Research Report – Update

Investors should consider this report as only a single factor in making their investment decision.

ME2C Environmental

Speculative Buy

John Nobile
April 13, 2022

MEEC $0.43 — (OTC)

	2020A	2021A	2022E	2023E
Revenues (million)	$8.2	$13.0	$20.0	$30.0
Earnings (loss) per share	$(0.07)	$(0.04)	$(0.01)	$0.02

52-Week range	$1.39 – $0.25	Fiscal year ends:	December
Common shares out as of 4/5/22	89.1 million	Revenue per share (TTM)	$0.15
Approximate float	63.4 million	Price/Sales (TTM)	2.9X
Market capitalization	$39 million	Price/Sales (2023)E	1.6X
Tangible book value/share	$(0.11)	Price/Earnings (TTM)	NMF
Price/tangible book value	NMF	Price/Earnings (2023)E	22X

ME2C Environmental, also known as Midwest Energy Emissions Corp., headquartered in Corsicana, Texas, is an environmental services and technology company specializing in mercury emission control technologies.

Key investment considerations:

Reiterating Speculative Buy rating on ME2C Environmental but lowering our twelve-month price target to $1.50 per share from $2.00 based on a reduced multiple applied to our 2023 revenue per share projection.

The company's mercury emissions sorbent technology has been gaining new supply and licensing business. ME2C has obtained new license agreements and renewed supply contracts with multiple coal-fired utilities for mercury emissions capture. The company also gained additional new product supply business from existing licensees of its patented technologies.

ME2C initiated outreach to multiple new utilities believed to be infringing on its patented technologies in order to secure new license and/or product supply agreements. The company also received approval from the District Judge to continue its lawsuit against 16 refined coal entities with discovery underway.

During 1Q22, ME2C identified in-field testing partners for its new rare earth element (REE) sorbent technology in preparation of commercialization efforts, planned for 2022. The second phase of lab testing that was completed through Penn State University's College of Earth and Mineral Sciences introduced real-world environmental samples (acid mine drainage sludge and coal ash) to the company's sorbent technology.

We project 2022 revenue increasing 53.7% to $20 million and a loss of $(0.01) per share. We previously projected revenue of $29 million and EPS of $0.04. Our revised forecast reflects company guidance.

We project 2023 revenue increasing 50% to $30 million and EPS of $0.02. Continued growth in license and product revenue related to the company's SEA technology along with the expected commercialization of the company's REE technology should help drive revenue growth.

ME2C reported (4/5/22) 4Q21 revenue increased 14.8% to $2.7 million with a loss of $(0.01) per share versus a loss of $(0.03) per share in 4Q20. We projected revenue of $4 million and a loss of $(0.00) per share.

****Please view our disclosures on pages 17 - 19.***

Recommendation and Valuation

We are reiterating our Speculative Buy rating on ME2C Environmental but lowering our twelve-month price target to $1.50 per share from $2.00 based on a reduced multiple applied to our 2023 revenue per share projection.

We believe ME2C has taken the appropriate initiatives to ensure significant short and long-term revenue growth for its emission control technologies.

The company's mercury emissions sorbent technology has been gaining new supply and licensing business. ME2C has obtained new license agreements and renewed supply contracts with multiple coal-fired utilities for mercury emissions capture. The company also gained additional new product supply business from existing licensees of its patented technologies.

ME2C initiated outreach to multiple new utilities believed to be infringing on its patented technologies in order to secure new license and/or product supply agreements. The company also received approval from the District Judge to continue its lawsuit against 16 refined coal entities with discovery underway.

During 1Q22, ME2C identified in-field testing partners for its new rare earth element sorbent technology in preparation of commercialization efforts, planned for 2022. The second phase of lab testing that was completed through Penn State University's College of Earth and Mineral Sciences introduced real-world environmental samples (acid mine drainage sludge and coal ash) to the company's sorbent technology. The testing was focused on wastewater and coal ash pond remediation and processing captured rare earth elements.

Shares of MEEC have traded at trailing-twelve-month (ttm) P/S multiples ranging between 10.9X and 3.9X over the past twelve months and currently trade at a multiple of 2.9X (5.1X previously). The pollution and treatment controls industry trades at an average of 2X ttm sales (2.9X previously), excluding outliers (finviz.com). We believe the company's higher multiple compared to the industry average is due to the market's favorable perception of MEEC's growth opportunities. Applying a multiple of 6X (7.8X previously) to our 2023 sales projection of $0.28 per share, discounted for execution risk, we derive a 12-month price target of approximately $1.50 per share.

Recent Developments

New Supply Business – On March 28, 2022, ME2C Environmental announced it exercised its right of first refusal (ROFR) for mercury emissions capture product supply with a significant coal-powered utility operating in the Midwest. This utility entered into a license agreement with the company in 2021, which provided a ROFR with respect to certain future supply business. ME2C Environmental is exercising the ROFR and matching the terms of an offer made by another supplier for a direct three-year supply order and a renewal option, which is expected to have a value of approximately $1 million annually. The company expects that direct supply orders for the utility's plant locations will begin during 1H22.

On February 10, 2022, ME2C Environmental announced it received new supply business with a licensee of the company's patented Sorbent Enhancement Additive (SEA®) technology for mercury emissions capture. The utility's license allows for their continued operation of the company's patented technologies.

The new supply business, expected to continue through 2022, was gained after product testing was completed in late 2021. The utility was initially granted a license agreement in 2020 that would allow continued operation of ME2C's patented mercury capture technologies.

On February 1, 2022, ME2C Environmental announced it secured new supply business with a licensee of its patented SEA technology for mercury emissions capture.

