ME2C

Midwest Energy Emissions Corp

# Reaffirming Our Position Across the U.S. Coal-Fired Power Fleet

Investor Presentation | December 2020

# Legal Disclosure

This presentation contains “forward-looking statements” as defined in Section 21E of the Securities Exchange Act of 1934, as amended, that are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and reflect our current expectations regarding our future growth, results of operations, cash flows, performance and business prospects, and opportunities, as well as assumptions made by, and information currently available to, our management. We have tried to identify forward-looking statements by using words such as “anticipate, “believe,” “plan,” “expect,” “intend,” “will,” and similar expressions, but these words are not the exclusive means of identifying forward-looking statements.

These statements are based on information currently available to us and are subject to various risks, uncertainties, and other factors, including, but not limited to, risks discussed in the Company’s filings with the SEC and those discussed under the caption “Risk Factors” in the Company’s 2019 Form 10-K. These risks could cause our actual growth, results of operations, financial condition, cash flows, performance and business prospects and opportunities to differ materially from those expressed in, or implied by, these statements. Except as expressly required by the federal securities laws, we undertake no obligation to update such factors or to publicly announce the results of any of the forward-looking statements contained herein to reflect future events, developments, or changed circumstances or for any other reason. Investors are cautioned that all forward-looking statement involve risks and uncertainties, including those detailed in $ME_2C$’s filings with the Securities and Exchange Commission.

This presentation also contains estimates and other statistical data made by independent parties and by the Company relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. Neither the Company nor any other person makes any representation as to the accuracy or completeness of such data or undertakes any obligation to update such data after the date of this presentation. In addition, the Company’s potential market share, projections, assumptions, and estimates of the Company’s future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors. These and other factors could cause results or outcomes to differ materially from those expressed in the estimates made by the Company.

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*Company Overview*

# Our Company

**Midwest Energy Emissions Corp. (OTCQB: MEEC) is a leading environmental technologies company delivering patented and proprietary solutions to the global power industry.**

$ME_2C$'s patented Sorbent Enhancement Additive (SEA®) technology is a leading approach to mercury emissions capture currently in use at nearly half of the coal-fired power across the U.S. fleet

SEA® provides numerous ESG benefits not seen with alternative mercury capture technologies, including using less product, capturing mercury more efficiently, maintaining the quality of byproducts for beneficial use, and improving overall plant operations.

| OTCQB | MEEC |
|---|---|
| Share Price (11/30/2020) | $0.32 |
| Market Cap (11/30/2020) | $24.9M |
| Cash (9/30/2020) | $0.3M |
| Shares Outstanding (09/30/2020) | 77.7M |
| Insider Ownership | 20.7% |
| Headquarters | Corsicana, TX |

## Key Highlights

- **Large Addressable Market:** Mercury capture for the coal-fired industry remains a significant and stable business annually in the U.S.
- **Litigation Momentum, a Possible "Domino Effect": Nearly half of U.S. coal-fired power plants are infringing on the Company's technology**. After having initiated patent litigation in U.S. federal court against certain defendants in July 2019, $ME_2C$ has entered into agreements that resolved all claims against two major defendants that allow for profitable supply agreements and other contingencies with these major power producers.
- **Recurring, High-Margin Revenue Model:** Patent license agreements and/or recurring product supply agreements are positioning our company to a return of substantial growth.
- **Stable Customer Base Over Medium & Long-Term:** U.S. coal-fired power plants will continue to play vital role in the national power grid for at least the next decade.
- **Experienced Management Team & Capital Structure:** Deep technical expertise with a "paid for" infrastructure capable of supporting $100M+ per year in product supply revenue.

*Mercury Capture Technologies*

# SEA® Technologies in Use Throughout The Coal-fired Market

**$ME_2C$'s patented SEA® technologies prevail as the leading approach to mercury emissions capture across the U.S. coal-fired fleet**

- The patented, 2-part system has been adopted by 44% of U.S. coal-fired power plants independent of $ME_2C$
- SEA® technologies were created by the EERC (Energy Environmental Research Center) at the University of North Dakota in the early 2000s under the direction of John Pavlish, $ME_2C$'s Chief Technology Officer
- Since the early 2000s, the SEA system has been tested at hundreds of power plants across the U.S.
- SEA Technologies are a proven system to consistently and effectively capture mercury emissions using less material than other technologies while providing numerous plant operations improvements and balance of plant impact

