

# Ecosphere: Century Company







CERAWeek 2013

March 7, 2013



### Cautionary Note Regarding Forward Looking Statements

This presentation contains forward-looking statements including statements regarding our 2012 forecast and financial outlook, 2013 royalties, market opportunities and future potential verticals for our patented Ozonix® advanced oxidation technology. Forward-looking statements can be identified by words such as "anticipates," "intends," "plans," "seeks," "believes," "estimates," "expects" and similar references to future periods. Forwardlooking statements are based on our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. Our actual results may differ materially from those contemplated by the forward-looking statements. We caution you therefore against relying on any of these forward-looking statements. They are neither statements of historical fact nor guarantees or assurances of future performance. Important factors that could cause actual results to differ materially from those in the forward-looking statements include a decline in the price of natural gas, the ability of Ecosphere or a partner to expand the Ozonix® technology outside of the United States, the ability to locate new partners to finance the use of our technology in other markets and our ability to reach definitive agreements with new partners, reluctance of businesses to change to new technologies, international regulations which affect hydraulic fracturing, federal or state regulations which affect hydraulic fracturing, problems that arise from the manufacturing of the Ozonix® units and delays in receipt of parts from component manufacturers.

Further information on Ecosphere's risk factors is contained in its filings with the Securities and Exchange Commission, including the Form 10-K for the year ended December 31, 2011. Any forward-looking statement made by us speaks only as of the date on which it is made. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.





## Water Engineering Technology Licensing Innovative Manufacturing



#### **Ecosphere Technologies**

## Solving the World's Water Challenges

We are a leader in advanced oxidation processes (AOP) & have an extensive portfolio of intellectual property.

## 30+ Approved U.S. Patents Including:

**United States Patent** 

No. 7,699,994

**United States Patent** 

No. 7,943,087

**United States Patent** 

No. 7,699,988

**United States Patent** 

No. 8,318,027

**United States Patent** 

No. 7,785,470



## Open Innovation Model

Big ideas have a world of value.

The stock market embraces businesses fueled by intellectual property and innovative manufacturing - businesses that are IP-heavy and capital-light.





## Identify an Environmental Challenge

Every challenge is an opportunity.



1 in 3 people on the planet are currently impacted by water scarcity

http://www.who.int/features/factfiles/water/en/index.html



82% of the world's water supply is consumed by industry and agriculture

http://www.unwater.org/downloads/Water\_facts\_and\_trends.pdf



# Invent New Technologies& File Patents

We innovate and protect our IP across global markets.







# Partner With Industry Leaders

Industry-proven partners lead to industry-proven solutions.













## Commercialize the Technology

Move seamlessly from patent to product.

Units Deployed:



44 Ozonix® EF units in operation

Water Processed:

2,778,843,388

Over 2 billion gallons of water treated and recycled with Ozonix\*



## Sell or License the Technology

Fully monetize IP via effective sales and licensing.







