

ENERGY TECH INVESTOR

ECOSPHERE TECHNOLOGIES – OVERVIEW REPORT

Company Description

Ecosphere Technologies, Inc. (OTCBB:ESPH) is a U.S. technology licensing and innovative manufacturing company that develops environmental solutions for global markets. ESPH has a portfolio of more than 35 patented and patent-pending technologies: Technologies like Ozonix® and Ecos PowerCube®, which are licensable across a wide range of industries and applications throughout the world.

Key Stats As Of: July 31, 2014	
Exchange : OTC	
OTCBB : ESPH	
52-Week Range	\$0.15-\$0.33
TTM Revenue (US\$mm)	\$6.0
Market Cap. (US\$mm)	\$27.8
Net Debt (US\$mm)	\$1.7
Shares Outstanding (M)	164.1M
20-Day Average Vol.	138,579



Source: Nasdaq.com

KEY POINTS

- Ecosphere Technologies is a leading Intellectual Property (IP) company focused on key technologies in the water treatment and renewable energy markets. The Company has two patented and fully commercialized products in its IP portfolio today that are available for license: Ozonix® and the Ecos PowerCube®.
- Ecosphere has invested over \$100 million in developing its core technologies, which we believe reflects the management's commitment to the Company's R&D and technology commercialization efforts.
- The Company is currently focused on granting global field-of-use licenses for its patented technologies to strategic partners in specific industries (including agriculture, food and beverage, industrial, marine and municipal wastewater treatment) and countries around the world.
- The Company has recently hired ICAP Patent Brokerage, the world's largest intellectual property brokerage firm, to monetize and license its patented Ozonix® and Ecos PowerCube® technology portfolios on a global basis.
- Since 2009, Ecosphere's patented Ozonix® technology has enabled major oil and gas customers to treat, recycle and reuse over 4.5 billion gallons of water for more than 1,000 oil and natural gas wells, protecting \$5 billion worth of well assets, and generating over \$70 million in revenue.
- Ecosphere Technologies has yet to unlock significant value in its IP portfolio, as it is still in early stages of monetization.
- Based on the analysis conducted by an independent, third-party, NYSE listed consulting firm, Ecosphere's patented Ozonix® and Ecos PowerCube® technologies are valued at nearly \$600 million.

COMPANY OVERVIEW

Ecosphere Technologies, Inc. (OTCBB:ESPH) is a U.S. technology licensing and innovative manufacturing company that develops environmental solutions for global markets. Ecosphere is focused on helping industry increase production, reduce costs, and protect the environment through a portfolio of more than 35 patented and patent-pending technologies: Technologies like Ozonix® and the Ecos PowerCube®, which are licensable across a wide range of industries and applications throughout the world.

Ecosphere has an extensive portfolio of intellectual property on its patented Ozonix® water treatment technology that includes six issued United States patents as well as numerous foreign patents, trademarks and patent pending applications. The Ecosphere Ozonix® process is a revolutionary Advanced Oxidation Process (AOP) that offers customers a chemical-free alternative to high-volume water treatment, disinfection and recycling for a diverse range of applications ranging from the oil & natural gas industry and mining to agriculture and municipal wastewater treatment.

Since 2009, Ecosphere's patented Ozonix® technology has been commercially proven in the U.S. oil and gas industry and is currently being used by Fidelity National Environmental Solutions or FNES, a company in which Ecosphere owns approximately 31%, to enable oil and gas customers to reduce costs, increase treatment efficiencies and eliminate harmful chemicals from oil and gas operations around the World. FNES and its sub-licensing partners have enabled oil and gas customers to treat, recycle and reuse over 4.5 billion gallons of water for more than 1,000 oil and natural gas wells; protecting \$5 billion worth of well assets and generating over \$70 million in revenue.

FNES owns an exclusive global field-of-use license to Ecosphere's patented Ozonix® technology for all energy applications globally whereas Ecosphere owns 100% of the global rights to the patented Ozonix® technology for all non-energy related applications including but not limited to agriculture, food and beverage, industrial, marine and municipal wastewater treatment. To put things in perspective, in January 2014, FNES signed an exclusive technology licensing and equipment purchase agreement with Hydrosphere Energy Solutions, a Canadian corporation to deploy Ecosphere's patented Ozonix® water treatment technology in the territory of Alberta and Northeast British Columbia, Canada for all hydraulic fracturing applications. In January 2014, Hydrosphere received receipt of its first Ozonix® EF10M from FNES and in July 2014, FNES received a follow-on equipment purchase order from Hydrosphere for an additional Ozonix® EF10M system to be deployed in its licensed territory. Hydrosphere purchases Ozonix® machines from FNES and Ecosphere manufactures and delivers Ozonix® machines on behalf of FNES.

In addition to Ozonix®, Ecosphere has received a patent from the United States Patent Office for the world's largest, mobile solar-powered generator. The Ecos PowerCube® is a portable, self-contained micro-utility that uses the power of the sun to provide electricity in the most remote, off-grid locations. The system is ideally suited to support off-grid needs in numerous applications such as military, disaster relief, humanitarian, residential, retail and remote Wi-Fi scenarios. Designed to meet the growing demand for off-grid energy, communications and water, the Ecos PowerCube® has a unique patented array of stacked solar panels, which when deployed on site provides users with the maximum amount of solar power generation possible in 10', 20' and 40' standard ISO shipping container footprints.

Ecosphere has recently hired ICAP Patent Brokerage, the world's largest broker of intellectual property, to license and monetize its Ozonix® and Ecos PowerCube® intellectual property portfolios which have recently been valued by an independent, NYSE listed valuation firm in excess of \$600 million.

KEY PHASES IN TECHNOLOGY INVESTMENT

Investing in emerging technologies is predicated on having the vision to identify and the knowledge to understand how a technology could radically change the market in which it is deployed.

Ecosphere's mission is divided into two key phases, which the Company defines as **(i) the Innovation Phase** and **(ii) the Monetization Phase**, and is based on the broader principal of "Open Innovation". The **Innovation Phase** is assigned with identifying a major environmental challenge in need of a better solution and thus developing and building a viable, patent based solution. The second level or **Monetization Phase** is focused on taking its idea to market and pursuing widespread adoption in a profitable and efficient manner. The Company looks to execute that strategy by partnering with industry leaders, commercializing and proving the technology in conjunction with those partners and finally licensing the patented, commercialized technology to the broader market. This approach enables the Company to rapidly develop, deploy and monetize new technologies in the way it could not accomplish independently.

