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Zacks Small-Cap Research

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Midwest Energy Emissions (MEEC-OTCQB)

Midwest Energy Emissions receives Nexus Small Business Award from Vistra Energy

Based on comparative analysis that utilizes the valuation metric of price-to-sales (P/S), an industry average P/S ratio of 3.08 on TTM sales through 3Q-2017 of $29.6 million indicates a share price target of $1.20

Current Price (02/21/18)	$0.28
Valuation	**$1.20**

OUTLOOK

Midwest Energy Emissions is well-positioned to benefit from the reduction of mercury emissions program of the EPA. The company holds patents to SEA™ Technology for the reduction of mercury emissions by coal-fired electric generating units. Dozens of EGUs continue to be highly prospective and are in various stages of the sales process. Management reaffirmed 2017 revenue guidance of $26 million, which conservatively represents current business-in-hand. In October, a $700,000 purchase order was announced for supplying product to 4 Canadian EGUs with deliveries expected to begin in early 2018.

SUMMARY DATA

52-Week High	**$1.28**
52-Week Low	**$0.20**
One-Year Return (%)	**-73.84**
Beta	**-1.54**
Average Daily Volume (shrs.)	**108,568**
Shares Outstanding (million)	**76.246**
Market Capitalization ($ mil.)	**$21.34**
Short Interest Ratio (days)	**0.006**
Institutional Ownership (%)	**0**
Insider Ownership (%)	**17**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**153.8**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/M**
P/E using 2018 Estimate	**5.6**
P/E using 2019 Estimate	**N/A**

Risk Level	**Above Average**
Type of Stock	**Small-Growth**
Industry	**Pollution Control**

ZACKS ESTIMATES

Revenue
(in millions of $)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2016	3.37 A	9.39 A	11.77 A	7.81 A	32.35 A
2017	5.43 A	7.93 A	8.45 A	5.48 E	27.29 E
2018					32.00 E
2019					

Earnings per Share
(EPS is operating earnings before non-recurring items)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2016	$0.02 A	-$0.17 A	-$0.19 A	-$0.00 A	-$0.33 A
2017	-$0.02 A	$0.01 A	$0.01 A	-$0.01 E	-$0.01 E
2018					$0.05 E
2019					

Zacks Projected EPS Growth Rate - Next 5 Years % **10**

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KEY POINTS

- The U.S. Environmental Protection Agency's Mercury and Air Toxic Standards (MATS) created a multi-billion dollar market for mercury remediation solutions.
  - Despite being legally challenged, the MATS regulations became full effective beginning on April 15, 2016. However, on April 18, 2017, EPA asked the U.S. Court of Appeals for the District of Columbia Circuit to place that litigation in abeyance. The EPA's abeyance request was granted on April 27, 2017, and beginning July 26, 2017, the EPA must file 90-day status reports. Any changes to the MATS could have a negative impact on Midwest Energy Emissions.
- Midwest Energy Emissions is **well-positioned** to benefit from the full implementation of MATS.
  - The company now **owns 42 issued patents and patents-pending** related to mercury removal processes developed by the Energy & Environmental Research Center, including SEA™ Technology.
  - SEA Technology provides an operationally-effective and cost-effective mercury emissions solution that is flexible to accommodate a broad range of configurations of coal-fired power plants fueled by varying coal types.
  - SEA Technology has been **successfully demonstrated over 50 times** at large operating power plants across the United States and Canada.
- Midwest Energy Emissions has won contracts that span **24 Electric Generating Units** (EGUs) across at least ten power plants.
  - a **West Coast utility** with two EGUs
  - a **major U.S. power producer** for 9 generating units
  - two separate utility **cooperatives in the Southwest**, each with one EGU
  - a large **northern Midwest utility** with two EGUs
  - four additional EGUs contracts awarded in early 2016
  - 3-year contract secured at another electric utility in September 2016
  - 2-year contract (valued at $5 million) with Midwest utility customer renewed in April 2017
  - 3-year contract (valued at $25 million) with largest customer renewed in August 2017
  - $700,000 purchase order for 4 Canadian EGUs to begin in January 2018
- **Expectations for the installation and operation of mercury emissions control systems**
  - The company's mercury emission control systems came online during the second quarter of 2016 as several coal-fired utilities adopted Midwest's more cost-effective mercury emissions solutions.
  - By September 2016, the 20 systems under the contract at that time were operational and under compliance.
  - The initial average EGU was estimated to approximately generate between $2.0 million and $3.0 million of revenue annually. However, after optimizing the process at each EGU under contract, the company is on average selling approximately $1.5 million in product to each EGU.
  - **Management's revenue guidance for the 2017 year** is **$26 million**, conservatively representing only current business-in-hand.
  - **Beginning in January 2018, Midwest Energy Emissions will begin supplying product to the front-end of four (4) new EGUs located in Canada.** An initial **$700,000 purchase order** has been secured.
- Midwest Energy Emissions has international **blue sky market opportunities**. The company holds the patents to SEA Technology in **Europe, Canada** and **China**, and the Minamata Convention on Mercury should bolster international demand for the company's mercury remediation solutions.
- **Management currently does not anticipate the need for raising additional capital**.
- **Alterna Capital Partners** is financially committed to Midwest Energy Emissions, currently holding a beneficial interest in 16,854,640 shares (about 22% of shares outstanding).
- **Management began holding quarterly conference calls** to review financial and operational results **in 2016**

RECENT NEWS

Midwest Energy Emissions received the Nexus Small Business Award by Vistra Energy at its Nexus Awards Recognition Reception. The Nexus Small Business Award is given to recognize excellent service and also for utilizing a diverse supply chain and workforce. Every year, Vistra Energy (the largest retailer and generator of electricity in Texas) recognizes companies that provide exceptional service to Vistra Energy and demonstrate a positive commitment to the community.

LATEST NEWS FROM 2017

Executive Summary of Third Quarter 2017 Results

Achievements:

- 3Q 2017 was another **operationally profitable quarter** (ex-change in value of warrant liability) for Midwest Energy Emissions.
- An initial **purchase order for $700,000** of product has been secured for use in supplying the front-end of **four (4) EGUs in Canada** starting January 2018.
- Midwest Energy Emissions presented at the ExPPERTS Environmental Conference in Wroclaw (Poland) on September 7th, increasing the company's visibility within the global power generation industry.
- The company is developing a high-sulfur tolerant product line which is being designed to prevent scrubber reemission events in wet scrubbers at coal-fired EGUs. The new product continues to be tested at several large coal-burning power facilities.
- Management does not anticipate the need for raising additional equity capital.
    - Working capital improved from $1.97 million to $2.79 million sequentially.

Challenges:

- Despite the pipeline of prospective customer opportunities increasing, the anticipated closing of new contracts this summer did not materialize due to an unexpected pricing response by incumbent suppliers of sorbent. The competitive pricing response also has impacted pricing in contract renewals.
- In the third quarter, revenue from product (sorbent) deliveries decreased 29.5%.
    - Company-initiated optimization efforts at each EGU have improved operating efficiencies resulting in less-than-expected product (sorbent) usage.
    - In addition, some customers lowered capacity factors, reducing the amount of product needed to achieve MATS compliance.
- The company's largest customer (with 9 EGUs under contract) announced a major reorganization, including the closing of a number of EGUs. Management now anticipates this major customer will generate less than the previously estimated $25 million in revenue during the contract's three-year term. A new estimate is anticipated to be announced by the end of the second quarter of 2018.