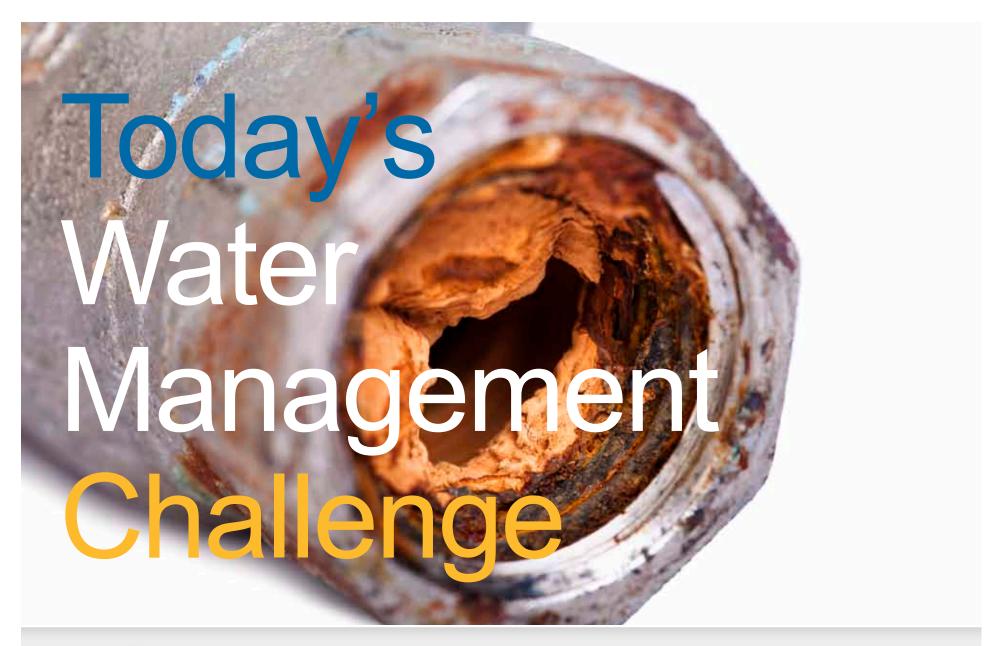
## Increase Shareholder Value

Value arises from solutions that are high margin and in demand.

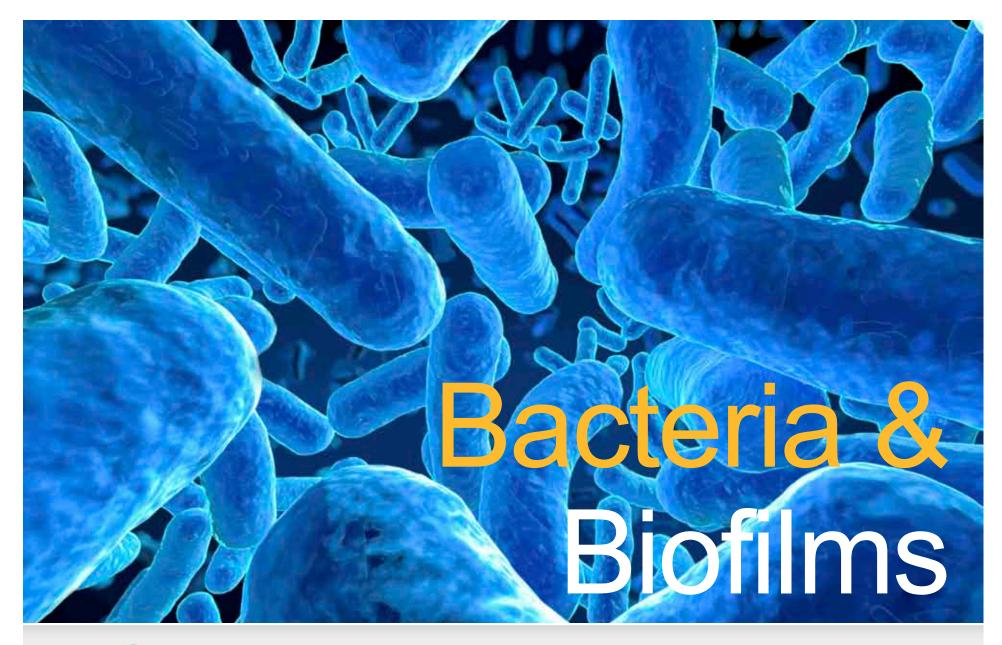
+90% increase in total revenue (9 month YTD)

+212% increase in IP licensing and manufacturing revenue (9 month YTD)











## Ozonix® Solution

#### Chemical-Free Bacteria & Scale Control

Protected by U.S. Patents 7,699,994; 7,699,988; 7,785,470; 7,943,087; 8,318,027; Patents Pending





**ZONE 1**HYDRODYNAMIC CAVITATION



ZONE 2 OZONE (O3)



**ZONE 3**ACOUSTIC CAVITATION



**ZONE 4**ELECTROCHEMICAL OXIDATION



### Ozonix® Solution

Chemical-Free Bacteria & Scale Control

Ozonix® is a patented advanced oxidation process that treats industrial wastewaters without the use of liquid chemicals.



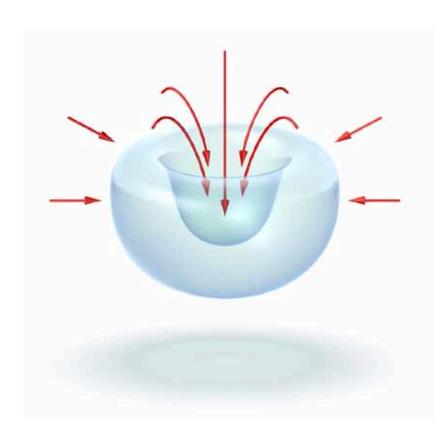


## Ozone

With a high oxidation potential of 2.07v, ozone has the ability to oxidize a wide range of pollutants including bacteria and heavy metals. Ozone purifies water 3,000 times faster than chlorine, can be generated on site, and doesn't require storage.