The inherent shareholder value lies in its Intellectual Property (IP) portfolio and how its technology can be profitably deployed across various markets by strategic, well positioned partners. In order to better understand the value of its IP portfolio, management commissioned a study from a NYSE listed third party to frame the potential value, which is discussed in some detail later in this report.

The Innovation Phase

Ecosphere currently has more than 35 approved U.S. & International Patents and Patents Pending, but its core technology today centers around its patented Ozonix® water treatment technology, which will be discussed in detail later in this report. It is important to note that this core technology is not speculative in nature and that Ecosphere's patented Ozonix® technology has already been successfully deployed in the energy sector for over four years having treated and recycled more than 4.5 billion gallons of water for more than 1,000 oil and natural gas wells and has generated over \$70 million in revenue. Today the innovation phase is focused on segmenting the Company's core Ozonix® technology into new applications and markets. The Company has identified six key market verticals in addition to Energy which include agriculture, food and beverage, industrial, marine and municipal wastewater treatment that are currently available for License through ICAP Patent Brokerage.

In addition to Ozonix®, Ecosphere has developed a second core portfolio technology that only recently received patent approval (after 7 years under review at the United States Patent Office) and is currently in the Innovation Phase. The Ecos PowerCube® is the world's largest, mobile, solar-powered generator. Applications could range from military and disaster relief to humanitarian efforts, residential, retail and off-grid telecommunications for the developing world. The Ecos PowerCube® can provide self-sustaining energy, connectivity and clean water to remote, off-grid locations where diesel fuel is either cost prohibitive or non-existent.

Note that the Company recently completed construction of the very first Ecos PowerCube® prototype and is moving into the Monetization Phase of this asset by offering various field of use licenses for sale through ICAP Patent Brokerage.

The Monetization Phase

Ozonix® - Energy Industry

The Ozonix® solution for the energy market is in the advanced Monetization Phase and has been in the field for over 4 years and has been used to treat, recycle and reuse over 4.5 billion gallons of water for more than 1,000 oil and natural gas wells, protecting \$5 billion worth of well assets. This

has generated over \$70 million in revenue for the Company and its shareholders. The Ozonix® technology in the energy field-of-use is managed through **Fidelity National Environmental Solutions** (FNES). Ecosphere at the time of this publication owns 31% of FNES. Ecosphere's equity partners in FNES include Fortune 500 company Fidelity National Financial, Inc. ("FNF"), which, as of the date of this publication, owns 39% of FNES.

In 2009, Ecosphere formed Ecosphere Energy Services, LLC ("EES"), now Fidelity National Environmental Solutions, LLC ("FNES"), to deploy its patented Ozonix® water treatment technology across the global energy market. Since then, Ecosphere and FNES have received numerous awards and accolades for its patented and proven Ozonix® water treatment solutions for the energy sector, including:

- 2013 Water Management Company of the Year Award - Oil and Gas Awards, Midcontinent Region;
- 2013 Bloomberg New Energy Finance - New Energy Pioneer Award;
- 2013 IHS CERAWeek - Energy Innovation Pioneer Award;
- 2013 American Technology Awards - "Clean Tech/Green Tech" Winner;
- 2013 World Technology Awards - Corporate "Environment" Category Winner;
- 2012 Frost & Sullivan - North American Product Leadership Award in Disinfection Equipment for Shale Oil and Gas Wastewater Treatment; and
- 2010, 2011, 2012 Artemis "Top 50 Water Technologies" Winner.

In addition to major awards and accolades, FNES has enabled oil and gas customers to treat, recycle and reuse over 4.5 billion gallons of water for more than 1,000 oil and natural gas wells, protecting \$5 billion worth of well assets, and generating over \$70 million in revenue for its shareholders.

Ecosphere is the manufacturer of all Ozonix® and Ecos-Frac® related products for FNES and since 2009 has manufactured approximately 50 Ozonix® systems for FNES and its customers. FNES sells Ecosphere's patented Ozonix® equipment to the energy market and provides ongoing technical service and support to its energy customers, including well-known Fortune 1000 companies, such as Southwestern Energy Co. and Newfield Exploration Company. FNES also has the ability to sub-license its global field-of-use license to partners and industry leaders that can provide strategic financial and geographic advantages for FNES and its shareholders.

Ozonix® - Food & Beverage Industry

In July 2014, the Company announced that it had signed an exclusive technology licensing and equipment purchase agreement with Brasil Clean Energy ("BCE"), a Brazilian environmental services company, to deploy its patented Ozonix® water treatment technology for the Food and Beverage industry in Brazil.

Under the terms of the agreement in order to maintain exclusivity, Brasil Clean Energy is required to purchase a minimum of \$5 million worth of Ozonix® equipment during the next two years, plus a royalty payment based on usage or revenue, with a minimum amount earned per machine. At the time of this report, Brasil Clean Energy had funded the purchase of its first Ozonix® water treatment system and manufacturing had begun at Ecosphere's corporate headquarters in Stuart, Florida.

Ozonix® - Industrial Water Treatment Industry

Outside of the Energy and Food and Beverage markets, the Company is actively in discussion and undergoing extensive due-diligence with a number of potential, pre-qualified licensing and manufacturing partners within the industrial water treatment market. This market includes applications ranging from automotive, electronics and metals manufacturing to biotechnology,

commercial laundry, pharmaceuticals, textiles and the pulp and paper industry. Prospective licensing territories include but are not limited to the United States, South America, Europe, Asia, Africa and the Middle East.

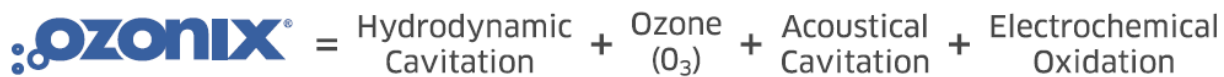
INVESTMENT CATALYSTS

Potential catalysts for the stock include (i) incremental licensing and revenue opportunities for Ecosphere's patented Ozonix® technology in industry sectors beyond the Global Energy market, including Agriculture, Food & Beverage, Industrial, Marine and Municipal markets, (ii) incremental licensing and revenue opportunities for Ecosphere's patented Ecos PowerCube® portfolio in the off-grid, renewable energy markets, (iii) increased licensing and monetization efforts with ICAP Patent Brokerage, the World's largest intellectual property brokerage firm (iv) a strategic sale of the Company's ownership position in FNES, and (v) the Company's current arbitration proceeding against Halliburton as a potential source of liquidity.