Third Quarter 2017 Results

On November 20, 2017, Midwest Energy Emissions reported results for the third quarter ending September 30, 2017. Total **revenues declined 28.2%** to $**8,447,967** from $11,771,418 reported in comparable quarter last year as revenue from product (sorbent) deliveries decreased 29.5%. **As the process at each specific EGU is fine-tuned, the company's customers benefit from the optimization process and enjoy operating efficiencies** (less sorbent usage). In addition, some

customers lowered capacity factors[i], reducing the amount of product needed to achieve MATS compliance. Revenue from equipment sales declined 98% to $2,975 as no new front-end or back-end product injection systems were installed during the quarter. Revenue from demonstration & consulting services increased 111% to $369,482.

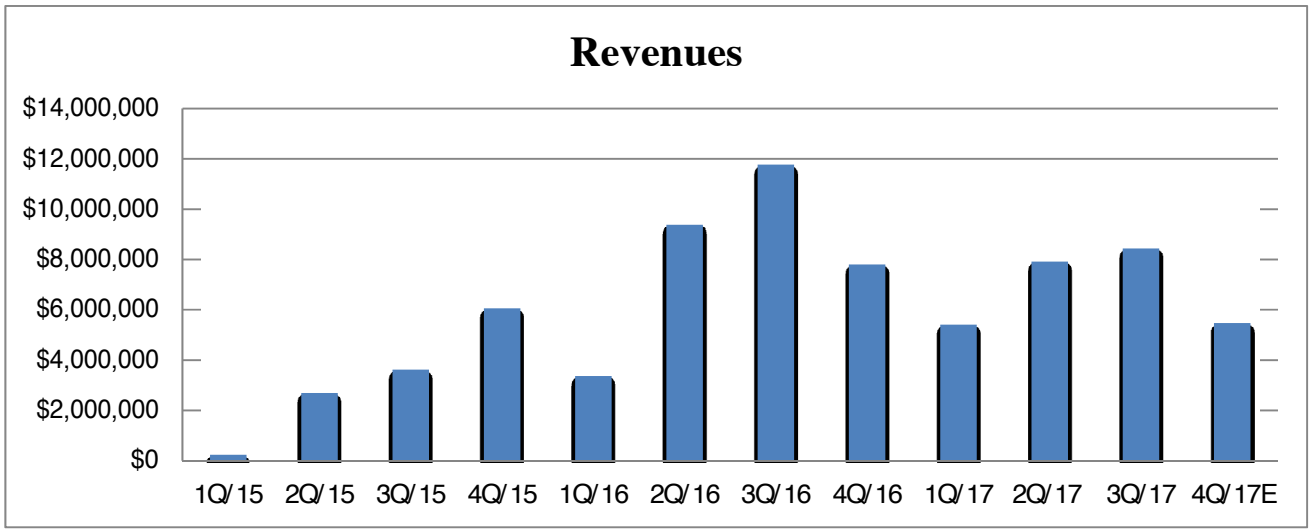
Total operating expenses decreased 26.1% to $7.42 million versus $10.03 million in the third quarter of 2016, primarily attributable to **cost of goods sold decreasing 29.6%** to $5.51 million, which is associated with the decrease in revenues during the quarter. **SG&A expenses *de*creased 13.7%** to $1.91 million versus $2.21 million. **Interest expense declined 44.3%** to $541,855 versus $972,930 during the quarter ended September 30, 2016. The **change in value of warrant liability** benefited results with a gain of $56,000 versus a loss of $9,984,541 in comparable quarter last year. A gain of $379,000 was recorded on legal settlements. As of September 30, 2017, Midwest Energy had a $500,000 net deferred tax asset and a $16,100,000 operating loss carry forward.

The company reported net income of $869,221 (or $0.01 per diluted share) versus a loss of $9,301,824 (or $0.19 per diluted share) in the third quarter of 2016. The primary driver for the dramatic improvement in net income was due to the change in value of warrant liability (a gain of $56,000 versus a loss of 9,984,541). Other factors for the improvement include the $431,075 decline in interest expense (due to the decrease in the amortization debt issuance costs and discount on notes payable from the same period in the prior year) and $379,000 gain on legal settlements.

Adjusted EBITDA decreased 31.9% YOY to $1.572 million versus $2.310 million in the comparable quarter last year. As of September 30, 2017, working capital was $2.97 million, a sequential improved from $1.97 million as of the end of the second quarter of 2017.

2017 Revenue Guidance

Management confirmed revenue guidance for the 2017 year **of $26 million**, representing conservatively only current business-in-hand.



2017 Contract Announcements

On March 7, 2017, Midwest Energy Emissions announced that the company has secured an **order for a $1 million injection system** for a redundant long-term application by an owner of a fleet of EGUs. Management is confident that the installation will lead to additional opportunities throughout this customer's fleet.

On April 4, 2017, Midwest Energy Emissions announced that a current utility customer located in the Midwest renewed its **contract valued at over $5.0 million** over the next two years. The customer has been utilizing Midwest Energy SEA Technology since 2015.

On August 21, 2017, Midwest Energy Emissions announced that the company secured a three-year contract renewal with its largest customer. The contract was anticipated to generate over $25 million during the three-year term. However, subsequently, the utility announced a major reorganization, which management anticipates will lead to generating less than the previously announced $25 million in revenue from product sales. A new estimate is anticipated to be announced by the end of the second quarter of 2018.

On October 10, 2017, the company announced that a **$700,000 purchase order** had been secured with a **Canadian customer for initial use in supplying the front-end of four (4) new EGUs**. The PO represents the first expansion to utility outside the U.S., growing the company's geographic footprint in North America.

Midwest Energy Emissions acquires SEA Technology patents from EERCF

In a **milestone event**, on April 24, 2017, Midwest Energy Emissions closed on the acquisition of all patents rights and patents pending related to the Sorbent Enhancement Additive (SEA™) Technology from the Energy & Environmental Research Center (EERCF) at University of North Dakota. The purchase price was $2,500,000 and 925,000 shares of MEEC common stock, of which 628,998 shares will be issued directly to EERCF and 296,002 shares will be issued to the inventors within 30 days. The cash payment was funded by cash-on-hand, which includes a portion of the net proceeds from the private placement that closed in November 2016.

Midwest Energy Emissions now not only owns the Technology, but also no longer is required to pay monthly license maintenance fees of $$25,000 ($300,000 annually) and annual running royalties of $100 per one megawatt (MW) of electronic nameplate capacity and $100 per three MW per hour at systems utilizing licensed products and/or processes.

SEA Technology, the company's **core IP**, provides an operationally-effective and cost-effective mercury emissions solution that is flexible to accommodate a broad range of configurations of coal-fired power plants fueled by varying coal types. Developed by researchers at the Energy & Environmental Research Center (EERC), SEA Technology utilizes the application of sorbent enhancement additives to promote the oxidation of elemental mercury in preparation for adsorption by uniquely formulated blends of sorbent products. Utilizing this Technology, Midwest Energy Emissions is able to offer at lower-cost option to utilities so that their coal-fired units can achieve compliance with MATS while maintaining the marketability of the fly ash by-product.

The portfolio of patents rights and patents pending is composed of **42 patents and patents-pending** related to mercury removal processes developed by the (EERC). The patents in the United States include:

- Sorbents and Flue Gas Additives for the Oxidation and Removal of Mercury (7,435,286)
- High-Temperature Halogen Dissociation for Mercury Control in Coal-Fired Systems (7,615,101)
- Multifunctional Abatement of Air Pollutants in Flue Gas (7,628,969)
- Sorbents for the Oxidation and Removal of Mercury (8,168,147)
- Process for Regenerating a Spent Sorbent (8,173,566)
- Mercury Control Using Moderate-Temperature Dissociation of Halogen Compounds (8,312,822)
- Process for Regenerating a Spent Sorbent (Continuation) (8,440,585)
- Sorbents for the Oxidation and Removal of Mercury (Continuation) (8,652,235)

The patent and patents pending portfolio also includes international **blue sky market opportunities** with SEA Technology patents in **Europe, Canada** and **China**.