### Infrastructure Alternative
*Scrubber & SCR Combo*

- Large, complex, and capital-intensive systems with extended plant disruptions
- Hundreds of millions of dollars for a medium Electrical Generation Unit
- Modest mercury capture impact
- Requires sorbent add-on technology and other additives

### Other Sorbent Alternative
*Powdered or Bromine Activated Carbon*

- Reduces mercury emissions up to 70% with minimal material required
- Over 70% of installations are utilizing $ME_2C$'s process to optimize cost and effectiveness
- Can cause fly ash and balance of plant issues
- Costs can range from $2M to $10M/year

### $ME_2C$'s SEA® Technologies
*Sorbent Enhanced Additives*

- Maximum efficiency in use of materials
- Allows for >90% mercury removal
- Least plant disruption
- Will maintain fly ash salability
- Most economical, typically 40-50% less than other sorbent alternatives, greater savings for utilities

** SCR: Selective Catalytic Reduction; PAC: Powdered Activated Carbon; BAC: Brominated Activated Carbon*

# Defense of Intellectual Property Market Opportunity

*What This Means For Investors*

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*Defense of Intellectual Property Market Opportunity*

# Developments in IP Lawsuit: Focus on Business Supply Agreements Creating Domino Effect with Infringers

- **In July 2019**, $ME_2C$, with its legal team at Caldwell Cassady & Curry P.C., an IP law firm based in Dallas, Texas, filed a patent infringement suit against 40+ defendants in an effort to defend the Company's IP and protect shareholder value. Defendants in this case include utilities as well as refined coal operators.
- **In July 2020**, $ME_2C$ entered into a multi-year, fleetwide license and supply agreement with one of the largest defendants and a long-term customer, Vistra Corp. With a commercial agreement reached, the customer has been dismissed from the lawsuit.
- **In November 2020,** $ME_2C$ and American Electric Power (AEP), a defendant and major U.S. power producer, entered into an agreement providing AEP a non-exclusive license to certain $ME_2C$ patents for use in connection with AEP's coal-fired power plants. The agreement includes AEP's dismissal from the lawsuit and their dismissal of the IPR filing.
- Caldwell Cassady & Curry P.C. are actively defending our patent claims across the United States fleet, covering hundreds of coal-fired boilers, which amount to **44% of the coal-fired fleet, dependent on our patented process in their current operations.**

**We believe that organic growth and significant supply revenue can be obtained focused on 200+ infringing boilers in operation nationwide.**

"With a strong infrastructure, we have the capacity and resources to accommodate organic growth in our supply business moving into 2021."

*– Richard MacPherson, President & CEO, $ME_2C$, AEP Press Release, December 1, 2020*

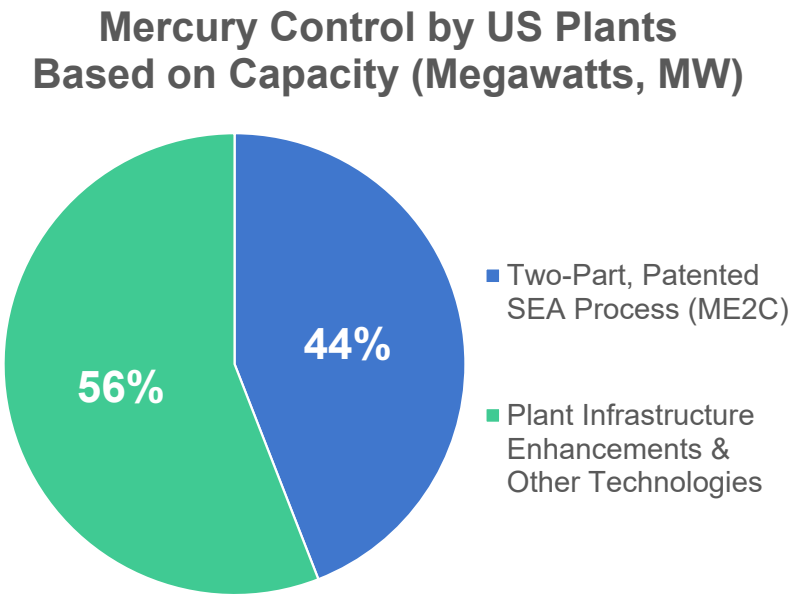
*Value of $ME_2C$ Mercury Control Sorbent Enhancement Technologies*