TECHNOLOGY OVERVIEW

OZONIX®

Many water recycling processes use chemicals - chemicals that are costly and harmful to the environment. The Ecosphere Ozonix® technology, developed, patented and manufactured by Ecosphere Technologies, offers customers a chemical-free alternative to high-volume water treatment and water recycling for a diverse range of industries and applications ranging from the oil and natural gas industry to agriculture, food and beverage, industrial, marine, mining and municipal wastewater treatment.



The Ozonix® technology is protected by U.S. Patent No's. 7,699,994; 7,699,988; 7,785,470; 7,943,087; 8,318,027; 8,721,898; Patents Pending.

How Ozonix® Works:

Ozonix® is a patented, Ozone-based Advanced Oxidation Process (AOP), that saturates contaminated water with Ozone using Hydrodynamic Cavitation, Acoustic Cavitation, and Electrochemical Oxidation to destroy bacteria, biofilms, organics, and oxidize heavy metals. As water cycles through the Ozonix® process, bacteria cell walls are destroyed and sulfurs and irons are ultrasonically removed and oxidized from the ore matrix, returning clean water that is free of bacteria and ready for re-use and future operations.

Ozonix® Treatment Methods:

There are four oxidation processes embodied in the Ozonix® technology, which synergistically provides enhanced cost and process efficiencies versus alternative treatment options. The four treatment processes are discussed below.

Hydrodynamic Cavitation

Hydrodynamic Cavitation results in the disruption of microorganisms and oxidation of pollutants through mechanical (i.e., conditions of high-intensity turbulence and shear generated in the flow) and chemical means by virtue of local hot spots and reactive free radicals. As the disinfection takes place by a combination of chemical and mechanical means, it is unlikely that bacteria can become resistant to the Ozonix® treatment system, as observed with conventional disinfection

chemistry techniques. As water enters the Ozonix® process it passes through a series of proprietary static mixing plates creating massive volumes of micro bubbles that grow in size based on engineered pressure fluctuations and finally collapse, releasing a large quantum of energy.

The cavitation process is composed of two stages: (1) rapid increase in the size of a micro bubble and (2) fast bubble collapse and the formation of a “hot spot”, a high temperature residual bubble. Under these extreme conditions, vaporized water molecules are dissociated into free oxidative (and reductive) radicals. One of the most abundant radicals is the hydroxyl radical (OH) whose oxidation potential ($E^\circ = 2.80 \text{ V}$) is slightly lower than that of fluorine, the strongest oxidizer known. However, unlike fluorine and chlorine, hydroxyl radicals are safe for the environment and people. Though conventional treatment processes require the addition of chemicals, cavitation is based on the creation of oxidative and reductive radicals directly from water, which either recombine to form stable byproducts or they react with the molecules causing their degradation. These cavitating conditions result in strong oxidation capacity capable of oxidizing harmful chemicals present in the water or wastewater.



Ozone

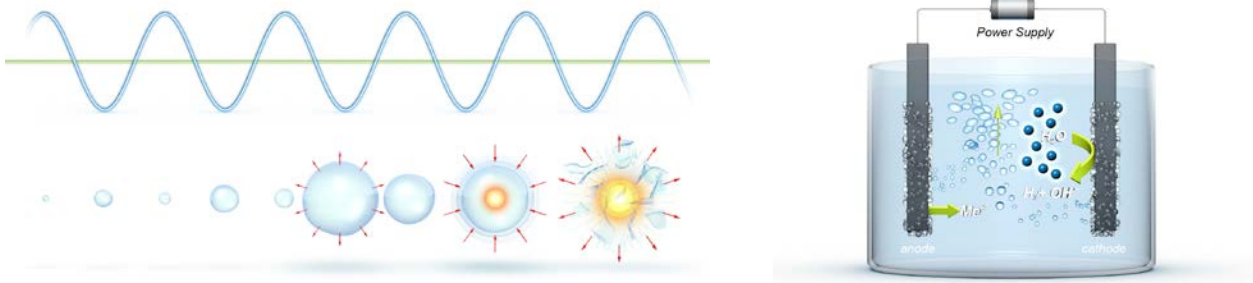
The next phase of the Ozonix® technology is based on the injection of Ozone (O_3) gas, which is a very powerful oxidizing agent ($E^\circ = 2.07\text{V}$) that can react with most species containing multiple bonds at high rates and also results in significant degrees of disinfection. These oxidations only require good contact of ozone with the chemical constituents. Residual bacteria that may have survived the first step of hydrodynamic cavitation are also subjected to the highly reactive oxidative power of O_3 . During this second step, residual metals are also oxidized by O_3 forming various oxides. It is important to note that the Ozonix® process also destroys the environment and food source for the survival of bacteria.



Acoustical Cavitation and Electrochemical Oxidation

The main stage of the patented Ozonix® technology consists of an oxidation zone where the combination of Ozone with ultrasound-induced acoustic cavitation and electrochemical oxidation results in the oxidation of pollutants, as well as water disinfection. Ultrasound is passed using multiple transducers that give much better cavitational activity in the reactor and also better energy transfer efficiencies. The combined operation in this stage gives much higher overall oxidation capacity as the effects of the individual operations are complimentary to each other. Thus, a combination of Ozone with other advanced oxidation techniques, which can give better contact and mass transfer rates, results in a significant degree of process intensification.

Similarly, electrochemical oxidation has been found to be an environmentally friendly technology able to mineralize completely non-biodegradable organic matter and to eliminate nitrogen species, and hence can be effectively applied to industrial water treatment applications. Historically, a major drawback of electrochemical oxidation by itself has been the mass transfer limitations and high-energy requirements of the process, which have made the application of electrochemical oxidation as a stand-alone process in water treatment facilities uneconomical. The efficacy of electrochemical oxidation can be greatly enhanced if it is effectively combined with ozonation, cavitation or a combination of both, such as what is achieved in the Ozonix® process.