OVERVIEW

Headquartered Lewis Center, Ohio, Midwest Energy Emissions Corp. (MEEC) provides patented mercury capture solutions for coal-power plants whose mercury emissions exceed the U.S. Environmental Protection Agency's Mercury and Air Toxic Standards (MATS). **The company has successfully commercialized its Sorbent Enhancement Additive (SEA™) Technology**, which can achieve mercury removal levels that are compliant with MATS at a significantly lower cost than other methods while preserving the quality (and hence the marketability) of fly-ash, a by-product from the coal burning process. The company holds **42 issued patents and patents-pending** related to a mercury removal processes developed by the Energy & Environmental Research Center (EERC) and has a close and mutually beneficial relationship with the EERC Foundation, which aids in the commercialization EERC's research efforts. The company's holistic **cost-competitive solution** for mercury emission control is a proven, effective technology that reduces mercury emissions to MATS-compliant levels over a wide range of plant configurations and coal types.

The EPA's **MATS have created a multi-billion dollar market for mercury remediation solutions**. MATS require that all coal-fired Electric Generating Units (EGUs) larger than 25 megawatts (MW) remove approximately 90% of mercury from their emissions beginning April 16, 2015. Many EGUs were granted one-year compliance waivers, including eleven of the initial 15 EGUs under contract to MEEC. On a plant-by plant basis, power plant operators must find an economical feasible method to upgrade existing plants in order to comply with MATS; otherwise, non-compliant plants could be forced to be decommissioned, which will affect the capacity, reliability and supply attributes of the associated electric networks.

The process of commercializing any pollution control technology or method within the utility industry is a lengthy and expensive process, which involves the migration of a technology from the laboratory to commercial-scale demonstrations and then to contract signings, installations, testing and finally commercial operations. SEA Technology has been successfully demonstrated over 50 times at large operating power plants across the United States and in Canada.

Midwest Energy Emissions is deploying what appears to be the industry's most cost-effective solution for coal power plants to comply with MATS. Management and the EERC believe that the SEA Technology process with an optimized blend of sorbents is the most efficient, cost-effective manner to capture mercury. **SEA Technology provides an approach that optimizes the mercury capture process while minimizing the cost of injected materials**. As a result, SEA Technology lessens the total amount of sorbent injected, thereby reducing the cost of MATS compliance. **The technology is also flexible**, allowing Midwest Energy's consumable products to be formulated specifically for a coal-fired unit and its coal-fuel-type. Importantly, the process has less operational impact with minimal corrosion to the plant's equipment and preserving the marketability of fly ash, an important ancillary revenue stream for power plants.

The company's primary consumable products are **SF-10** (a front-end sorbent enhancement additive) and **SB-24** (a back-end carbon sorbent). SF-10 conditions the flue gas enhancing the ability of mercury to be removed with the company's proprietary back-end sorbent products. The company also can provide a non-carbon approach with a back-end carbon-free sorbent, **SB-26**, if a customer desires.

Management is executing its plan to sign multi-year contracts, deliver and test mercury emissions removal equipment and supply sorbent for three-year contract periods. The company has been **awarded at least eight contracts encompassing 24 EGUs**. Management's strong marketing efforts resulted in many successful full-scale demonstrations since 2013, which altogether exceed 50 in number since SEA Technology was invented. However, the company has many more opportunities in its sales pipeline, especially utilities that have not yet committed to a mercury remediation solution and also companies currently under contract with competitors but dissatisfied with the high cost of their current solution.

Also, Midwest Energy Emissions has **international market opportunities**. The company holds the patents to SEA Technology in Europe, Canada and China. SEA Technology has been successfully demonstrated for a few large utilities in Canada, where raising mercury capture regulations is being contemplated. Since 2012, a nationwide mercury reduction agreement has required a 60% reduction, which will likely be raised to an 80% reduction beginning in 2018. Individual provinces may require more strict emissions control sooner. China has promulgated emission regulations, but has yet to implement mercury reductions. In October 10, 2013, 140 nations (including the US, Canada, China, Germany, Netherland and the U.K.) signed the Minamata Convention on mercury, an international treaty that recognized mercury is a chemical of global concern and addresses the reduction of emissions of mercury and mercury compounds. Long-term, there is **blue sky potential** for international demand for the company's mercury remediation solutions.

Midwest Energy Emissions has demonstrated a **technical competitive advantage** by bringing EGUs to MATS compliance in a cost-effective manner. As many coal-fired utilities are having difficulties, ranging from encountering prohibitive costs in achieving a 90% reduction in mercury emissions to having to de-rate (lower the capacity of) boilers to attain compliance, management is focused on further penetrating the fleets of existing customers as well as securing new clients (electric utilities) which are challenged and are seeking an economical solution to comply with MATS.

Midwest Energy Emissions is unique in that it has a singular focus (the mercury emissions control market), holds the patents on processes, has achieved market penetration through the commercialization of SEA™ Technology and is positioned to take advantage of further opportunities afforded by the implementation of MATS.

Many coal-fired utilities are having difficulties, ranging from encountering prohibitive costs in achieving a 90% reduction in mercury emissions to having to de-rate (lower the capacity of) a boiler to attain compliance. Electric utilities with challenged EGUs are seeking out alternative solutions in the attempt to achieve compliance with MATS. Midwest Energy is specifically targeting this **sweet spot of prospective customers**.

The benefits of new contract wins can accrue within the timeframe of a quarter. The turn time to implement Midwest Energy's SEA™ Technology is relatively short: 8-to-16 weeks, and in many cases, Midwest Energy's sorbent products can be utilized with existing back-end equipment until the custom-designed front-end system is designed and implemented.

SEA™ TECHNOLOGY

Utilizing a patented Sorbent Enhancement Additive (SEA™) Technology, Midwest Energy Emissions is able to offer at lower-cost option to utilities so that their coal-fired units can achieve compliance with MATS while maintaining the marketability of the fly ash by-product. Developed by researchers at the EERC, the company's SEA Technology utilizes the application of sorbent enhancement additives to promote the oxidation of elemental mercury in preparation for adsorption by uniquely formulated blends of sorbent products.