The new supply business, expected to continue through 2022, was gained after certain testing was completed at one of the utility's power plants located in the Midwest. The utility entered into a license agreement in 2020 that allowed continued operation of ME2C's patented mercury capture technologies.

On January 18, 2022, ME2C Environmental announced it secured new supply business with one of the largest coal-powered utilities in the US. This supply customer entered into a license agreement with the company in 2021 and has now agreed to a direct one-year supply order with ME2C Environmental to purchase its custom sorbents valued at approximately $2 million for 2022.

The supply order, which is for one of the utility's power plants in the Southwest, includes the sale and installation of the company's patented engineering system and proprietary sorbent-feed equipment. ME2C will supply this coal-fired utility customer with its SEA system to help the utility meet mercury emissions capture and compliance requirements.

New License Agreement of its Patented Technology - On November 30, 2021, ME2C Environmental announced the signing of a five-year license agreement with a utility in the Midwest to provide a non-exclusive license to certain ME2C patents for use in connection with the utility's coal-fired power plants. The licensed patents relate to ME2C's SEA process for mercury removal from coal-fired power plants.

The five-year license agreement includes a one-time sum to be paid to ME2C Environmental for use of the company's patented processes for mercury emissions capture. The agreement also provides ME2C Environmental the opportunity to compete for the utility's product supply going forward.

Contract renewals - On February 23, 2022, ME2C Environmental announced the signing of a multi-year contract renewal with an annual value expected to reach $1.5 million. Under the extended supply contract, ME2C will continue supplying its patented SEA technologies for mercury emissions capture.

On January 12, 2022, ME2C Environmental announced the signing of a two-year contract renewal with an estimated annual value in excess of $2.5 million. Under the extended supply contract, ME2C will continue supplying its patented SEA technologies for mercury emissions capture.

Business Overview

ME2C Environmental, also known as Midwest Energy Emissions Corp., headquartered in Corsicana, Texas, is an environmental services and technology company specializing in mercury emission control technologies, primarily to utility and industrial coal-fired power plants. The company delivers solutions to the global coal-power industry to remove mercury from power plant emissions. ME2C Environmental developed patented technology and proprietary products that have been shown to achieve mercury removal at a significantly lower cost and with less operational impact than currently used methods, while maintaining and/or increasing unit output and preserving the marketability of fly ash. Fly ash, also known as flue ash, is a coal combustion product that is composed of the particulates (fine particles of burned fuel) that are driven out of coal-fired boilers together with the flue gases. Fly ash can be used as a prime material in many cement-based products, such as poured concrete, concrete block, and brick.

Acquisition of Patent Rights

ME2C Environmental's Sorbent Enhancement Additive (SEA) technology was originally developed by the University of North Dakota's Energy and Environmental Research Center (EERC). It was tested and refined on numerous operating coal-fired energy generating units (EGUs), with the founder of ME2C Environmental participating with the EERC on these tests since 2008. The Energy and Environmental Research Center Foundation (EERCF), obtained patents on this technology.

In January 2009, the company entered into a license agreement with EERCF and was granted an exclusive license by EERCF with respect to this technology to develop, make, use, sell, offer to sell, lease, and import the technology in any coal-fired combustion system (power plant) worldwide. Under the terms of the license agreement, ME2C Environmental was required to pay EERCF monthly license maintenance fees and annual running royalties on operational systems of the company, and had the right to purchase the patent rights.

In April 2017, ME2C Environmental closed on the acquisition from EERCF of all such patent rights, including all patents and patents pending, domestic and foreign, relating to the technology. A total of 42 domestic and foreign patents and patent applications were included in the acquisition. The patent rights were acquired for $2.5 million cash and 925,000 shares of common stock. As a result of the acquisition of the patent rights, no additional monthly license maintenance fees and annual running royalties will be due or owed to EERCF.

Monetization of Intellectual Property

ME2C has a patent portfolio consisting of 37 active patents throughout North America, Europe and Asia, and 5 patents pending applications. The company estimates over 40 companies (includes utilities and refined coal companies) have infringed on their patents related to its SEA technology and started filing lawsuits against those companies in July 2019. The following is a status of these lawsuits.

- In July 2020, ME2C settled a lawsuit with Vistra Corp. one of the company's largest defendants and a long-term customer. The company entered into a multi-year license and supply agreement with Vistra, as the lawsuit was dismissed.

- In December 2020, ME2C and American Electric Power (AEP), a defendant and major US power producer, entered into an agreement providing AEP a non-exclusive license to certain ME2C patents for use in connection with AEP's coal-fired plants. The lawsuit against AEP was dismissed.

- In January 2021, ME2C announced license agreements with two additional major utilities named in the 2019 lawsuit. The agreements include the removal of any challenges to the company's patented technologies.

- In May 2021, the US District Court of Delaware issued a report and recommendation that ME2C can move forward with patent litigation against 16 key refined coal defendants. The jury trial date is set for September 2023.

- In September 2021, Caldwell & Curry issued 20 subpoenas to certain refined coal and power plant entities to provide testimony and to produce documents. The discovery process in underway.

- There are currently multiple new utilities under license agreements for ME2C's SEA technology with several adopting supply agreements.

After the first lawsuit settlement, which took approximately one year to settle after the initial filing, the lawsuits are being settled at a faster pace. We believe that as the number of lawsuits being settled increases, it will make it easier to settle the remaining lawsuits.