Benefits and Capabilities:

- **Chemical Free:** With Ozonix® there is no need for toxic liquid chemical biocides and scale-inhibitors. Thousands of bacteria tests and dynamic tube blocking tests have established that water processed through Ozonix® shows complete destruction of bacteria cell walls and scale-inhibition effects.
- **High Volume:** A single Ozonix® advanced oxidation system can be designed to process any amount of water. Current Ozonix® systems operate from 400 gallons per minute up to 3,300 gallons per minute - treating water to a level that is suitable for re-use.
- **Self-Contained:** Ozonix® products are mobile, self-contained and fully transportable - they go wherever you need them and require minimal mobilization time.
- **Highly Effective:** Ecosphere's patented Ozonix® technology produces highly reactive bacteria killing hydroxyl radicals. Hydroxyl radicals are important to water disinfection because they have a high oxidation potential of 2.80V, which is much higher than the most common disinfectants, Ozone (2.07 V) and Chlorine (1.36 V).
- **Industry Proven:** Ozonix® has been commercially proven in the oil and gas industry where it has enabled major energy customers to treat, recycle and reuse more than 4.5 billion gallons of water for more than 1,000 oil and natural gas wells.
- **Environmentally Responsible:** Ozonix® is the most energy efficient and environmentally sustainable solution for high-volume, chemical-free water management.
- **Effective:** As a result of the patented combination of Ozone, Hydrodynamic and Acoustic Cavitation and Electrochemical processes, the Ecosphere Ozonix® technology realizes a 10 to 20 times multiplier over the use of Ozone alone, exponentially increasing the mass transfer efficiency and cost-effectiveness of Ozone.

ECOS POWERCUBE®

The Ecos PowerCube® is the world's most powerful, mobile, solar-powered generator. It is a patented, self-contained, self-sustaining, solar-powered generator that uses the power of the sun to provide energy, communications and clean water to the world's most remote, off-grid locations.

The Ecos PowerCube® is protected by U.S. Patent No. 8,593,102.



Features and Benefits

The Ecos PowerCube® represents a combination of Ecosphere's patented technologies and its innovative manufacturing know-how and experience. The Ecos PowerCube® is designed to deliver:

- **Anytime, Anywhere Power:** the foundation of the system is the Ecos PowerCube® and its patented array of stacked solar panels. When deployed on site, the Ecos PowerCube® provides a photovoltaic surface area approximately 3x that which is normally obtainable in a given footprint. The solar energy system can provide up to 15kW of electricity to power numerous utility functions, and higher power if multiple Ecos PowerCubes® are combined.
- **Versatile:** numerous off-grid applications including but not limited to industrial remote utilities, military remote utilities, off-grid telecommunication base stations, solar powered internet, emergency preparedness, disaster response, remote habitation (e.g., physical islands and remote villages) and many others.
- **Portable:** capable of being transported and delivered by truck, train, boat, helicopter or plane.
- **Durable:** patented solar panel array protects solar panels during transportation and inclement weather.
- **Powerful:** provides users with the maximum amount of solar power generation possible (in 10, 20 and 40 foot standard ISO shipping container footprints).

- **Rapid Deployment:** the solar panel array can immediately be deployed and engaged once the Ecos PowerCube® arrives on location.
- **Reliable:** 24/7 energy to power a wide variety of remote, off-grid support systems including but not limited to electrical power management systems, wireless/satellite/voice over internet protocol (VOIP) communication systems, wireless connectivity, water treatment systems and more.
- **Sustainable:** uses the power of the sun to generate electricity for numerous off-grid support needs.
- **Range:** has the ability to provide wireless connectivity and communications in remote, off-the-grid scenarios.

The Ecos PowerCube® is revolutionary in the fact that it will use only the power of the sun to create and store the energy needed to run water filtration and communication components, pumps, motors, and/or a wide variety of other devices requiring power. Multiple Ecos PowerCube® systems can be combined when greater power needs are required.

OZONIX® MARKET OPPORTUNITIES

According to a Frost & Sullivan analysis, the global water market is estimated at \$425 billion. Its growth is being driven by macro political, financial, social and ecological considerations. Additionally, according to a United Nations Report, demand for water can be broken down into major water use sectors:

- Food & Agricultural (70% of freshwater use);
- Energy & Industry (20%) --- the percentage of a country's industrial sector water demand is generally proportional to its average income level; and,
- Human settlements (10%) --- between 2009 and 2050, the world population is expected to increase by 2.3 billion, and urban areas are expected to absorb essentially all of the population growth.

Within the global water market, the estimated 2013 global water and wastewater treatment market sizes for Agriculture, Food & Beverage, Industrial, Marine, and Municipal are \$3.4 billion, \$4.3 billion, \$10.2 billion, \$2.4 billion, \$1.5 billion, and \$34.1 billion, respectively. This implies significant market opportunities for Ecosphere, as the Company's patented Ozonix® technology has the potential to be applied across numerous water treatment market sectors and industries around the world including but not limited to:

- **Agriculture:**
 - Grain growing & processing
 - Irrigation & runoff
 - Nutrient runoff
 - Livestock farms & feedlots (dairy, poultry, beef, hog)
 - Aquaculture & fish farming
- **Energy:**
 - Oil & gas (onshore & offshore)
 - Cooling & boiler water
 - Nuclear power generation
 - Coal-fired power plants

- **Food & Beverage:**
 - Bottled water
 - Bottled beverages
 - Breweries
 - Vineyards & wineries
 - Dairy (milk, butter, cheese)
 - Livestock processing (poultry, beef, hog)

- **Industrial:**
 - Automotive
 - Aerospace & defense
 - Manufacturing
 - Metals & metal finishing
 - Microelectronics
 - Pulp & paper
 - Biotechnology
 - Pharmaceutical
 - Commercial Laundry
 - Textiles
 - Lifestyle, leisure & water parks
 - Material waste management
 - Solar & semiconductor production

- **Marine:**
 - Aquaculture & aquariums
 - Ballast water
 - Onboard gray water
 - Onboard process water

- **Mining & Minerals:**
 - Hydrometallurgical extraction
 - Base metals, precious metals, mineral contamination
 - Pre-treatment of hard mineral mining ores
 - Increased ore recovery rates
 - Acid mine drainage
 - Leachate
 - Tailings

- **Municipal:**
 - Drinking water
 - Sewage water
 - Storm & drainage water treatment
 - Odor control
 - Sludge treatment
 - Municipal irrigation

From a technical standpoint, Ecosphere has proven its patented Ozonix® technology in the most challenging treatment market sector, the oil & gas segment of the energy industry; therefore, the technological risks faced when delivering the technology to other target sectors and industries are significantly diminished.