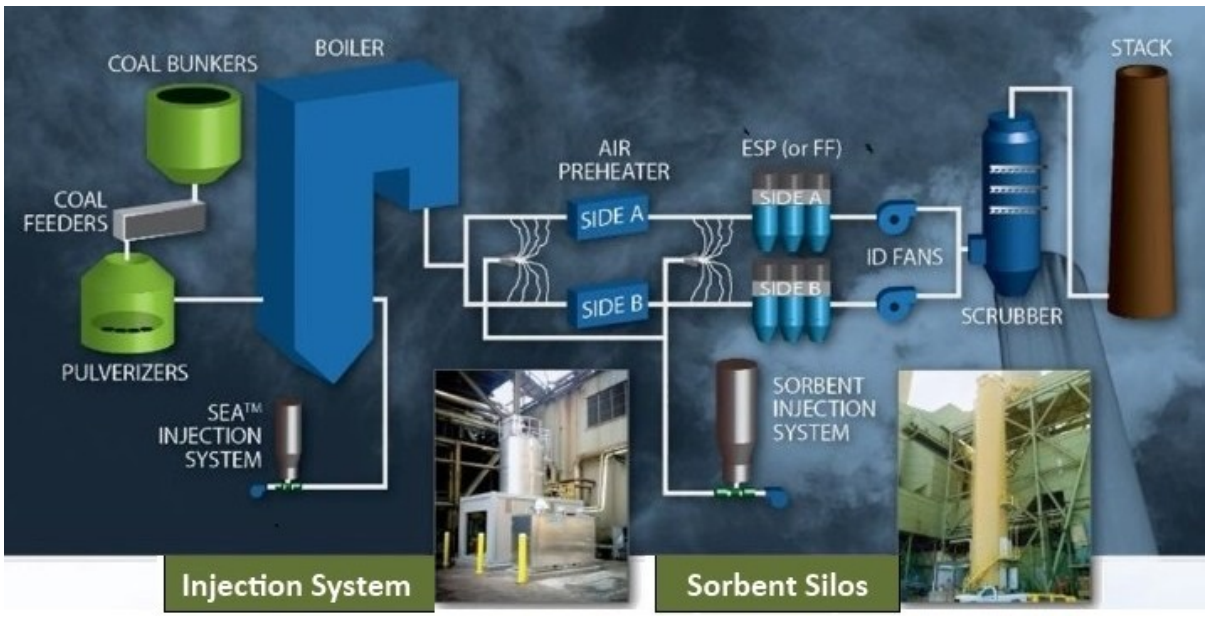
Mercury is emitted from coal-fired boilers in three basic forms: elemental mercury (Hg^0), oxidized mercury (Hg^{2+}) and particulate-bound mercury (Hg_p). **Compliance with MATS requires that the <u>total</u> of all three forms of mercury be measured and reduced.** The ratio of elemental to the oxidized forms of mercury emitted from combustion is highly dependent on the type of coal that is combusted. By and large, bituminous coal-fired boilers emit primarily oxidized mercury while the majority of mercury produced by low rank coal-fired (subbituminous and lignite) boilers is elemental mercury.[ii] The strongest factor for this generalization is that the relatively high concentrations of halogens, such as chlorine and bromine, in bituminous coals results in the oxidization of elemental mercury to form oxidized mercury, primarily the

mercuric halides ($HgCl_2$ and HBr_2). In contrast, both subbituminous and lignite coals not only have lower quantities of halogens, but also higher amounts of alkaline material (such as calcium and sodium) than bituminous coals. The halogens from the combustion of subbituminous coal and lignite have a tendency to react with the alkaline materials with the result that little halogen oxidizes the elemental mercury.[iii] Though in aggregate, roughly 60% of the mercury emitted by coal combustion is elemental mercury and 40% is oxidized mercury.[iv]

Elemental mercury is very difficult to capture and remove because, by definition, it is in its elemental form (a single atom with a neutral charge). Elemental mercury is the most difficult to remove from flue gas since it is practically insoluble in water, and hence, not typically removed by wet processes like flue gas desulfurization (FGD) systems aka scrubbers. However, **oxidized mercury** is reactive in that it more easily deposited and captured by sorbents. Through the chemical reaction by which oxidized mercury is formed, it becomes charged allowing its efficient capture by pollution control devices. It is highly soluble in water, and therefore, readily captured in wet scrubbers. **Particle-bound mercury** is condensed on the fine fly ash particles emitted by coal-fired boilers. With charged components, Hg_p sticks to surfaces and is readily removed by pollution control devices designed to remove particulates (bag houses/fabric filters, electrostatic precipitators and scrubbers) and also by activated carbon.

The use of a Brominated Activated Carbon (BAC) injection system is the most common method used today to oxidize elemental mercury, primarily since BAC is more effective than Standard Powdered Activated Carbon (PAC) for removing mercury from flue gas of boilers burning low chlorine content coal. However, the cost of operation can become uneconomical, since the injection of activated carbon sorbent is only cost-effective at capturing about 60% of the mercury emissions, at which point diminishing effectiveness is achieved by the injection of additional sorbent. For some 1,000 MW coal-fired units, the cost to achieve a 90% reduction in mercury emissions can exceed over $10 million per year.

Midwest Energy Emissions can provide a MATS-compliant process, along with custom-blended halogenated front-end sorbent enhancement additives and back-end sorbents, for an effective and cost-competitive solution for controlling emissions mercury in coal-fired units. The use of SEA Technology, namely the proprietary additives and sorbents, costs around $2.5 million annually, depending on size of the EGU, the coal being combusted and the amount of time the plant is being operated. In addition, the fly ash by-product remains marketable, which may not be the case in a BAC system. Fly ash is fine, powdery matter collected by the fabric filters and electrostatic precipitators, which is mostly utilized by the cement/concrete industry, but also for structural fills (such as embankments), the stabilization of waste materials and road bases. The sale of fly ash represents an opportunity for utilities to both increase revenues and reduce costs.



Midwest Energy Emissions **provides a process** that can be fine-tuned to achieve optimum efficiency, by tweaking not only the **location and method of injection** of products, but especially the **blend and reactivity** of sorbents. The company's solution for 90%+ mercury emissions reduction is a **two-step process** that can be fine-tuned to the unique configuration of the customer's EGU and the coal type being combusted. The **first step** involves the introduction of **flue gas conditioning products** that promote the conversion of elemental mercury to oxidized mercury and particulate-bound mercury, which are more easily captured in downstream devices.

SF-10, Midwest Energy's proprietary and patented sorbent enhancement additive flue gas conditioner, is **injected into the coal-fired boiler** by MEEC's injection system. The SF-10 immediately gasifies and migrates throughout furnace system promoting mercury oxidation. With a keen understanding of the complex interactions among elemental mercury, sorbent enhancement additives and flue gases, along with the role and impact that these various components of flue gas have on chemisorption, EERC designed SEA Technology to maximize the conversion of elemental mercury to oxidized mercury while minimizing the amount of injected sorbent enhancement additives. The location of front-end injection **optimizes the residence time** for these reactive conditioning products to oxidize the elemental mercury. Promoting mercury oxidation through catalytic processes and materials is a key feature of SEA Technology and only requires the use of a relatively small amount of sorbent enhancement additive. In addition, the amount of SF-10 being injected is adjusted to the unique requirements of each client's system to ensure benefit-to-cost performance.

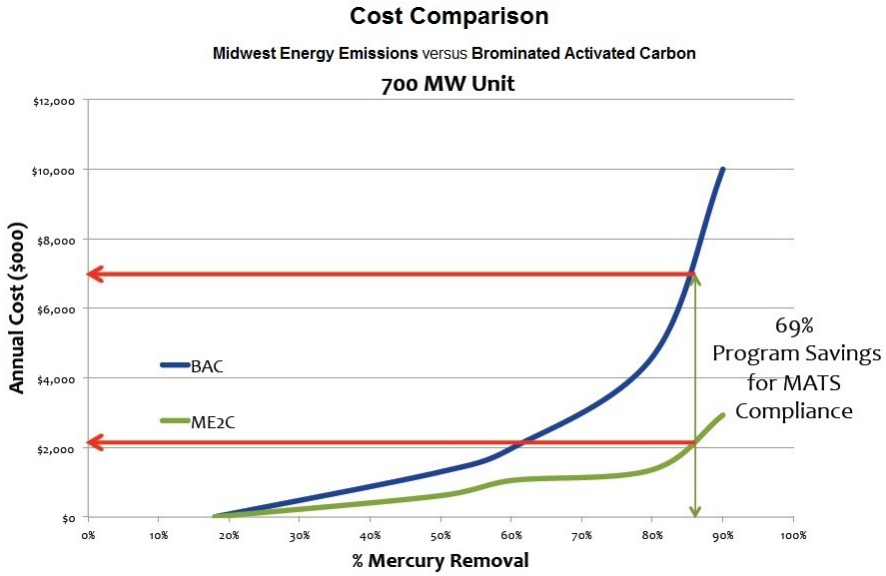
The cost of installing the **front-end injection system** has averaged around $250,000, though high-end, turn-key, automated installations can cost up to $600,000 while low-end, front-end systems can be installed for as low as $175,000. Moreover, the new Canadian purchase order will use test units at no cost. Midwest Energy Emissions sells its front-end and back-end (sorbent) products for the duration of the contract, which are generating annual product revenues for Midwest Energy Emissions in the range of $1.25-to-$1.5 million per EGU. Typically, the lower operating costs can provide a payback of less the one year on the front-end capital equipment when compared to current costs of operating a Brominated Activated Carbon system.