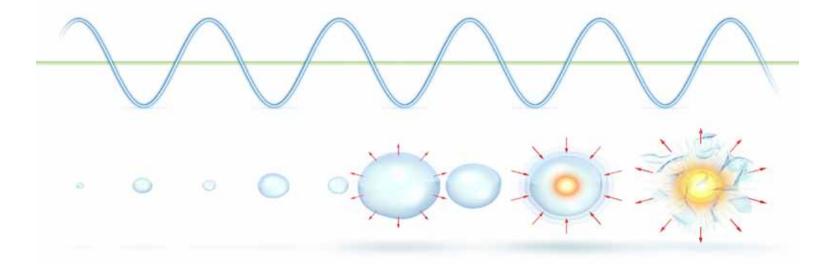
## Hydrodynamic Cavitation

is a photocatalytic process that produces localized hot spots that raise water temperatures around the cavitating bubble to over 4,000K at a molecular level. These reactions convert ozone to hydroxyl radicals (OH-), which have an oxidation potential of 2.8V.



## **Acoustic Cavitation**

uses sound waves to produce localized hot spots, converting ozone into hydroxyl radicals (OH-). This process decreases the surface tension of water, which aids in the breakdown of bacteria clusters.







## Electrochemical Oxidation

uses electricity to create hydroxyl radicals. It is highly successful in removing sulfides, nitrogen species, and up to 99% of iron in water sources. It is also effective in removing calcium carbonate (a primary source of scaling) because the electricity creates the aqueous form of calcium carbonate.



### Ozonix® Products

#### Chemical-Free Bacteria & Scale Control

**EF10** 







**EF20** 





RECYCLES 20 BPM 840 GPM **EF60** 





60 BPM

2,540 GPM

**EF80** 

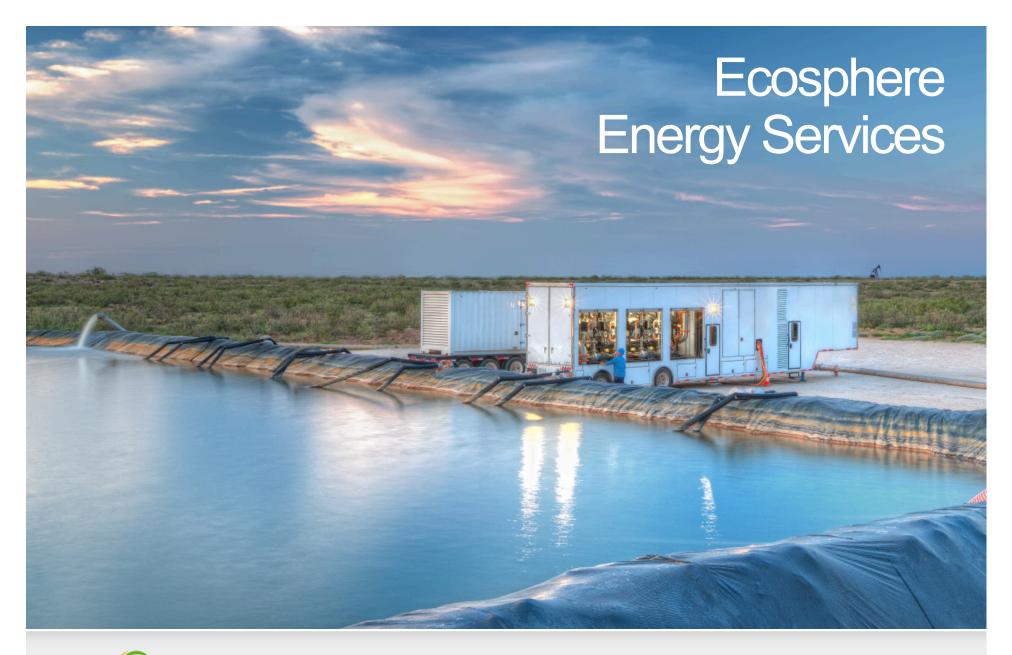






3,360 **GPM** 











703 Oil and Natural Gas Wells completed



+2 BILLION gallons of fracturing fluid treated



**294 MILLION** gallons of flowback and produced water recycled



Chemicals eliminated; risks eliminated; resources saved



## Ozonix® Broad Spectrum Treatment Capabilities Chemical-Free Bacteria & Scale Control

- Chemical Free There is no need for liquid chemical biocides
- High Volume A single system can process more than 3,000 GPM
- Self Contained Mobile, self-contained and fully transportable
- Cost Effective Ozonix<sup>®</sup> is competitive with liquid chemistry costs
- Industry Proven 2.5 Billion gallons treated for 700+ oil & gas wells
- Environmentally Responsible Preserves vital water resources



