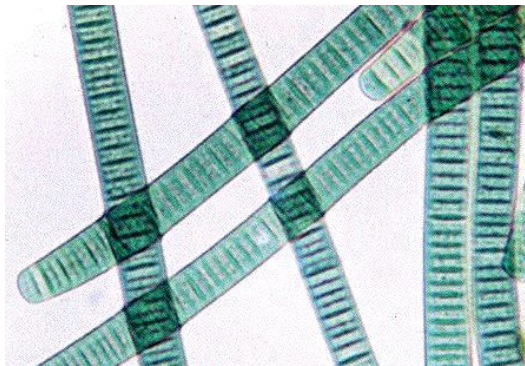
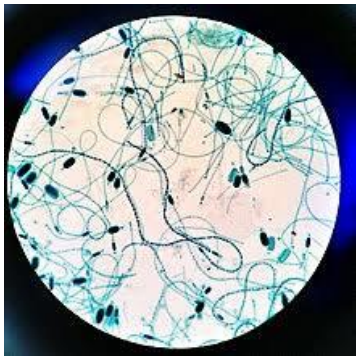
- **Disposal Fees:** Estimated at \$175 per ton. \$2.63BN in potential revenues annually.
- **Solid Wastes:** Estimated at \$30+ per ton. \$20MM+ in annual sales at high margins.
- **Liquid Wastes:** Estimated at \$10+ per gallon. \$15MM+ in annual sales at high margins.

# Cyanobacteria Remediation Solutions

## Cyanobacteria Overview

- Cyanobacteria have existed on Earth for 3.5BN+ years. They are typically unicellular and grow in aquatic photosynthetic colonies.
- They played a critical role in the formation of an oxygen-rich atmosphere capable of supporting life as we know it today.
- Cyanobacteria also form the basis for the chloroplast found in nearly all plant life.
- Because they are photosynthetic and aquatic, cyanobacteria are often called "blue-green algae". This name is convenient for talking about organisms in the water that make their own food, but does not reflect any relationship between the cyanobacteria and other organisms called algae.
- Cyanobacteria are relatives of the bacteria, not eukaryotes, and it is only the chloroplast in eukaryotic algae to which the cyanobacteria are related.\*

\*Source: UCMP Berkeley



# Cyanobacteria Remediation Solutions

- Under certain conditions, cyanobacteria colonies can experience hyper-growth conditions.
- Typically, warmer water temperatures coupled with increased nutrient levels are believed to trigger what are commonly referred to as “blue-green algae blooms.”
- Typically elevated nitrogen and phosphorus levels as the key nutrients, which are commonly generated through a wide range of agricultural industry waste streams.
- When the algae blooms die, this causes widespread hypoxia, or “deadzones” that lead to fish kills.
- In 2018, Florida blooms were confirmed to be 10 times greater than levels known to be toxic to the touch.\*
- A Florida state of emergency was declared, and federal legislation is under way to fund remediation and prevention.
- Taronis has the only known technology to simultaneously kill the organisms, reduce nitrogen and phosphorus levels and eliminate any other pathogens that resulting from pollution caused by a fish kill in a single process.
- We are actively engaging with the regulatory, municipal and research communities to help address this issue.



\*Source: Florida Department of Environmental Protection.

# Management & Board of Directors

## Management

### **Scott Mahoney**

Chief Executive Officer, President and Director

### **Timothy Hauck**

Chief Financial Officer

### **Tyler B. Wilson, Esq.**

Executive Vice President and General Counsel

### **Richard Konz**

Executive Vice President of Engineering and Technology Development

### **Ermanno P. Santilli**

Chief Technology Officer

### **Clinton Rafe Dean**

Chief Operating Officer

### **Jack Armstrong**

Executive Vice President of Business Development

## Board of Directors

### **Robert Dingess**

Independent Interim Chairman of the Board

### **Scott Mahoney**

Chief Executive Officer, Secretary, Director

### **Timothy Hauck**

Chief Financial Officer, Controller

### **Ermanno Santilli**

Chief Technology Officer, Director

### **Kevin Pollack**

Independent Director

### **William Staunton**

Independent Director

# Key Corporate Relationships

Auditors: **MARCUM**  
ACCOUNTANTS ▲ ADVISORS

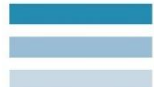
Securities Counsel: **COVINGTON**  
COVINGTON & BURLING LLP

Investor Relations:

 **EDISON**   
INVESTOR RELATIONS & STRATEGIC CONSULTING

Analyst Coverage:

 **EDISON**  **ZACKS**  **HCW**  
H.C.WAINWRIGHT & CO.

UK Advisors:  **INNOVATOR  
CAPITAL**

EU Advisors:  **EY** Building a better  
working world