ECOS POWERCUBE® MARKET OPPORTUNITIES

Additionally, the Ecos PowerCube®'s ability to provide off-grid micro utility needs has applications in numerous markets and sub markets, including:

- **Military Remote Utilities:** The DOD will spend \$1.8 Billion on renewable energy by 2025
- **Remote Cell Towers:** \$2.8 Billion in 2014, growing to \$10.5 Billion in 2020 (640,000 anticipated off-grid base station installations by the end of 2012)
- **Remote Habitation:** \$2.4 Billion in 2014, growing to \$4.2 Billion in 2020
- **Industrial Remote Utilities:** \$0.5 Billion in 2013, growing to \$1.2 Billion in 2020
- **Others:**
 - Agriculture & Ranching
 - Off-Grid Telecommunications
 - Solar Powered Wi-Fi
 - Humanitarian Relief
 - Emergency / Disaster Preparedness
 - Survivalists & Preppers
 - Infrastructure & Construction
 - Corporate Branding & Advertising
 - Remote / Temporary Entertainment Events & Venues
 - Equipment Rental & Leasing
 - Remote, Off-Grid Research Stations

TECHNOLOGY AWARDS & ACCOLADES

Ecosphere Technologies' numerous awards and accolades evidence the importance and quality of its patented technologies. For example:

- Ecosphere Technologies was named the winner in the **Clean Tech/Green Tech** category for the 2013 TechAmerica Foundation [American Technology Awards](#) ("ATAs"). The ATAs cross the technology industry recognizing products and services like Ecosphere's patented Ozonix® technology for the treatment and recycling of water. "The Ecosphere team deserves a huge round of applause for their excellence in this category. This was an incredibly competitive category and it was clear that the hard work and late nights of this team paid off," said Shawn Osborn, Chairman of the TechAmerica Foundation. "We appreciate how outstanding work like this furthers innovation in the U.S." The awards were determined on the basis of a thorough evaluation by industry experts and technology leaders.
- Ecosphere Technologies was chosen by Bloomberg as a **2013 New Energy Pioneer**. The awards program, now in its fourth year, selects ten New Energy Pioneers each year. An independent panel of industry experts selected the winners from more than 200 candidates from around the world, assessing them against three criteria: innovation, demonstrated momentum and potential global scale.
- Ecosphere Technologies was selected by IHS CERAWeek (an annual energy executive gathering hosted by IHS) as a **2013 Energy Innovation Pioneer**. The Energy Innovation Pioneers program, held annually in conjunction with IHS CERAWeek, aims to identify the most innovative and distinctive new technologies in the energy spectrum. Criteria include creativity, feasibility of plan, scalability of technology and leadership team.

- Ecosphere Technologies was selected as a finalist for the **2013 World Technology Awards** in the corporate “Environment” category. The World Technology Awards have been presented since 2000 as a way to honor those in 20 different categories doing “the innovative work of the greatest likely long-term significance.” Nominees for the 2013 World Technology Awards were selected by the WTN Fellows (winners and finalists from previous annual award cycles in the individual categories) through an intensive, global process lasting many months.
- Ecosphere Technologies was awarded the **2012 Frost & Sullivan North American Product Leadership Award** for its *Disinfection Equipment for Shale Oil and Gas Wastewater Treatment*. The 2012 Product Leadership Award recognizes Ecosphere’s leadership in the field of advanced water treatment, specifically in providing energy exploration and production companies with a non-chemical solution that allows them to recycle flowback and produced water with an ozone-based advanced oxidation process.
- Ecosphere Technologies has been chosen by the Artemis Project for the **Artemis “Top 50 Water Tech” listing** for the last three consecutive years. The Artemis Water Tech Review brings together an elite group of water users that are seeking new solutions. An international network of hundreds of industry experts recommends promising companies, and Artemis guides the jury through a rigorous evaluation process. From a diverse pool of hundreds of applicants, the jury scores build a listing of 50 leaders in water tech.

INTELLECTUAL PROPERTY (IP) PORTFOLIO

Ecosphere Technologies has more than 35 Approved U.S. & International Patents and Patents Pending that have been assigned to the shareholders of Ecosphere by its Chief Inventor and Founder, Dennis McGuire. Because of generally accepted accounting principles and SEC accounting rules, Ecosphere is required to value its patents and patents pending at the cost it pays its counsel to process and maintain those patents. This type of accounting method does not take into account the likely fair value of the intellectual property created that can be licensed to customers and industry leaders for the 20 year life of the patents. The Company’s unique patents gives the Company the sole right to exclude others from making, using or selling its proprietary solutions. The patents also allow Ecosphere to monetize its assets for shareholders by granting local, regional and/or global field-of-use licenses to strategic, industry-specific partners around the world.

Accordingly, in the third quarter of 2013 Ecosphere retained a leading NYSE listed company in the field of intellectual property valuation, to perform an analysis for value of its patented Ozonix® and Ecos PowerCube® technology portfolios. The Company delivered the valuation in November 2013, which includes all of the potential industries and applications where Ozonix® can be used and licensed, including the global energy field-of-use, of which the shareholders of Ecosphere Technologies currently own approximately 31% of through its interest in FNES. The Valuation also includes an extensive review of all of the potential industries and applications where the Ecos Powercube® can be used and licensed throughout the world. While this valuation is subject to a number of assumptions, the Company believes that it helps to illustrate the Company’s hidden value and opportunity that exceeds \$600 million in intellectual property assets that are currently available for license through ICAP Patent Brokerage.

As noted earlier, the Company has hired ICAP Patent Brokerage as its exclusive technology broker, tasked with aggressively monetizing its intellectual property assets across a wide variety of industries and applications on a global basis.