#### Chemical-Free Bacteria & Scale Control

Protected by U.S. Patents 7,699,994; 7,699,988; 7,785,470; 7,943,087; 8,318,027; Patents Pending









One Pass Treatment at 3,360 GPM



45 Billion SRB/ml

95 SRB/ml

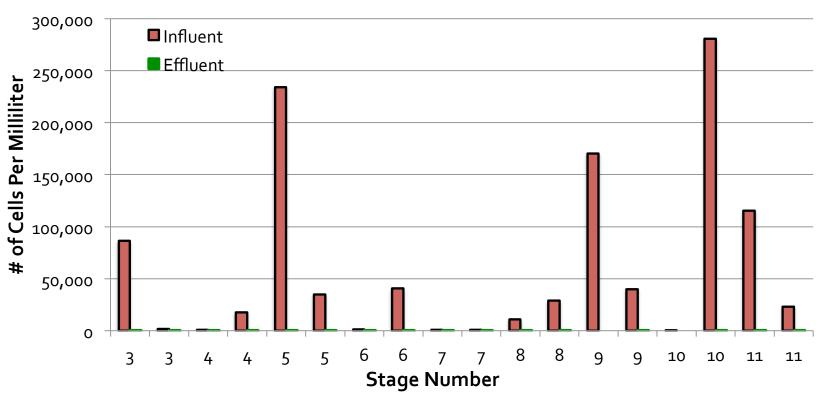
Source of the influent water (tested by an independent laboratory) was a 30k bbl storage pit of 100% produced water from the Fayetteville Shale



99.98% REDUCTION

**Bacteria Control** 

#### **Bacteria Treatment Results**

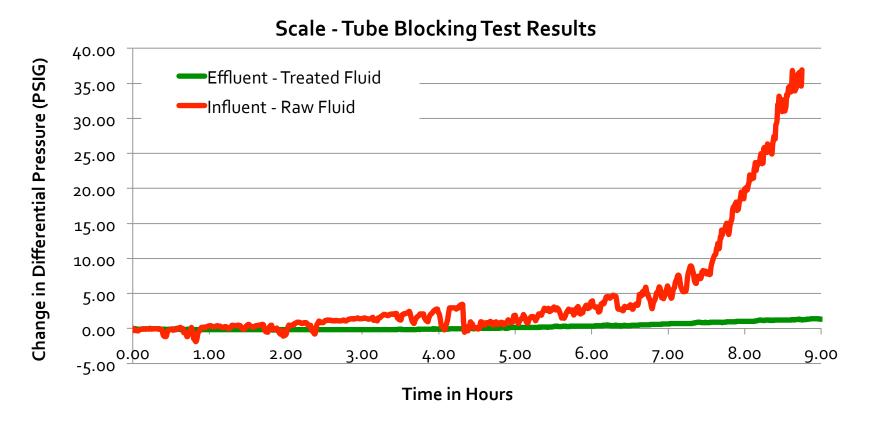


Source of the influent water is from Ozonix® operations in the Permian Basin, West Texas supplied by EES' oil and gas sub-licensee Hydrozonix



96.40% REDUCTION

Scale Control



Source of the influent water is from Ozonix® operations in the Marcellus Shale, Pennsylvania supplied by EES' oil and gas sub-licensee Hydrozonix



### Ozonix® for Oil and Gas

#### **Industry Acceptance**

#### Water Processed

Every day, businesses around the globe rely on Ecosphere Technologies' advanced water recycling technologies and expertise to help them reclaim and reuse water, ensuring that they are meeting both their financial and environmental obligations.

Contact us

Recycled Water

2,7 7 6,0 9 9,1 7 0

Gallons of Water Treated and Recycled with Ozonix®

Eliminated Chemical Biocide

2,078,978.085

Gallons of Chemical Biocide Eliminated with Ozonix®



#### Many Industries

## One Wastewater Management Solution – Ozonix®



Agriculture



Energy



**Environmental** 



Industrial



Mining



**Public Utility** 



## **Ecosphere Technologies**

Committed to one of the world's greatest causes – protecting the quality and accessibility of the world's water supply.