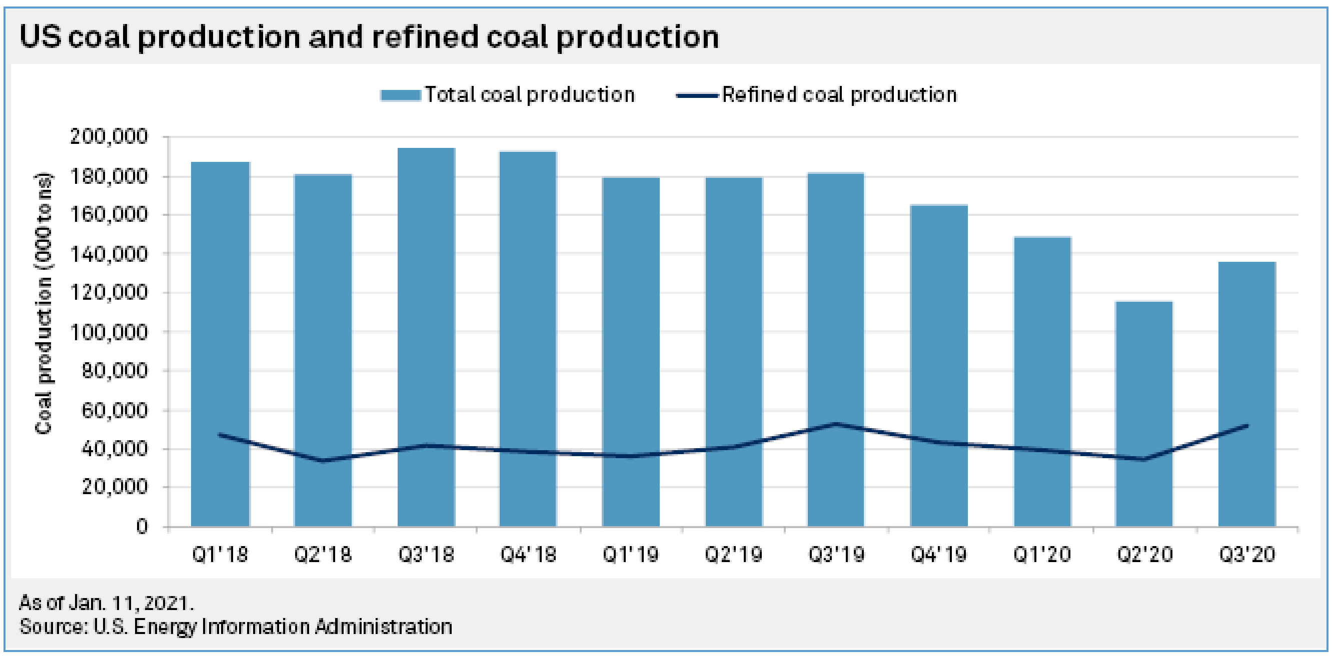
ME2C estimates that the total sales potential from IP settlement agreements could reach from $17 million (license only) up to $90 million (supply only) through 4Q23 with profit margins ranging from 40% (supply) to 75% (license).

The May 2021 recommendation to move forward against 16 key refined coal process defendants adds a new layer to ME2C's litigation actions that already include utilities.

Refined coal companies are LLCs created by Wall Street investors for the purpose of receiving significant revenue and tax credits from utilities using refined coal (coal that has been chemically treated to reduce emissions when burned). This has been shown to be a very lucrative business model as refined coal production qualifies for a tax credit under the American Jobs Creation Act of 2004.

The refined coal tax credit allows companies to build facilities, buy coal from a power generator, and sell it back after treating the fuel. S&P Global Market Intelligence[1] reported that several companies have described plans in which they plan to sell the coal back to power generators at a lower price than paid while reaping the tax benefits as refined coal facilities can be built to scale for about $4 million to $6 million. The report cited one of the companies using the tax credit showing returns of up to 500% from this business model because the development costs were so low.

According to US Energy Information Administration (EIA) data, companies mined about 400.1 million tons of coal in the US during the first nine months of 2020. Coal refining plants produced about 125.8 million tons in the same period, or an amount equal to about 31.5% of national coal production (see chart below). Annualizing the EIA's nine month production rate in 2020 would equate to refined coal production of approximately $167.7 million tons annually. With the current tax credit valued at more than $7 per ton of refined coal (S&P Global Market Intelligence), this equates to refined coal companies receiving tax credit payouts of over $1 billion annually.



The company has the infrastructure in place to support over $100 million in annual revenue. In 2017, ME2C completed and fully paid for its manufacturing and distribution center in Texarkana, Texas. This investment should enable the company to move forward with the monetization of its patents and handle an upturn in demand.

Coal and the Environment

Coal is an abundant fuel source that is relatively inexpensive to produce and convert to useful energy. However, producing and using coal adversely affects the environment.

1. https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/audit-of-us-coal-tax-credit-set-to-expire-in-2021-underway-by-federal-watchdog-62062796#:~:text=The%20refined%20coal%20tax%20credit%20allows%20companies%20to%20build%20facilities,reaping%20the%20tax%20credit%20benefits

Some of the principal emissions from coal combustion include mercury and other heavy metals, which have been linked to both neurological and developmental damage in humans and other animals, and fly ash and bottom ash, which are residues created when power plants burn coal.