VALUING INTELLECTUAL PROPERTY (IP)

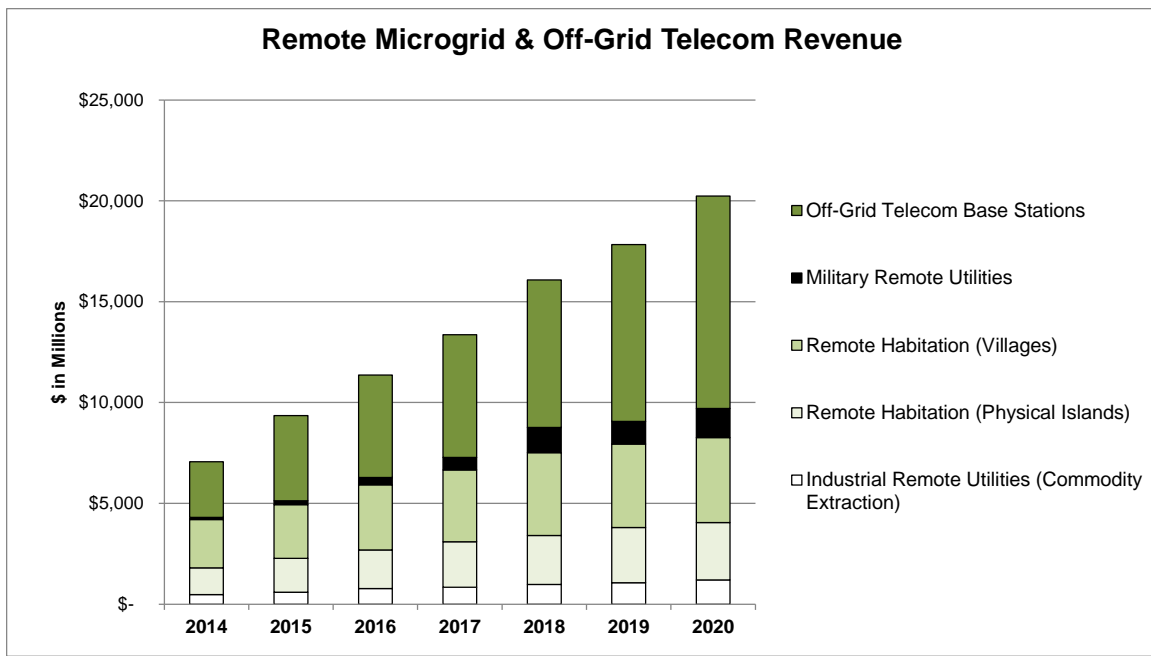
Based on the analysis conducted by a third-party consulting firm, an alternative perspective of Ecosphere (i.e., the Ozonix® and Ecos PowerCube® technology portfolios) results in a valuation of nearly \$600 million. This alternative value is based on viewing Ecosphere not solely as an innovative manufacturer of patented wastewater treatment and renewable energy machinery and equipment, but also as a technology licensing company.

Based on the analysis and various inputs and assumptions discussed herein, the cumulative risk-adjusted indication of value for Ecosphere's patented Ozonix® technology is \$484 million, with the portion of total for each sub market shown on the following table.

Target Sector	Estimated Value (\$ in millions)
Energy	\$250.9
Mining & Minerals	\$84.3
Others	\$322.7
Agriculture	
Food & Beverage	
Industrial	
Marine	
Municipal	
Other	
Total	\$657.8
Total (excluding Energy)	\$406.9
Total (including 31% of Energy)	\$484.7

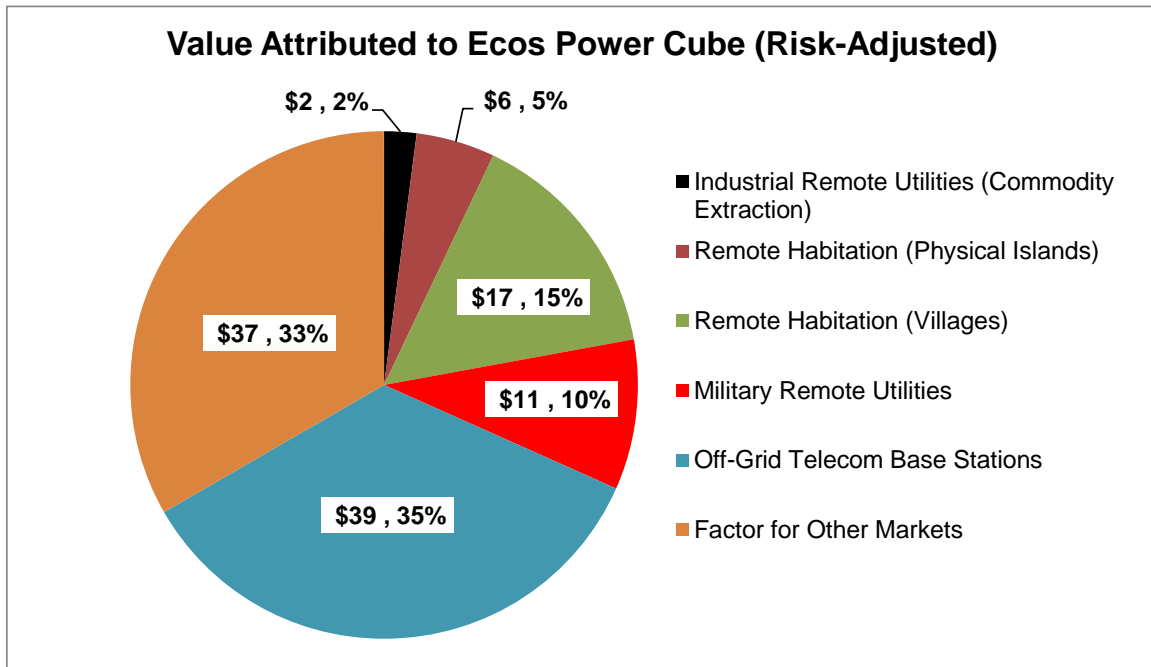
Note that the analysis is based, in part, on quantifications and estimates of the target sector market sizes; however, the Ozonix® technology's potential uses are multiple and varied and, therefore, there are other potential markets and sub-markets for which the technology could potentially be used that are not included in the current analysis. Inclusion of additional markets and sub-markets would increase the value.

As for Ecosphere's patented Ecos PowerCube® technology, the estimated attackable global markets for the explicitly quantified sub markets are, in total, forecasted to increase from \$7.1 billion in 2014 to \$20.2 billion in 2020, an annual growth rate of nearly 20 percent.



Another perspective is that the estimated global size for the solar photovoltaic market is forecasted to increase from \$100 billion in 2014 to \$134 billion in 2020, an annual growth rate of over 5 percent.

Based on the analysis and various inputs and assumptions discussed herein, the cumulative risk-adjusted indication of value for Ecosphere's patented Ecos PowerCube® technology is \$112 million, with the portion of total for each sub market shown on the following figure.



(\$ in millions)

ICAP PATENT BROKERAGE

In June 2014, the Company engaged ICAP Patent Brokerage to monetize its patented Ozonix® and Ecos PowerCube® technology portfolios and to serve as its exclusive licensing agent. ICAP is now the Company's exclusive broker, tasked with successfully licensing both technologies across a wide variety of industries and applications on a global basis.