SEA Technology's **back-end injection system** is located up-stream (prior) to the particulate matter (PM) equipment, principally bag-house and electrostatic precipitator. Midwest Energy offers a variety of products for introduction into the mercury-contaminated flue gas stream, with the most-used product being SB-24. The fine sorbent particles of the sorbent are injected through a flue gas duct, where the now more reactive, oxidized mercury contacts the sorbent and attaches to its surface so it can be collected. The pregnant sorbent is removed from the flue gas stream, along with the fly ash, in the bag-house or electrostatic precipitator. The cost of the back-end system is in the $1.0-$1.5 million range, but an injection silo must be installed in all cases when MATS-compliance cannot be achieved. This back-end injection system is common to almost any mercury collection technology in the industry, and not unique to SEA.

SB-24 is the mainstream sorbent product of Midwest Energy Emissions and designed to provide active capture sites for mercury absorption. The proprietary blend performs well across all known boiler configurations and most coal types without impacting fly ash quality. SB-24 is the company's most effective and least cost-per-pound sorbent.

The SEA Technology process has been proven to be effective over a broad range of coal types and configurations of coal-fired power plants. Midwest Energy provides an approach that optimizes the mercury capture process while minimizing the cost of injected sorbents. The optimal combination is determined through extended parametric testing of various combinations of front- and back-end products to determine the arrangement that exhibits optimum mercury removal rate at the minimal consumption of sorbent material. Depending on the existing air pollution control equipment and the type of coal being burned, the SEA Technology system can also be tailored on-the-fly through adjustable sorbent

enhancement additive and sorbent feed rates. As a result, SEA Technology lessens the total amount of sorbent injected thereby reducing the cost of MATS compliance.



A **case study** was performed in which mercury removal and costs were monitored through parametric testing of the use of both SEA Technology proprietary sorbents and Brominated Activated Carbon at the same 700 MW EGU powered by subbituminous coal. The results (depicted in the graph below) clearly indicate that Midwest energy's SEA Technology is vastly superior to BAC in terms of cost and effectiveness.

Attaining 80%+ mercury reduction levels at low-rank-coal EGUs by injecting Powdered Activated Carbon or Brominated Activated Carbon has proven to be challenging and, in most cases, uneconomical. The higher volumes of injectant not only can increase annual injectant costs to the $5 million to $20 million range, but also potentially can creates severe operational issues, including corrosion of the plant's equipment and the degradation of the fly ash by-product, which renders it unsuitable for sale.

COMMERCIALIZATION OF SEA TECHNOLOGY

Lead times for the selection of mercury emissions control solutions are long, with power producers requiring demonstrations in order to evaluate and assess the effectiveness and costs of competing pollution control systems. Since SEA Technology is both operationally effective and cost-effective, management anticipates that demonstrations will often yield commercial contracts.

Midwest Energy's initial client was a **West Coast utility** with the contract being signed in late 2010. The utility had parametrically tested various mercury emission control systems at one of its two 730-MW Electric Generating Units (EGUs) located at a power plant in the Pacific Northwest. Midwest Energy's method of employing SEA Technology achieved a mercury capture rate that exceeded the required MATS compliance limit at the lowest cost. State mercury emissions regulations and grass roots pressure required the early implementation of the reduction of mercury emissions. The company's system was commissioned into operation in September 2011, and compliance operation began in December 2011. The company attained a significant milestone with this **first commercial installation** of SEA Technology. A **second system** was also installed at the utility's other 730-MW EGU. The systems are used when the EGUs are in operation, usually during peak demand periods of the year.

In August 2012, a major **Southwestern U.S. power producer** contracted Midwest Energy Emissions to perform a demonstration of the company's mercury removal technology at one of the power producer's generating units. After the initial demonstration in the fall, the power producer contracted for additional demonstrations on three of the larger generating units at different plant sites for the spring of 2013.

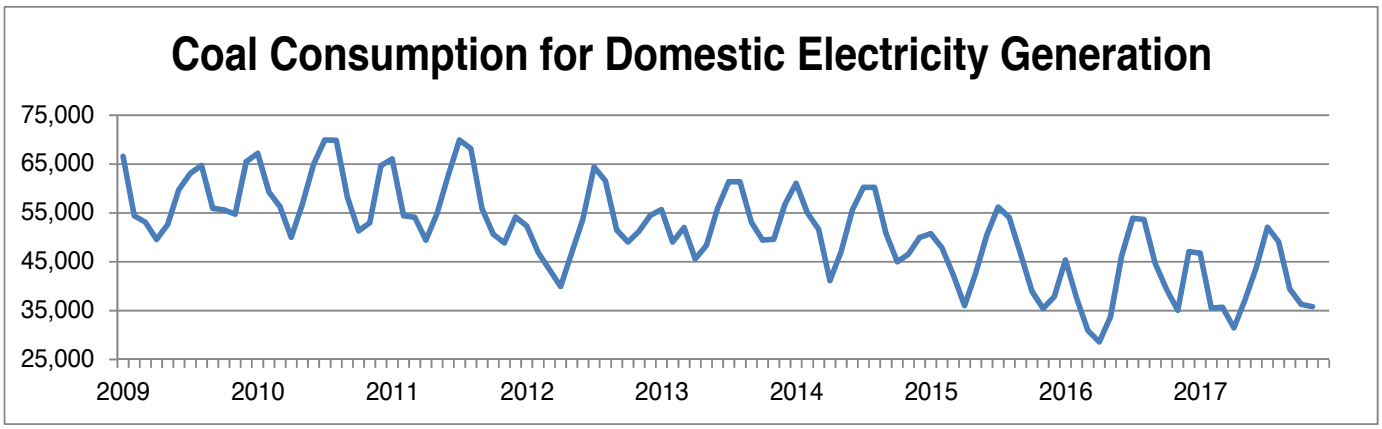
By the spring of 2013, Midwest Energy Emissions had performed 23 demonstrations of the SEA Technology in North America. In April 2013, a major **U.S. electric utility in the Midwest** contracted for a demonstration in early-summer. The Southwestern and Midwestern utilities then requested additional demonstrations, which were completed in late-summer.

By the end of 2013, Midwest Energy Emissions had conducted **31 demonstrations** of its patented SEA Technology on the power generating units of potential customers. The demonstrations were carried out across many coal types and the majority of utility system designs. In addition, management attended trade shows including participation at the EERC Air Quality Conference during October 2013 in Arlington, Virginia. Midwest Energy's CEO Alan Kelley served as Session Chair for "Hg Control – Sorbent Injection" and Marc Sylvester, VP of Sales, made a presentation entitled "MATS Compliance Programs for Mercury with Various PM Equipped Units." The company's participation cultivated interest with potential clients who were planning for compliance with mercury emissions regulations.

As a result of the management's marketing efforts since 2012 and subsequent demonstrations during 2013, 11 coal-fired electricity generation units came under contract during the first quarter of 2014, bringing the total to 13 at that time. The first commitment was from a **major U.S. power producer** for **9 generating units**, which came online in mid-2016.

The second contract announced was for a **single EGU** with a large coal-power **cooperative in the Southwest US** The installation of the SEA system, which included a newly-designed mercury-control feeder system, occurred in 2014. The company originally estimated that the sorbent supply contract should generate $2 million of revenues annually. The third commitment was a contract with a large utility **cooperative in the Southwest US** for a single EGU. The system installation generated revenues of $2.4 million in 2015, and the three-year supply contract began generating revenues in 2016.