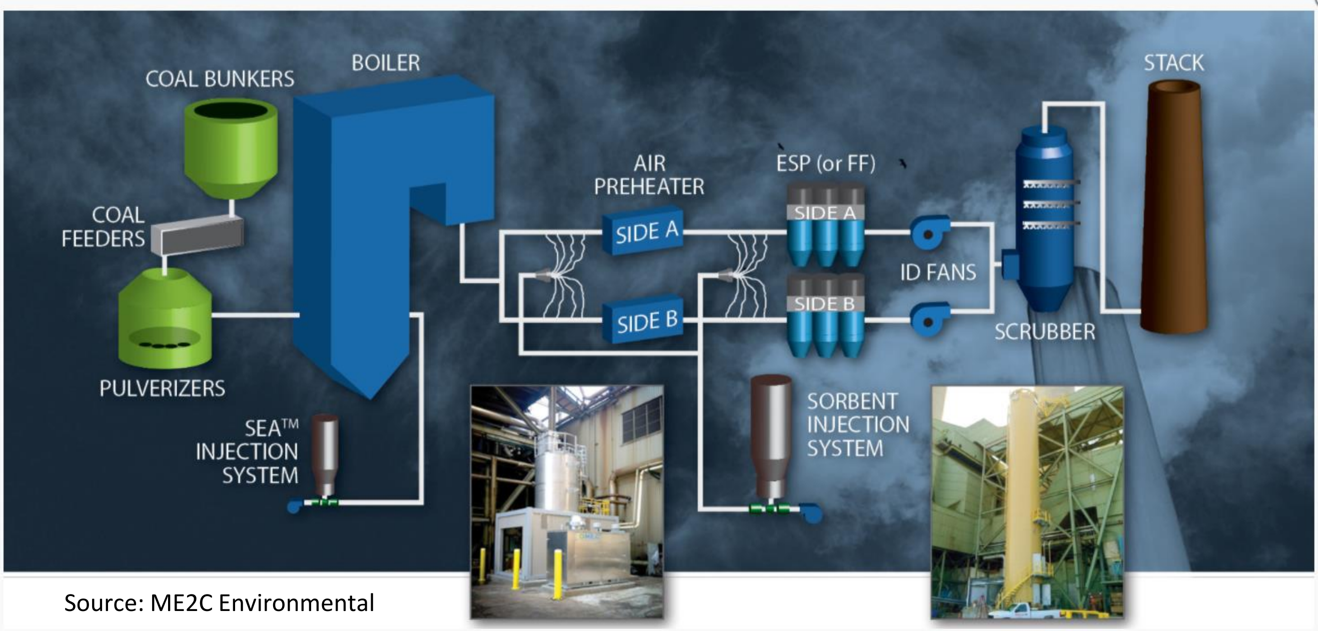
The US EPA Mercury and Air Toxics Standards (MATS) rule requires that all coal and oil-fired power plants in the US, larger than 25MWs, must limit mercury in its emissions to below certain specified levels, according to the type of coal burned. Power plants were required to begin complying with MATS in April 2015, unless they were granted a one-year extension. MATS, along with many state and provincial regulations, form the basis for mercury emission capture at coal fired plants across North America. Under MATS regulation, Electric Generating Units (EGUs) are required to remove about 90% of the mercury from their emissions.

In the past, fly ash was released into the air through the smokestack, but laws now require that most emissions of fly ash be captured by pollution control devices.

Power plants also use flue gas desulfurization equipment, also known as scrubbers, to clean sulfur from the smoke before it leaves their smokestacks.

ME2C's Technology

Sorbent Enhancement Additive (SEA®) Technology – The company's SEA technology provides total mercury control by its ability to capture mercury in coal-fired flue gas. This technology is specifically tailored for each application to match a customer's fuel type and boiler configuration for optimal results. ME2C's SEA technology consists of a front end sorbent (a substance which has the property of collecting molecules of another substance by absorption) injected directly into the boiler in minimal amounts combined with a back end sorbent injection solution to insure maximum mercury capture (see diagram at top of next page). This method is believed to use fewer raw materials than other mercury capture systems and cause less disruption to plant operations. The SEA process also preserves fly ash which can be sold and recycled for beneficial uses.



Source: ME2C Environmental

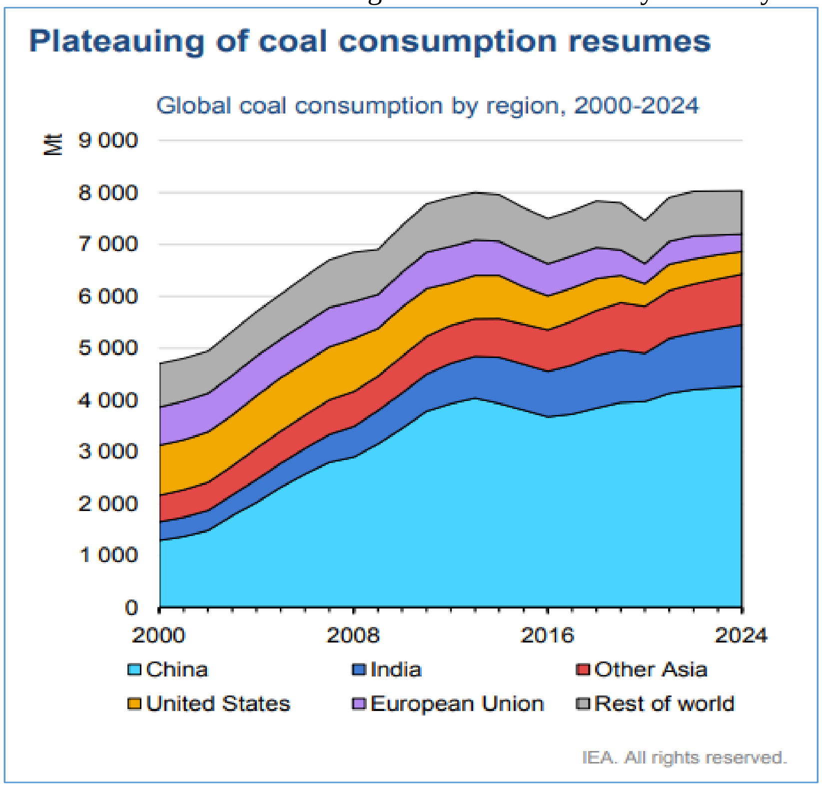
Customized Emissions Services – In an effort to achieve optimal results, ME2C brings its mercury emission analytics to the field as opposed to collecting samples for laboratory analysis. This enables the company to offer its customers an assessment of existing systems and suggested improvements, an assessment and guidance of mercury capture and emissions, as well as the optimal design of the injection strategy and appropriate equipment layout and installation. The company is also able to offer sorbent optimization using flow modeling for a customized, low-cost plan for each unit, emission testing for mercury and other trace metals with its mobile laboratory, and ongoing research toward improved technology for mercury capture, as well as enabling rapid-response scientific support for emission or combustion issues as operations and regulations change.