ICAP Patent Brokerage's veteran brokers have more than 35 years of experience in monetizing and leveraging intellectual property assets, drawing on an extensive knowledge of the marketplace across multiple sectors throughout the United States, Asia, and Europe. ICAP brings credibility, stability and liquidity to the IP marketplace and is quickly becoming the intellectual property brokerage of choice for IP assets in both the primary and secondary markets. With the growing pressure on global water resources and the need for clean, renewable energy, we expect Ecosphere's patented technology portfolio to continue to expand.

FINANCIAL OVERVIEW

Revenue

The Company generated record revenues in 2011 and 2012 as its Ozonix technology was deployed in the Energy sector through a partnership with a then-exclusive licensee, and through its majority owned subsidiary, FNES. In early 2013, the Company began the final phase of its business model by selling a portion of its interest in FNES. As a result of the Company's ownership in FNES declining below 50%, and the granting of managing control to FNF, the Company no longer includes the revenues of FNES in its consolidated financial statements. The Company's reported revenues for 2013 were \$6.7 million. The Company reported revenues of \$0.1 million for the first quarter of 2014. The Company and FNES have recently executed agreements with licensees in Brasil and Canada that will result in increased revenues in the near to mid term, and continues its efforts to secure licensing arrangements in all of its target industries for both, Ozonix and Ecosphere's patented Ecos Powercube.

Liquidity

As of May 6, 2014, Ecosphere had cash on hand of approximately \$0.4 million. Ecosphere plans to continue monetizing its intellectual property, and has identified the following liquidity sources:

- Ecosphere is seeking to raise up to \$3.0 million from the sale of Convertible Notes and Warrants.
- Ecosphere plans to sell minority rights to the Ozonix® technology for use in industries outside of oil and gas exploration that management expects will result in similar realization of value as that realized by the development and sale of rights to the technology to FNES. Ecosphere owns 100% of the rights to the Ozonix® technology in the U.S. and globally to all applications outside of the energy industry, including but not limited to agriculture, food and beverage, industrial, marine and municipal wastewater treatment, and any other industry in which water is treated with traditional chemicals to clean and recycle it for human consumption and industrial consumption and industrial disposal or for re-use.
- Ecosphere's business model revolves upon the sale of intellectual property. In addition to its 30.6% interest in FNES, Ecosphere has the patent rights to all of its Ozonix® technology outside of energy. All of the various "vertical" applications are available for sale including the 30.6% of FNES. Ecosphere also recently received a patent for its Ecos PowerCube® and is seeking to sell all or a portion of it.
- Ecosphere's arbitration proceeding against Halliburton is another potential source of liquidity.

In addition to needing capital to support its operations, Ecosphere has \$1,007,500 in convertible notes payable due over the next 12 months. This consists of \$245,000 due in March 2015, \$50,000 due in September 2014 and \$712,500 due in February 2015.

ARBITRATION WITH HALLIBURTON ENERGY SERVICES

As a pioneer in the field of emerging Advanced Oxidation Processes, Ecosphere Technologies has aggressively defended its intellectual property. In February 2013, Ecosphere initiated an arbitration proceeding against Halliburton Energy Services, Inc. alleging that Halliburton took and disclosed Ecosphere's trade secrets and proprietary technical, business and strategic information that was disclosed to them during an extensive due-diligence period. Ecosphere is seeking damages and alleges that Halliburton's breached a Non-Disclosure Agreement (NDA) with Ecosphere and converted or misappropriated trade secrets. The trade secrets relate to Ecosphere's green technology business model to treat and recycle wastewater used during hydraulic fracturing of oil and gas wells. Additional details about the arbitration with Halliburton include:

- The damages Ecosphere Technologies has claimed against Halliburton Energy Services were approximately \$300 million.
- It appeared that Halliburton filed three U.S. patents at the U.S. Patent office after the discussions between Ecosphere technologies and Halliburton broke off. Those three patents were very similar to the early patents Ecosphere Technologies had filed and shared with Halliburton, using ozone as a base oxidant with UV, cavitation and electro-oxidation.
- Note that during the Ecosphere Technologies- Halliburton partnership, Ecosphere Technologies showed Halliburton how to leave the salts in produced and flowback water "without using chemicals to kill bacteria and eliminate scale" so these waters that are being injected into deep injection wells can be recycled cost effectively to frac new wells instead of depleting scarce water resources using lake, river, or municipal water.
- The American Arbitration Association (AAA) has some guidelines for the decision time based on the amount of the claim of a particular case. For a claim size of \$10 million and up, it can take anywhere from 347 days to 597 days between filing and the award. As a reminder, on February 21st, 2013, Ecosphere initiated an arbitration processing against Halliburton energy Services. As of July 30, 2014, it has been a total of 525 days since Ecosphere filed the complaint.

MANAGEMENT TEAM

Dennis McGuire, Chairman of the Board, Chief Executive Officer and Chief Technology Officer

Mr. McGuire is the founder of Ecosphere Technologies and the chief inventor of its intellectual property. Mr. McGuire currently serves as Chairman and CEO of Ecosphere Technologies, Inc. and previously served as Chief Technology Officer since July 2009. During the years 2005-2008, Mr. McGuire served in various roles as President, Chief Executive Officer, Co-Chief Executive Officer and Chief Technology Officer. Mr. McGuire became Chairman and Chief Executive Officer of Ecosphere in March 2013.

Mr. McGuire guides the development of innovative clean water processes and technologies, drawing on his two decades of research and development with the cavitating energy properties of water and using energy in water for environmental water treatment applications. Mr. McGuire has earned global recognition for his accomplishments that are now represented by approximately 35 U.S. and International patents and patent pending rights in the major markets the Company's technologies serve globally.

Under Mr. McGuire's various leadership roles the Company has received several very prestigious awards including Frost & Sullivan's 2012 North American Product Leadership Award, Bloomberg's 2013 New Energy Pioneer Award, the 2013 TechAmerica Foundation's American Technology Award in the Clean Tech/Green Tech Category and named a 2013 Energy Innovation Pioneer by IHS CERAWeek. In addition, the Environmental Protection Agency was able to verify Ecosphere's water treatment technology for Homeland Security applications under the EPA Environmental Technology Verification (ETV) program.