Seasonal Consumption of Coal for Domestic Electricity Generation



In May 2014, the company's initial customer, located on the West Coast, **extended the contract for its two coal-fired electric generating units** for additional three years. The contract extension serves as an indicator of the customer's level of satisfaction with Midwest Energy's Sorbent Enhancement Additive solution. Obviously, the operational performance of SEA Technology has more than met the utility's expectations. The supply contract was originally expected to generate approximately $3 million in revenues per year. To date, revenues derived by supplying sorbent to the customer has been less than the $3 million potential due to lower reduction rates required by state regulations and the seasonal operation of the two EGUs, which are used to satisfy peak demand periods in the summer and winter.

In November 2014, a large coal-power producing **electric utility in the upper Midwest** contracted for the company's mercury emissions control systems on a **dual-unit power plant**.

In January 2016, an unnamed customer signed **contracts for four systems**, and in September 2016, a three-year contract was signed with an electric utility for new proprietary high sulfur-tolerant SEA™ product, bringing **the total number of systems under contract** to **20 EGUs**.

In April 2017, a current utility customer located in the Midwest renewed a two-year **contract** representing anticipated **revenues over $5.0 million**. The customer has been utilizing Midwest Energy SEA Technology since 2015.

In August 2017, Midwest Energy Emissions' largest customer renewed its three-year contract, which was **anticipated to generate over $25 million** during the three-year term. However, a recent major reorganization at the utility is expected to alter management's expectations. A new estimate is anticipated to be announced by the end of the second quarter of 2018.

On October 10, 2017, Midwest Energy Emissions announced that the company had secured a **$700,000 purchase order** from a **Canadian customer** for initial use in supplying the front-end of four (4) new EGUs. The first shipments of product are anticipated to begin in January 2018, which will bring **the total number of systems to 24 EGUs**.

VALUATION

The valuation methodology for pollution control/environmental remediation companies usually is based on the use of EV-to-EBITDA (Enterprise Value/Earnings Before Interest, Taxes, Depreciation and Amortization) reflecting the industry's characteristics of profitability and cash flow generation. However, if a company is experiencing negative profitability, either due to adverse fundamental circumstances or being in the early phases of the company's life cycle, **the applicable valuation metric becomes Price-to-Sales (P/S)**.

Finding comparable companies to Midwest Energy Emissions is challenging. The company is unique in that it has a singular focus (the mercury emissions control market), holds the patents to SEA Technology processes, has achieved market penetration through the commercialization of SEA Technology and is positioned to take advantage of further growth opportunities afforded by the implementation of MATS. Many companies involved in the air pollution control industry range from companies that provide commodity chemicals and/or equipment to divisions of large, diversified companies where emission controls is just a small part of total operations. These types of companies are generally valued in the lower-to-middle portions of the valuation continuum rather than in the higher-end of the spectrum where highly-focused companies with patented treatment processes tend to trade.

For example, competing mercury emission control technologies are largely being commercialized by subsidiaries of large, diversified firms where mercury emission remediation is a small part of the total company. For example, TOXECON™ is being brought to market by Hamon Research-Cottrell, a subsidiary of Hamon & Cie International SA (aka Hamon Group), a publicly-traded Belgium-based engineering, procurement and contracting company (HAMO.BR) while Mer-Cure™ is being offered by US Power Plant Laboratories and URS Group, both subsidiaries of Alstom SA (ALO.PA and ALSMY OTC Pink), a publicly-traded France-based power generation, power transmission and rail infrastructure company. Also, the Air Pollution Control business unit of FMC Environmental Solutions, a division of FMC Corp. (FMC: NYSE), offers methods of mercury emission control as an adjunct to its use of hydrogen peroxide- and sodium bicarbonate-based methods to prevent or remediate contamination of air by power utility and manufacturing industries. FMC Corp. is a diversified chemical company. Mitsubishi Hitachi Power Systems, a merger of thermal power generation businesses of Mitsubishi Heavy

Industries, Ltd. (7011) and Hitachi, Ltd. (HTHIF), is dedicated to the engineering, design and service of SCR systems for the control of NOx and SO2, and its SCR system solutions also have mercury oxidation capabilities.

Industry Comparables	Pr Chg YTD	P/E CFY	EPS Gr 5Yr Est	Gross Margin	Price/ Book	Price/ Sales	Price/ CF
MIDWEST ENERGY EMISSIONS	12.0	22.5	10.0	31.5	N/M	0.7	21.3
Industry Mean	-5.4	15.5	13.2	32.7	2.9	3.1	12.5
Industry Median	-9.4	15.6	13.9	33.4	2.7	4.3	10.7
S&P 500	1.6	18.6	10.8	N/A	12.5	4.3	18.4
ALBEMARLE CORP.	-10.4	22.4	14.8	33.4	3.1	4.3	20.4
ADV. EMISSIONS SOLUTIONS	-9.4	4.7	N/M	27.9	2.5	4.8	4.9
CABOT CORP.	3.6	15.6	10.0	23.0	2.7	1.4	10.7
CECO ENVIRONMENTAL	-14.4	7.8	15.0	36.3	0.8	0.4	1.4
IDEX CORP.	3.7	27.0	13.0	43.1	5.5	4.6	24.9
Recent Industry Acquisition		**Acquiror**					
CALGON CARBON		Kuraray	16.0	30.0	2.7	1.8	17.1
CYTEC INDUSTRIES INC.		Solvay SA	16.0	30.0	3.6	2.6	14.4
PALL CORP.		Danaher	12.5	50.2	8.3	4.8	19.3

We believe that the **valuation comparables** of Midwest Energy Emissions should Albemarle (ALB), Cabot Corp. (CBT), Calgon Carbon (CCC), CECO Environmental (CECE), Cytec Industries (CYT) and IDEX (IEX). For example, Calgon Carbon supplies value-added catalyst chemicals while CECO Environmental provides engineering, manufacturing and construction services and Fuel-Tech offers boiler optimization and air pollution control solutions. Also, comparable pollution control and value-added specialty chemical companies have comparable business models to Midwest Energy Emissions and achieve higher-than-average gross margins, generally in the 30% range, which is management's targeted margin for fully functional contracts.

The appropriate valuation methodology for Midwest Energy Emissions is based on price-to-sales (P/S) due the character of the company's enterprise, namely a small-capitalization company, currently with negative profitability, but with an expected sales profile that should grow and expand as the company's SEA Technology processes are deployed within the coal-fired utility industry and the company's patent-protected sorbent is sold into the operating customer base. Ultimately, the growing revenue stream should manifest itself into positive EBITDA and later, positive earnings when the break-even point is surpassed.

Comparable companies trade in a P/S valuation range between 4.8 and 0.4.

Also, as a reference,

- Cytec Industries was acquired by Solvay SA at 2.6 times TTM revenues (19.7 EV/EBITDA)
- Pall Corp. was acquired by Danaher (DHR) at 4.8 times TTM revenues (20.3 EV/EBITDA) and
- Calgon Carbon was acquired by Kuraray SA at 1.8 times TTM revenues (16.1 EV/EBITDA).

Utilizing an industry average P/S ratio of 3.08 on TTM sales through 3Q-2017 of $29.6 million, our **share price target is $1.20**.

We are optimistic the ultimate success of Midwest Energy Emissions. The company should experience increases in revenues over the next few years as the coal-fired plants utilize Midwest

Energy's SEA Technology to control mercury emissions in order to become compliant with the EPA's mercury emissions reduction regulations.