Markets Served

North America is currently the largest market for the company's technologies. In the US, ME2C's success depends, in part, on the demonstrations performed with utility customers and the resulting contract awards to meet the MATS requirements and the company's operational performance with energy generating units under contract.

Electricity Generation - The three major categories of energy for electricity generation are fossil fuels (coal, natural gas, and petroleum), nuclear energy, and renewable energy sources with fossil fuels being the largest component. According to the latest statistics from the Energy Information Administration (EIA), coal was the third largest source (about 19%) of US electricity generation in 2020.

Coal – According to the EIA, global coal demand may hit a new all-time high in the next two years. Beyond 2021, global coal consumption is set to revert to the pattern seen over the previous decade: declines in advanced economies offset by growth in some emerging and developing economies. After its brief rebound in the US and the EU in 2021, the EIA projects coal demand will resume its decline through 2024. This is mostly driven by the power sector where slow electricity demand growth and rapid expansion of wind and solar are eating into coal power generation. However, global coal trends will be shaped largely by China and India, who account for two-thirds of global coal consumption, despite their efforts to increase renewables and other low-carbon energy sources. In China, coal demand growth is expected to average less than 1% per year between 2022 and 2024. In India, stronger economic growth and increasing electrification are forecast to drive coal demand growth of 4% per year. For most industrial purposes where coal is used, such as iron and steel production, there are not many technologies that can replace it in the short term. Based on current trends, global coal demand is set to rise to the highest level ever seen in 2022 and to remain there through 2024 (see chart at right).



The IEA said that coal production failed to keep pace with rebounding coal demand in 2021, especially during the first half of the year, cutting into stock levels and pushing up prices. Coal production is forecast to reach an all-time high in 2022 and then plateau as demand flattens.

Although North America is currently the largest market for ME2C's technologies, efforts to reduce mercury pollution in the European Union could result in a significant market for the company. In May 2017, the European Union and seven of its member states ratified the Minamata Convention on Mercury, which triggered its entry into force with implementation starting in 2021. The Minamata Convention on Mercury is a global treaty to protect human health and the environment from the adverse effects of mercury.

Competition

The industry the company operates in is highly competitive. Major competitors in the US and Canada include companies such as Advanced Emissions Solutions, Inc., Albemarle Corporation, Cabot Corporation, Calgon Carbon Corporation, Carbonxt, Inc., Environmental Energy Services Inc., and Nalco Company. These companies employ large sales staff and are well positioned in the market. ME2C's ability to compete successfully depends in part upon its ability to offer superior technology, including a superior team of sales and technical staff. If the company is unable to maintain its competitive position, it could lose market share which would likely adversely impact its financial results.

Strategy / Future Growth Opportunities

ME2C remains focused on positioning itself for short and long-term growth through execution at customer sites and continual operational improvement. While the company continues to seek new utility customers for its technology in order for them to meet the MATS requirements, ME2C continues to make refinements to all of its key products and has a number of initiatives that should drive revenue growth and include high margin coal ash cleanup, wastewater remediation, and rare earth element processing.

A key initiative to drive growth is the company's development of technologies in the rare earth market. In March 2021, ME2C announced new technologies under development intended to improve the processing of rare earth elements (REEs) in North America. The US Department of Energy reported the global market for REEs was valued at approximately $13.2 billion in 2019 with annual growth of 10.7% from 2020 to 2026. Rare earth elements are commonly used in automobile catalysts and petroleum refining catalysts, televisions, magnets, batteries, and medical devices.

The technologies under development for the REE market are focused on the extraction process of obtaining rare earth elements abundantly available from coal mining and the coal-fired power industry, along with general mining operations. The company is focused on improving the cost of extracting rare earth minerals along with improving the environmental footprint of extracting those rare earth elements. ME2C anticipates that its new sorbent technology could dramatically improve rare earth element production in North America at a lower production cost.

In July 2021, The Environmental Protection Agency (EPA) announced plans to implement more stringent limits on wastewater pollution from coal power plants. The agency issued a statement that it would initiate the rulemaking process to reduce coal-fired power plant pollution that can contain toxic metals including mercury, arsenic, and selenium. The EPA plans to issue a proposed rule for public comment in the fall of 2022. In the meantime, a 2015 rule setting federal limits on the levels of toxic metals in wastewater that can be discharged from power plants and a 2020 rule revising requirements for flue gas desulfurization wastewater and bottom ash transport water will remain in place.

ME2C says its technology for REE extraction will be beneficial not only in the cleanup of the soil and wastewater, but in the extraction of the REE from the coal ash. In July 2021, ME2C announced that Pennsylvania State University's College of Earth and Mineral Sciences completed the initial round of testing to evaluate the company's REE technology.

ME2C said that the initial results received by Penn State's College of Earth and Mineral Sciences will lead to further testing and development of this emerging technology focused on rare earth capture, as well as the cleanup of coal ash ponds and wastewater from coal-fired power plants. The company expects to have Penn State continue with the evaluation of the technology's extraction capacity of certain rare earth elements, as well as its regeneration potential and other factors necessary to move forward with pilot scale testing. ME2C hopes to bring a cost-effective, environmentally sound solution to market in 2022.