Mr. McGuire was recognized by Julia Moulden in "We Are The New Radicals – A Manifesto for Reinventing Yourself and Saving the World" as part of an "emerging movement of people who are reinventing their work to help save the world" in December 2007. Other awards include the London's Seatrade Award for "Countering Marine and Atmospheric Pollution" in 2002 and the International Ship Repair News "Innovation of the Year" Award for excellence and innovation in ship repair and conversion in 2001 for his patented, robotic environmental coating removal technologies, which was the world's first environmentally friendly robotic equipment for the heavy marine industry and is now the standard for environmentally safe coatings removal in shipyards around the world.

Mr. McGuire has been instrumental in forming eco-alliances with Carnival Cruise Lines, the Shaw Group, Pierce Manufacturing, BAE Systems, Williams, Newfield Exploration, BP, and Southwestern Energy. Mr. McGuire pioneered the concept of recycling frac flowback water "at the well site" in the oil and natural gas industry using high volume mobile water treatment units that reduce CO2 emissions and hauling and disposal costs for energy companies.

Dean Becker, Director

Mr. Becker has served as a Director since January 1, 2013. Since June 2009, Mr. Becker has been the Chief Executive Officer of ICAP Patent Brokerage and ICAP Ocean Tomo Auctions (collectively, "ICAP"), the world's largest intellectual property brokerage firm. From January 2006 until June 2009, Mr. Becker was the Vice Chairman of Ocean Tomo, LLC, an industry-leading provider of an array of financial products and services related to intangible assets prior to its acquisition by ICAP. Mr. Becker is a frequent global speaker on intellectual property rights and the use of patents to include or exclude competition through licensing and enforcement of government issued rights. Mr. Becker was selected as a director because he is one of the world's leading experts on monetizing intellectual property.

George Chapas, Director of New Business Development

George Chapas was appointed Director of New Business Development in January of 2010. Mr. Chapas is responsible for sales and business development to introduce and market the Company's patented Ecosphere Ozonix® technology into a multitude of industrial and municipal wastewater treatment applications. Mr. Chapas is a water industry veteran with more than 25 years of experience in water filtration systems and processes. That experience, the relationships he's formed, and knowledge of a wide range of water treatment industries provides a valuable asset to Ecosphere as it develops its strategy to build out the various wastewater treatment industries and applications for Ozonix® including but not limited to agriculture, food and beverage, industrial, mining, marine and municipal sewage water treatment. Mr. Chapas' most recent position prior to working for Ecosphere was Vice President of Sales for the Thermo Energy / Castion Corporation and formerly worked as General Manager for RGF Environmental and the Vice President of Sales and Business Development at Thermo Electron.

David Brooks, Director, Chief Financial Officer

Mr. Brooks was appointed interim Chief Financial Officer on February 5, 2013 and was elected as a director on December 13, 2013. Since November 2009, Mr. Brooks has been the Managing

Shareholder of D. Brooks and Associates CPAs, P.A., which provides Chief Financial Officer and related services to businesses on a consulting basis. From August 2008 through October 2009, Mr. Brooks was an audit director and consultant for McGladrey & Pullen, LLP (now McGladrey LLP), a large assurance, tax and consulting services company. Mr. Brooks is a Certified Public Accountant in Florida. Mr. Brooks was selected as a Director due to his financial and auditing expertise.

Michael Donn, Sr., Director, Chief Operating Officer

Michael Donn, Sr. was appointed a Director in March 2005 and was appointed Chief Operating Officer on March 27, 2008. Mr. Donn has held a number of senior executive positions with us since January 2000. As part of his duties, Mr. Donn set up and coordinated our relief effort in Waveland, Mississippi following Hurricane Katrina. Mr. Donn was the Project Manager for Ecosphere's EPA Verification testing of its Water Filtration System. From November 2006 until January 29, 2010, Mr. Donn was a director of GelTech Solutions, Inc. From 1994 to 2000, he served as President of the Miami-Dade County Fire Fighters Association, a 1,700-member employee association for which he previously served as Vice President and Treasurer beginning in 1982. His responsibilities included negotiating, lobbying at the local, state and national levels, head of the business operations for the Association, and Chairman of the Insurance Trust.

Jacqueline McGuire, Senior Vice President of Administration

Jacqueline McGuire has been Senior Vice President of Administration since January 2001 and Secretary since the Company's founding in 1998. She and her husband Dennis McGuire, Chairman of the Board and Chief Executive Officer are the Founders of Ecosphere Technologies.

RISKS

Financing Needs

If Ecosphere does not generate positive cash flow, The company will be required to engage in a future financing. Any future capital investments may dilute or materially and adversely affect the holdings or rights of the existing shareholders.

Commodity Pricing

The development of new horizontal drilling techniques and the discovery of unconventional oil and gas in new shale areas throughout the U.S. and world market have opened a significant opportunity for Ecosphere's Ozonix technology to replace traditional chemicals used to kill bacteria in waters used for hydraulic fracturing. Volatility of natural gas price may have an impact on the level of activity in horizontal drilling. If current prices decline, horizontal drilling may not be cost effective, and thus the lack of horizontal drilling activity may negatively affect the attractiveness of the Ecosphere Ozonix business in the oil and gas industry.

Litigation Risk

In February 2013, Ecosphere initiated an arbitration proceeding against Halliburton Energy Services, alleging that Halliburton took and disclosed Ecosphere's trade secrets and proprietary information. Ecosphere is seeking damages and alleges that Halliburton's breached a Non-Disclosure Agreement (NDA) with Ecosphere and converted or misappropriated trade secrets. The trade secrets relate to Ecosphere's green technology business model to treat and recycle wastewater used during hydraulic fracturing of oil and gas wells. The final hearing commenced March 3, 2014 and went through March 14, 2014 and the company is awaiting the decision. Unfavorable ruling on the arbitration proceeding may negative impact the company's business model and revenue opportunities going forward.

Changes in Legislation and Regulations

If federal and state legislation and regulatory initiatives relating to horizontal drilling are passed, it could materially and adversely affect the company's results of operations.

Competition

In its providing services to oil and gas drilling companies, FNES (Ecosphere owns 31%) face severe competition from a number of sources including service companies and various chemical companies which may adversely affect its future results of operations and financial condition.

Disclosures

Energy Tech Investor is an independent research organization. We do not recommend or solicit an investment in any particular stock or other security. We have prepared our research based upon information and sources considered to be reliable. We are compensated by the issuer. We may distribute our research through other organizations or companies. In some instances, we may be compensated by the Company in stock in the Company. Additionally, we may perform consulting or advisory services for Companies that we produce research for.