# Potential Market Share of SEA® of $ME_2C$ Technologies

| *Potential Market | |
|---|---|
| Units at Power Plants Using $ME_2C$ Technologies | 200 |
| Capacity of These Units | 77,525 MW |

**Based on U.S. Energy Information Administration (EIA) Data*

- $ME_2C$ is confident that up to 200 units are using our patented, SEA® technologies.
- These infringing units would be seriously challenged to remain within federal and state mercury emissions regulations without the use of our patented SEA® process.
- **There is no other technology available today that is more effective than the SEA® process in terms of emissions capture, cost savings, or achieving overall plant improvements**




- **Coal-fired power market remains stable across the U.S. through 2025 due to federal and state regulations mandated by the EPA**
- **States must adhere to [2]"best system emissions reduction" by Spring 2022**

[2] https://www.epa.gov/sites/production/files/2019-07/documents/ace_overview_presentation_july2019.pdf

# Projected Revenue Assumptions

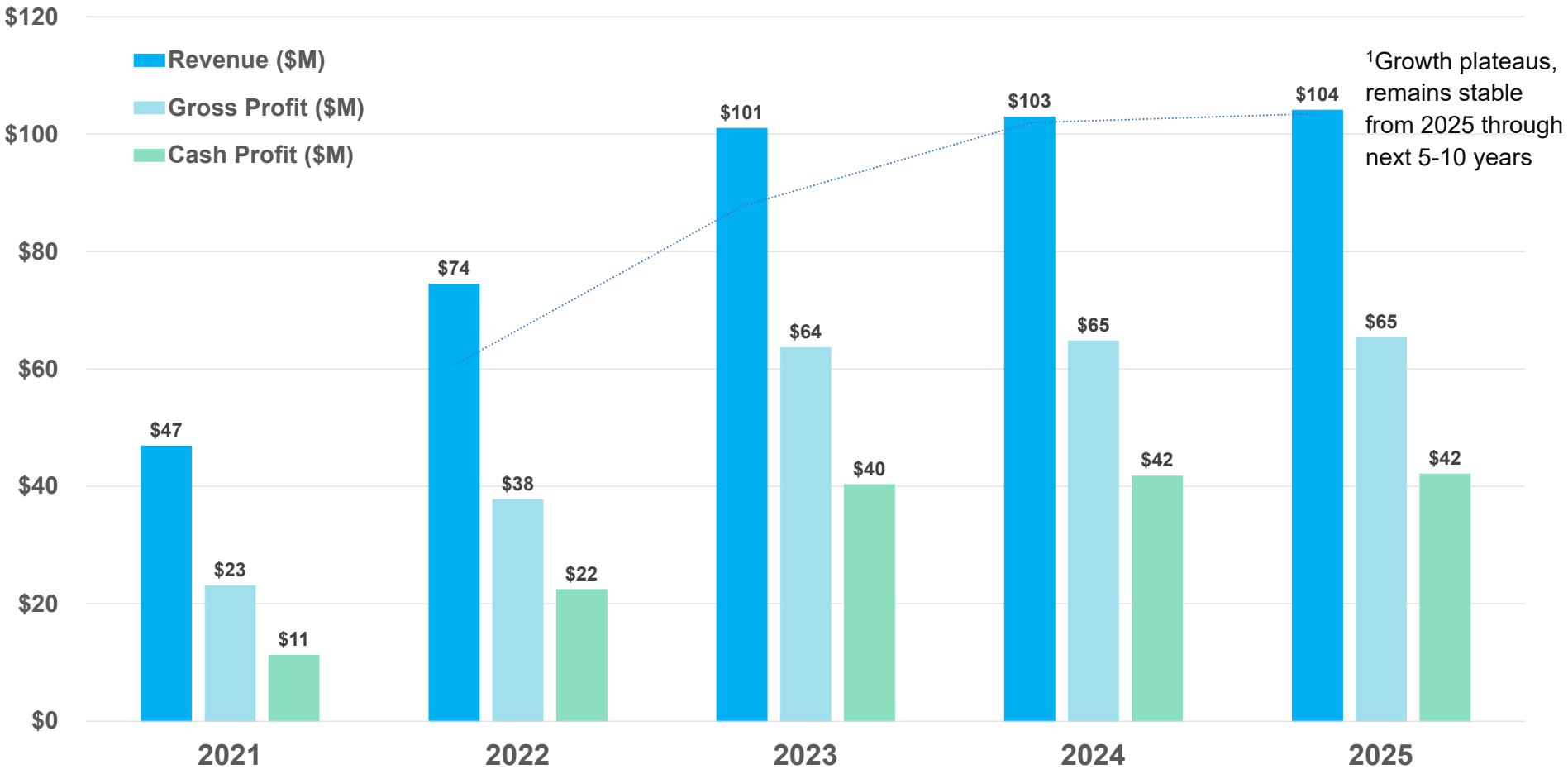
**Estimated New Business Revenue Assumptions:**