Economic Outlook

In January 2022, the International Monetary Fund (IMF) revised its global economic growth estimates to an increase of 4.4% for 2022 and 3.8% for 2023. While the IMF's growth projection for 2022 is down from its earlier projection calling for 4.9% growth (October 2021), the 2023 projection is up from 3.6%. The 2022 downward revision primarily reflects lower growth assumptions for the US and China. The upward revision for 2023 largely reflects a pickup in economic activity after the impediments to growth dissipate in 2H22.

The IMF revised its economic growth estimate for the US to an increase of 4% for 2022 and 2.6% for 2023. In October 2021, the IMF projected US economic growth of 5.2% and 2.2% for 2022 and 2023, respectively.

The third estimate of US GDP growth (released on March 30, 2022) showed the US economy increased at an annual rate of 6.9% in 4Q21, up from the 2.3% increase reported in 3Q21. The 4Q21 US GDP estimate primarily reflects increases in inventory investment, exports, consumer spending, and business investment, partially offset by decreases in both federal and state and local government spending.

Projections

2022 Forecast - We project revenue increasing 53.7% to $20 million and a net loss of $900,000 or $(0.01) per share. We previously projected revenue of $29 million and net income of $4.6 million or $0.04 per share. Our revised forecast reflects company guidance.

We project gross profit increasing to $8 million from $5.1 million in 2021 with gross margins of 40%. SG&A expenses are projected to increase to $7.2 million from $5.9 million to support revenue growth. We project interest expense decreasing to $1.7 million from $2.8 million on lower debt levels.

In 2022, we project $950,000 cash provided by operations from $2.1 million in cash earnings and a $1.2 million increase in working capital. We project a $1.3 million pay down of debt. We project cash should decrease $350,000 to $1 million at the end of 2022.

2023 Forecast - We project revenue increasing 50% to $30 million from an estimated $20 million in 2022 and net income of $2.2 million or $0.02 per share versus a projected loss of $900,000 or $(0.01) in 2022. Continued growth in license and product revenue related to the company's SEA technology along with the expected commercialization of the company's REE technology should drive revenue growth.

We project gross profit increasing to $12 million from $8 million projected for 2022 with gross margins of 40%. SG&A expenses are projected to increase to $8.5 million from $7.2 million projected for 2022 to support revenue growth. We project interest expense decreasing to $1.3 million from our projected $1.7 million for 2022 on lower debt levels.

In 2023, we project $3.7 million cash provided by operations from $4.8 million in cash earnings and a $1.1 million increase in working capital. We project a $3.8 million pay down of debt. We project cash should decrease $103,000 to $934,000 at the end of 2023.

4Q and FY2022 Financial Results

4Q21 - Revenue increased 14.8% to $2.7 million with a net loss of $1.3 million or $(0.01) per share versus a loss of $2 million or $(0.03) per share in 4Q20. We projected revenue of $4 million and a net loss of $141,000 or $(0.00) per share.

Revenue growth was primarily due to increased sorbent product sales. Gross profit decreased 11.7% to $976,000 from $1.1 million due primarily to a reduction in gross margins to 36.2% from 47.1%. SG&A expenses decreased 20.4% to $1.9 million.

Interest expense and letter of credit fees decreased to $515,000 from $672,000.

FY 2021 – Revenue increased 59.5% to $13 million with a net loss of $3.6 million or $(0.04) per share versus a loss of $5.8 million or $(0.07) per share in 2020.

Revenue growth was primarily due to increased sorbent product sales and the expansion of the company's customer base. Gross profit increased 86.7% to $5.1 million from $2.7 million due primarily to higher sales and gross margins improving to 39% from 33.3%. SG&A expenses were flat at $5.9 million.

Interest expense and letter of credit fees increased to $2.8 million from $2.7 million.

Liquidity – As of December 31, 2021, ME2C had $1.4 million cash, a current ratio of 0.2X, $12.1 million of total debt (all short-term) and a shareholder's deficit of $10.2 million.

In 2021, the company generated $206,000 cash from operations from cash earnings of $716,000 and a $510,000 increase in working capital. Cash from financing of $602,000 was primarily due to an increase in debt and proceeds from the exercise of options and warrants. Cash increased by $797,000 to $1.4 million as of December 31, 2021.

ME2C's debt consists primarily of an unsecured note payable with AC Midwest with an outstanding balance of $11.9 million. The unsecured note payable matures on August 25, 2022, has a zero cash interest rate, and an unamortized remaining balance of its discount of approximately $1.2 million as of December 31, 2021.

In connection with the unsecured note payable, the company shall also pay a profit share. The profit share liability totaled approximately $2.8 million as of December 31, 2021. The discounted cash flow model assumptions used to calculate the profit share liability included an estimated term of sixteen years with $100,000 to $350,000 paid quarterly starting in February 2024 at an annual market interest rate of 21%. The profit share liability will be marked to market every quarter utilizing management's estimates.

ME2C also has $272,000 outstanding on a secured note payable-related party. The note matures August 25, 2022 and bears interest at an annual rate of 15%.

In June 2021, ME2C entered into a debt repayment and exchange agreement with AC Midwest, which will repay all existing secured and unsecured debt obligations presently held by AC Midwest. Pursuant to the agreement, the company shall at closing repay the principal balance outstanding of $272,000 on the AC Midwest secured note in cash, together with any other amounts due and owing under such note, and repay the outstanding debt under the AC Midwest unsecured note by paying and issuing a combination of cash and shares of common stock which AC Midwest has agreed to accept in full and complete repayment of the obligations thereunder.

At closing, and with regard to the AC Midwest unsecured note, the company shall pay AC Midwest approximately $6.6 million in cash representing 50% of the aggregate outstanding principal balance of such note, and issue shares of common stock to AC Midwest in exchange for the remaining 50% of the aggregate outstanding principal balance.