RISKS

- The industry addressing the reduction of mercury emissions is a market driven by governmental regulation. Any reduction in the EPA's regulations concerning mercury emissions or the timing of enforcement would significantly impact the demand for the company's products and services.
- Investors should be aware of the potential dilution from options, warrants and convertible notes as the company becomes profitable. The fully diluted share count is approximately 80.82 million shares versus 76.25 million shares outstanding (as of September 30, 2017) with an additional 10.54 million shares economically exercisable through warrants and options in the $0.65-to-$1.31 range.

INSIDER TRADING AND OWNERSHIP

Insiders hold approximately 17% of the outstanding shares of Midwest Energy Emissions. Major holders include CEO Richard A. MacPherson (10,730,905 shares or 14.1%), Director Allan Grantham (1,110,745 shares or 1.46%), CTO John Pavlish (1,035,945 shares or 1.36%) and COB Chris Greenberg (50,000 shares).

Alterna Capital Partners holds a beneficial interest in 16,854,640 shares (about 22% of shares outstanding).

BALANCE SHEET

Midwest Energy Emissions Corp.							
Income Statement							
Period ending	2011 12/31/2011	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015	2016 12/31/2016	2017 E 12/31/2017
Revenues	**458,080**	**788,072**	**1,668,472**	**2,794,206**	**12,631,919**	**32,345,540**	**27,085,021**
Costs and operating expenses:							
Cost of goods sold	443,925	233,120	370,635	1,483,379	8,629,570	23,030,404	17,750,062
Operating expenses	255,026	263,143	886,949	904,914	1,812,355	-	-
License maintenance fees	150,000	200,000	1,075,000	300,000	300,000	-	-
Marketing and development	764,046	413,816	338,379	0	0	-	-
Selling, general & administrative exp.	3,878,087	1,655,114	1,622,657	2,208,546	2,967,146	7,257,445	9,774,080
Settlement charges	-	-	-	-	1,335,394	-	-
Depreciation and amortization	23,250	417,735	176,394	387,123	390,828	-	-
Professional fees	805,852	782,121	565,851	678,725	672,269	-	-
Stock-based compensation	N/A	N/A	855,256	3,318,759	213,273	-	-
Impairment of fixed assets	-	800,000	-	-	-	-	-
Impairment of goodwill	3,555,304	-	-	-	-	-	-
Total operating expenses	**9,875,490**	**4,765,049**	**5,891,121**	**9,281,446**	**16,320,835**	**30,287,849**	**27,524,141**
Operating gain (loss)	**(9,417,410)**	**(3,976,977)**	**(4,222,649)**	**(6,487,240)**	**(3,688,916)**	**2,057,691**	**(439,120)**
Other income (expense):							
Interest (expense)	(54,257)	(261,534)	(711,647)	(2,724,506)	(6,213,897)	(4,912,855)	(2,188,704)
Letter of credit (fees)	-	-	-	-	-	(226,000)	(244,032)
Gain (loss) on disposal of fixed assets	-	(19,504)	-	-	-	-	-
Gain (loss) on forgiveness of liabilities	-	280,000	80,656	0	0	-	-
Gain (loss) on debt restructuring	-	-	-	-	-	406,791	-
Change in value of warrant liability	-	-	-	4,204,189	(3,194,189)	(14,681,311)	863,023
Debt conversion costs	-	-	-	-	(1,123,380)	0	-
Other income (expense)	-	-	-	-	-	-	-
Total other income (expense)	**(54,257)**	**(1,038)**	**(630,991)**	**1,479,683**	**(10,531,466)**	**(19,413,375)**	**(1,569,713)**
Net loss before taxes	**(9,471,667)**	**(3,978,015)**	**(4,853,640)**	**(5,007,557)**	**(14,220,382)**	**(17,355,684)**	**(2,008,833)**
Income tax benefit (expense)	-	-	-	-	(41,149)	472,669	0
Net Gain (Loss) from Continuing Ops.	**(9,471,667)**	**(3,978,015)**	**(4,853,640)**	**(5,007,557)**	**(14,261,531)**	**(16,883,015)**	**(2,008,833)**
Net gain (loss) from discontinued ops.	(25,449)	99,966	-	-	-	-	-
Net Income (Loss)	**(9,497,116)**	**(3,878,049)**	**(4,853,640)**	**(5,007,557)**	**(14,261,531)**	**(16,883,015)**	**(2,008,833)**
Net loss per share:							
Basic and diluted loss per share	**(0.32)**	**(0.12)**	**(0.14)**	**(0.13)**	**(0.32)**	**(0.33)**	**(0.03)**
Wgted avg. shares - basic & diluted	29,331,788	33,136,492	34,283,631	39,140,243	44,160,298	50,646,328	74,915,092

PROJECTED INCOME STATEMENT & BALANCE SHEET

Midwest Energy Emissions Corp.							
Income Statement							
	2011	2012	2013	2014	2015	2016	2017 E
Period ending	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017
Revenues	**458,080**	**788,072**	**1,668,472**	**2,794,206**	**12,631,919**	**32,345,540**	**27,289,725**
Costs and operating expenses:							
Cost of goods sold	443,925	233,120	370,635	1,483,379	8,629,570	23,030,404	18,048,151
Operating expenses	255,026	263,143	886,949	904,914	1,812,355	-	-
License maintenance fees	150,000	200,000	1,075,000	300,000	300,000	-	-
Marketing and development	764,046	413,816	338,379	0	0	-	-
Selling, general & administrative exp.	3,878,087	1,655,114	1,622,657	2,208,546	2,967,146	7,257,445	8,808,579
Settlement charges	-	-	-	-	1,335,394	-	-
Depreciation and amortization	23,250	417,735	176,394	387,123	390,828	-	-
Professional fees	805,852	782,121	565,851	678,725	672,269	-	-
Stock-based compensation	N/A	N/A	855,256	3,318,759	213,273	-	-
Impairment of fixed assets	-	800,000	-	-	-	-	-
Impairment of goodwill	3,555,304	-	-	-	-	-	-
Total operating expenses	**9,875,490**	**4,765,049**	**5,891,121**	**9,281,446**	**16,320,835**	**30,287,849**	**26,856,729**
Operating gain (loss)	**(9,417,410)**	**(3,976,977)**	**(4,222,649)**	**(6,487,240)**	**(3,688,916)**	**2,057,691**	**432,996**
Other income (expense):							
Interest (expense)	(54,257)	(261,534)	(711,647)	(2,724,506)	(6,213,897)	(4,912,855)	(2,166,057)
Letter of credit (fees)	-	-	-	-	-	(226,000)	(219,056)
Gain (loss) on disposal of fixed assets	-	(19,504)	-	-	-	-	-
Gain (loss) on forgiveness of liabilities	-	280,000	80,656	0	0	-	-
Gain (loss) on debt restructuring	-	-	-	-	-	406,791	-
Change in value of warrant liability	-	-	-	4,204,189	(3,194,189)	(14,681,311)	919,023
Debt conversion costs	-	-	-	-	(1,123,380)	0	-
Other income (expense)	-	-	-	-	-	-	-
Total other income (expense)	**(54,257)**	**(1,038)**	**(630,991)**	**1,479,683**	**(10,531,466)**	**(19,413,375)**	**(1,466,090)**
Net loss before taxes	**(9,471,667)**	**(3,978,015)**	**(4,853,640)**	**(5,007,557)**	**(14,220,382)**	**(17,355,684)**	**(1,033,094)**
Income tax benefit (expense)	-	-	-	-	(41,149)	472,669	0
Net Gain (Loss) from Continuing Ops.	**(9,471,667)**	**(3,978,015)**	**(4,853,640)**	**(5,007,557)**	**(14,261,531)**	**(16,883,015)**	**(1,033,094)**
Net gain (loss) from discontinued ops.	(25,449)	99,966	-	-	-	-	-
Net Income (Loss)	**(9,497,116)**	**(3,878,049)**	**(4,853,640)**	**(5,007,557)**	**(14,261,531)**	**(16,883,015)**	**(1,033,094)**
Net loss per share:							
Basic and diluted loss per share	**(0.32)**	**(0.12)**	**(0.14)**	**(0.13)**	**(0.32)**	**(0.33)**	**(0.01)**
Wgted avg. shares - basic & diluted	29,331,788	33,136,492	34,283,631	39,140,243	44,160,298	50,646,328	75,142,412

Midwest Energy Emissions Corp.