- Estimated revenue calculated at 44% of estimated MWh generation minus current customers
- 70% of customers enter into supply/licensing contracts as follows:
  - 2020 5%
  - 2021 55%
  - 2022 40%
- New customer revenue is split 50/50 between license revenue and product revenue
- Long-term litigation proceeds from approximately 30% of defendants

*DISCLAIMER: The Company's potential market share, projections, assumptions, and estimates of the Company's future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors. These and other factors could cause results or outcomes to differ materially from those expressed in the estimates made by the Company.*

*Value of $ME_2C$ Mercury Control Sorbent Enhancement Technologies*

# Potential Recurring Revenue for $ME_2C$ through 2025 & Beyond




[1]Growth plateaus, remains stable from 2025 through next 5-10 years

[1]U.S Energy Information Administration (EIA), *Annual Energy Outlook 2019 With Projections Through 2050*, January 2019

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*Company Overview: Positioned for Significant Growth Through 2025*

# Infrastructure to Support $100M+ in Potential Annual Revenue

## Strategic Investments in Our Growth Completed in 2017

- New Manufacturing & Distribution Center in Texarkana is ***completely paid for*** by $ME_2C$
- This infrastructure is being commissioned ready to meet the expected upturn in demand starting January 2021 as we move forward with the monetization of our patent position through new license and/or supply agreements.

***Infrastructure Investments: Modern, Innovative Equipment***

# Key Takeaways & Future Opportunities

- **Large Addressable Market:** Significant coal-fired mercury emissions capture market that remains stable in the U.S. through 2030
- **Strong IP Portfolio:** Covering a catalogue of patented technologies across North America through the next decade
- **Litigation Momentum, a Possible "Domino Effect":** Nearly half of U.S. coal-fired power plants are infringing on the Company's technologies, with agreements already reached with two major defendants resolving all claims against such defendants and paving the way for a domino effect for infringers to convert to our supply chain or obtain a patent license
- **Recurring, High-Margin Revenue Model:** Either a patent license or a recurring product supply agreement should position the Company for a return to strong growth as these power plants, which we believe depend on our technologies for regulatory compliance, acknowledge our patented position.
- **Stable Customer Base Over Medium-Term:** *U.S. coal-fired power plants will continue to play a vital role in the national power grid for at least the next decade and beyond
- **Value Recognition – the Organic Growth Path to Uplisting:** $ME_2C$ continues to focus on developing strong business, monetizing its patented position across the fleet, which could result in an uplisting to a major exchange in 2021

*Based on U.S. Energy Information Administration (EIA) Data

# Leadership Team

**Richard MacPherson**
*President, CEO, Director*

- $ME_2C$ founder who successfully led the early development and commercialization of the firm's technologies.
- Over 25+ years in Executive Management roles across Canada and the U.S. for various industries, including communications, industrial production, and internet marketing firms.

**Jami L. Satterthwaite, CPA**
*Chief Accounting Officer*

- CPA specializing in process design and implementation with a focus on accuracy and efficiency.
- Accounting system customization, consultation, and training.
- Background in research consultation and compliance for state and federal taxation.
- Experience in budget development, management, presentation, and legislative analysis
- CPA Practice Advisor 40 under 40 Honoree (2015).

**John Pavlish**
*Senior VP, Chief Technology Officer*

- International expert with 25+ years in mercury technology.
- Inventor of multiple patented mercury control technologies with commercial applications.
- Prior industry experience includes Energy & Environmental Research Center, Director of Center for Air and Toxic Metals, and Black & Veatch Unit Leader

**James Trettel**
*Vice President of Operations*

- Mechanical Engineer and material handling expert.
- Senior project management background with expertise in coal utilities and supply chain.

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