With regard to the profit share, at closing the company shall pay AC Midwest approximately $2.3 million in cash and issue shares of common stock for $4 million. The closing is subject to various conditions including but not limited to the completion of an offering of equity securities resulting in net proceeds of at least $12 million by December 31, 2021, which has been extended to June 30, 2022. In the event that the closing does not occur by June 30, 2022, either party may terminate the debt repayment agreement and the existing notes with AC Midwest will continue in their current forms.

Risks

In our view, these are the principal risks underlying the stock.

Going concern – As of December 31, 2021, the company had $1.4 million in cash, a working capital deficit of $11.7 million and an accumulated deficit of $67.1 million. The company also had a net loss in the amount of $3.6 million. All existing secured and unsecured debt held by its principal lender million matures on August 25, 2022 which is within one year from the current date. These factors raise substantial doubt about the company's ability to continue as a going concern.

In an effort to alleviate the going concern doubt, during 2021, the company eliminated approximately $4.4 million of convertible notes through stock conversions and repaid the remaining convertible notes. In June 2021, the company entered into a debt repayment and exchange agreement with its principal lender which included the completion of an equity offering resulting in net proceeds of at least $12 million by June 30, 2022 to repay all existing secured and unsecured debt obligations held by such lender. No assurances can be given that the company can obtain sufficient working capital through its operations or that it will be able to raise the funds necessary to close the debt repayment agreement by June 30, 2022 or at all.

Coal demand – North American coal-fired electricity generating units comprise the basis of the market for ME2C'S services and products. Regulations mandating or incentivizing the purchase of power from renewable energy sources (e.g., wind, solar, hydroelectric, and geothermal) and/or the phasing out of coal-fired power plants could lessen the demand for electricity from such plants, thereby decreasing demand for the company's services and products.

Regulation issues – The company's business focus is mercury removal from power plant emissions, which is driven primarily by regulation. The US EPA Mercury and Air Toxics Standards (MATS) rule requires that all coal and oil-fired power plants in the US, larger than 25MWs, must limit mercury in its emissions to below certain specified levels, according to the type of coal burned. Power plants were required to begin complying with MATS in April 2015, unless they were granted a one-year extension.

The MATS regulation has been subject to numerous legal challenges over the years, and in April 2020, the EPA issued a final rule which leaves the MATS rule in place. The EPA's final action will almost certainly be challenged in the courts, some of which has already begun, both by those who favor retention of MATS (such as the electric utility industry) and by those who oppose it (such as certain coal interests and deregulatory groups). This litigation could extend uncertainty over the status of MATS for a number of years. Any significant changes in mercury emission regulation could have a major impact on the company.

Technological obsolescence **-** The market into which the company sells its products and services is characterized by periodic technological change, as well as evolving industry standards and regulations. Unless ME2C is able to enhance, improve and/or modify existing products in a timely manner or to develop and introduce new products that incorporate new technologies or conform with evolving industry standards and regulations, its products and services may be rendered less marketable.

Competition – The industry the company operates in is highly competitive. If ME2C is unable to compete effectively with its competitors, its financial results could be adversely affected.

Dependence on key customers – The company's customers are concentrated, so the loss of one or more key customers or a material reduction in business performed for them could cause ME2C to experience a decline in net sales.

Natural gas price and weather factors – The company's mercury-emissions control technologies are used by coal-fired power plants primarily in the US. When natural gas prices remain low for an extended period of time or drop substantially, power suppliers will likely rely more upon gas-fired units rather than coal plants in meeting their power needs. In addition, mild winter months in the US will also result in a reduction of power demand which will also be expected to negatively impact the company's operations.

Pandemic concerns - The ongoing COVID-19 pandemic has adversely impacted various businesses throughout the world. This pandemic could result in disruptions to the company's business including the availability of raw materials, equipment, the workforce, or to business relationships. Any such disruptions could have a material adverse effect on the company's financial results.

Material weakness in internal controls – As of December 31, 2021, the company's disclosure controls and procedures were not effective as a result of material weaknesses in its internal control over financial reporting. The material weaknesses were due to a lack of personnel commensurate with the company's reporting requirements and insufficient written documentation or training of its internal control policies and procedures which provide staff with guidance or framework for accounting and disclosing financial transactions.

Liquidity risk - Shares of ME2C have risks common to those of the microcap segment of the market. Often these risks cause microcap stocks to trade at discounts to their peers. The most common of these risks is liquidity risk, which is typically caused by small trading floats and very low trading volume and can lead to large spreads and high volatility in stock price. There are 63.4 million shares in the float and the average daily volume is approximately 105,000 shares.

Miscellaneous risk - The company's financial results and equity values are subject to other risks and uncertainties including competition, operations, financial markets, regulatory risk, and/or other events. These risks may cause actual results to differ from expected results.

Consolidated Balance Sheets
(in thousands $)