Income Statement Period ending	2015 12/31/2015	1Q 2016 3/31/2016	2Q 2016 6/30/2016	3Q 2016 9/30/2016	4Q 2016 12/31/2016	Year 2016 12/31/2016
Revenues:						
Product sales	5,028,184	2,837,628	6,872,000	11,453,000	7,757,423	28,920,051
Equipment sales	6,939,412	164,400	2,391,000	143,000	651	2,699,051
Demonstration and consulting services	664,323	371,283	129,000	175,000	51,155	726,438
Total revenues	**12,631,919**	**3,373,311**	**9,392,209**	**11,771,418**	**7,808,602**	**32,345,540**
Costs and operating expenses:						
Cost of goods sold	10,764,835	2,547,187	7,304,197	7,821,028	5,357,992	23,030,404
Selling, general & administrative expenses	4,220,606	1,110,591	1,667,827	2,213,849	2,265,178	7,257,445
Settlement charges	1,335,394	-	-	-	-	-
Total operating expenses	**16,320,835**	**3,657,778**	**8,972,024**	**10,034,877**	**7,623,170**	**30,287,849**
Operating gain (loss)	**(3,688,916)**	**(284,467)**	**420,185**	**1,736,541**	**185,432**	**2,057,691**
Other income (expense):						
Interest (expense)	(6,213,897)	(2,073,144)	(1,032,949)	(972,930)	(833,832)	(4,912,855)
Letter of credit (fees)	-	(42,667)	(60,666)	(61,333)	(61,334)	(226,000)
Gain (loss) on disposal of fixed assets	-	-	-	-	-	-
Gain (loss) on forgiveness of liabilities	0	-	-	-	-	-
Gain (loss) on debt restructuring	-	-	-	-	406,791	406,791
Change in value of warrant liability	(3,194,189)	3,309,400	(7,566,000)	(9,984,541)	(440,170)	(14,681,311)
Debt conversion (costs)	(1,123,380)	-	-	-	-	-
Other income (expense)	-	-	-	-	-	-
Total other income (expense)	**(10,531,466)**	**1,193,589**	**(8,659,615)**	**(11,018,804)**	**(928,545)**	**(19,413,375)**
Net loss before taxes	**(14,220,382)**	**909,122**	**(8,239,430)**	**(9,282,263)**	**(743,113)**	**(17,355,684)**
Income tax benefit (expense)	(41,149)	(828)	(3,383)	(19,561)	496,441	472,669
Net Gain (Loss) from Continuing Ops.	**(14,261,531)**	**908,294**	**(8,242,813)**	**(9,301,824)**	**(246,672)**	**(16,883,015)**
Net gain (loss) from discontinued ops.	-	-	-	-	-	-
Net Income (Loss)	**(14,261,531)**	**908,294**	**(8,242,813)**	**(9,301,824)**	**(246,672)**	**(16,883,015)**
Net loss per share:						
Basic and diluted loss per share	**(0.32)**	**0.02**	**(0.17)**	**(0.19)**	**(0.00)**	**(0.33)**
Wgted avg. shares - basic & diluted	44,160,298	47,358,618	47,358,618	47,918,064	60,125,548	50,646,328
Adjusted EBITDA	**(1,200,000)**	**16,000**	**1,053,000**	**2,310,000**	**721,000**	**4,100,000**

Income Statement Period ending	2016 12/31/2016	1Q 2017 3/31/2017	2Q 2017 6/30/2017	3Q 2017 9/30/2017	4Q E 2017 12/31/2017	Year Est. 2017 12/31/2017
Revenues:						
Product sales	5,028,184	5,284,234	7,112,722	8,075,510	5,430,196	25,902,662
Equipment sales	6,939,412	7,160	776,946	2,975	3,000	790,081
Demonstration and consulting services	664,323	136,000	41,500	369,482	50,000	596,982
Total revenues	**32,345,540**	**5,427,394**	**7,931,168**	**8,447,967**	**5,483,196**	**27,289,725**
Costs and operating expenses:						
Cost of goods sold	23,030,404	3,785,922	4,995,776	5,509,204	3,757,249	18,048,151
Selling, general & administrative expenses	7,257,445	2,694,282	2,313,357	1,910,020	1,890,920	8,808,579
Settlement charges	-	-	-	-	-	-
Total operating expenses	**30,287,849**	**6,480,204**	**7,309,133**	**7,419,224**	**5,648,168**	**26,856,729**
Operating gain (loss)	**2,057,691**	**(1,052,810)**	**622,035**	**1,028,743**	**(164,972)**	**432,996**
Other income (expense):						
Interest (expense)	(4,912,855)	(540,475)	(544,918)	(541,855)	(538,809)	(2,166,057)
Letter of credit fees	(226,000)	(60,000)	(60,667)	(52,667)	(45,722)	(219,056)
Gain (loss) on disposal of fixed assets	-	-	-	-	-	-
Gain (loss) on forgiveness of liabilities	-	-	-	-	-	-
Gain (loss) on debt restructuring	406,791	-	-	-	-	-
Change in value of warrant liability	(14,681,311)	208,000	655,023	56,000	0	919,023
Debt conversion costs	-	-	-	-	-	-
Gain on legal settlements	-	-	-	379,000		
Other income (expense)	-	-	-	-	-	-
Total other income (expense)	**(19,413,375)**	**(392,475)**	**49,438**	**(159,522)**	**(584,531)**	**(1,466,090)**
Net loss before taxes	**(17,355,684)**	**(1,445,285)**	**671,473**	**869,221**	**(749,503)**	**(1,033,094)**
Income tax benefit (expense)	472,669	0	0	0	0	0
Net Gain (Loss) from Continuing Ops.	**(16,883,015)**	**(1,445,285)**	**671,473**	**869,221**	**(749,503)**	**(1,033,094)**
Net gain (loss) from discontinued ops.	-	-	-	-	-	-
Net Income (Loss)	**(16,883,015)**	**(1,445,285)**	**671,473**	**869,221**	**(749,503)**	**(1,033,094)**
Net loss per share:						
Basic and diluted loss per share	**(0.33)**	**(0.02)**	**0.01**	**0.01**	**(0.01)**	**(0.01)**
Wgted avg. shares - basic & diluted	50,646,328	73,585,727	74,493,909	75,865,678	76,624,335	75,142,412
Adjusted EBITDA	**(1,200,000)**	**145,000**	**1,293,000**	**1,572,000**	**506,286**	**3,516,286**

HISTORICAL STOCK PRICE



DISCLOSURES

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[i] The capacity factor of a generating unit is the ratio between the amount of energy that a plant actually produces and the maximum amount of energy that it could produce for the same period of time. Managing Large-Scale Penetration of Intermittent Renewables, An MIT Energy Initiative Symposium April 20, 2011p. 17.
[ii] Control of Mercury Emissions from Coal-fired Electric Utility Boilers, U.S. Environmental Protection Agency, March 2004.
[iii] Process Optimization Guidance for Reducing Mercury Emissions from Coal Combustion in Power Plants, United Nations Environment Programme, Division of Technology, Industry and Economics, November 2010, page 13.
[iv] Bowen, Brian, Basic Mercury Data & Coal Fired Power Plants, Indiana Center for Coal Technology Research, August 2007, Slide 4.