	2019A	2020A	2021A	**2022E**	**2023E**
Cash	1,499	591	1,388	**1,038**	**934**
Accounts receivable	1,223	1,116	1,015	**1,444**	**2,167**
Inventory	514	560	1,076	**1,500**	**2,250**
Prepaid expenses and other	316	107	312	**312**	**312**
Customer acquisition costs	-	-	-	**-**	**-**
Total current assets	3,552	2,374	3,791	**4,294**	**5,663**
Security deposits	-	-	10	**10**	**10**
Property and equipment, net	2,082	1,887	1,830	**1,816**	**1,810**
Right of use asset	1,107	796	390	**-**	**-**
Intellectual property	2,532	2,319	2,114	**2,114**	**2,114**
Total assets	9,273	7,376	8,135	**8,234**	**9,597**
Accounts payable and accrued expenses	1,677	1,612	2,268	**3,167**	**4,750**
Equipment notes payable	53	29	3	**3**	**3**
Operating lease liability	383	408	340	**340**	**340**
Note payable	-	35	-	**-**	**-**
Convertible notes payable	990	-	-	**-**	**-**
Acrrued interest	226	259	-	**-**	**-**
Customer credits	167	167	167	**167**	**167**
Secured note payable - related party	-	-	272	**272**	**272**
Unsecured note payable - related party	-	-	11,871	**10,571**	**6,771**
Accrued salaries	357	849	562	**562**	**562**
Total current liabilities	3,853	3,359	15,483	**15,082**	**12,865**
Equipment notes payable	22	1	-	**-**	**-**
Operating lease liability	807	395	54	**54**	**54**
Note payable	-	299	-	**-**	**-**
Convertible notes payable	2,951	4,055	-	**-**	**-**
Profit share liability	2,329	2,305	2,837	**2,837**	**2,837**
Secured note payable - related party	272	272	-	**-**	**-**
Unsecured note payable - related party	7,912	9,894	-	**-**	**-**
Total liabilities	18,146	20,580	18,374	**17,973**	**15,756**
Total stockholders' equity (deficit)	(8,873)	(13,204)	(10,239)	**(9,739)**	**(6,159)**
Total liabilities & stockholders' equity (deficit)	9,273	7,376	8,135	**8,234**	**9,597**

Source: Company filings and Taglich Brothers' estimates

Income Statements for the Fiscal Years Ended
(in thousands $)

	2019A	2020A	2021A	**2022E**	**2023E**
Revenue	11,417	8,158	13,012	**20,000**	**30,000**
Cost of sales	8,335	5,440	7,939	**12,000**	**18,000**
Gross profit	3,082	2,718	5,073	**8,000**	**12,000**
SG&A	6,429	5,936	5,934	**7,200**	**8,500**
Interest expense and letter of credit fees	2,391	2,658	2,818	**1,700**	**1,320**
(Gain) loss on change in fair value of profit share	375	(24)	531	**-**	**-**
Gain on sale of equipment / debt extinguishment	(30)	(36)	(601)	**-**	**-**
Income (loss) before taxes	(6,083)	(5,816)	(3,609)	**(900)**	**2,180**
Income tax	(14)	(10)	(23)	**-**	**-**
Net income / (Loss)	(6,097)	(5,826)	(3,632)	**(900)**	**2,180**
EPS	(0.08)	(0.07)	(0.04)	**(0.01)**	**0.02**
Shares Outstanding	76,535	77,819	85,856	**94,750**	**106,050**
Margin Analysis					
Gross margin	27.0%	33.3%	39.0%	**40.0%**	**40.0%**
SG&A	56.3%	72.8%	45.6%	**36.0%**	**28.3%**
Year / Year Growth					
Total Revenues	(7.1)%	(28.5)%	59.5%	**53.7%**	**50.0%**

Source: Company filings and Taglich Brothers' estimates

Quarterly Income Statements 2021A - 2023E
(in thousands $)

	3/21A	6/21A	9/21A	12/21A	2021A	3/22E	6/22E	9/22E	12/22E	**2022E**	3/23E	6/23E	9/23E	12/23E	**2023E**
Revenue	3,027	2,271	5,020	2,694	13,012	2,500	4,000	8,500	5,000	**20,000**	6,900	5,100	11,700	6,300	**30,000**
Cost of sales	1,491	1,490	3,240	1,718	7,939	1,500	2,400	5,100	3,000	**12,000**	4,140	3,060	7,020	3,780	**18,000**
Gross profit	1,536	781	1,780	976	5,073	1,000	1,600	3,400	2,000	**8,000**	2,760	2,040	4,680	2,520	**12,000**
SG&A	1,453	1,261	1,341	1,879	5,934	1,650	1,750	1,850	1,950	**7,200**	2,050	2,100	2,150	2,200	**8,500**
Interest expense and letter of credit fees	676	1,120	507	515	2,818	475	460	415	350	**1,700**	345	335	325	315	**1,320**
(Gain) loss on change in fair value of profit share	121	128	137	145	531	-	-	-	-	**-**	-	-	-	-	**-**
Gain on sale of equipment / debt extinguishment	(299)	-	-	(302)	(601)	-	-	-	-	**-**	-	-	-	-	**-**
Income (loss) before taxes	(415)	(1,728)	(205)	(1,261)	(3,609)	(1,125)	(610)	1,135	(300)	**(900)**	365	(395)	2,205	5	**2,180**
Income tax	(3)	(1)	(2)	(17)	(23)	-	-	-	-	**-**	-	-	-	-	**-**
Net income / (Loss)	(418)	(1,729)	(207)	(1,278)	(3,632)	(1,125)	(610)	1,135	(300)	**(900)**	365	(395)	2,205	5	**2,180**
EPS	(0.01)	(0.02)	(0.00)	(0.01)	(0.04)	(0.01)	(0.01)	0.01	(0.00)	**(0.01)**	0.00	(0.00)	0.02	0.00	**0.02**
Shares Outstanding	80,410	84,190	89,255	85,856	85,856	89,100	89,100	111,700	89,100	**94,750**	111,700	89,100	111,700	111,700	**106,050**
Margin Analysis															
Gross margin	50.7%	34.4%	35.5%	36.2%	39.0%	40.0%	40.0%	40.0%	40.0%	**40.0%**	40.0%	40.0%	40.0%	40.0%	**40.0%**
SG&A	48.0%	55.5%	26.7%	69.7%	45.6%	66.0%	43.8%	21.8%	39.0%	**36.0%**	29.7%	41.2%	18.4%	34.9%	**28.3%**
Year / Year Growth															
Total Revenues	171.0%	20.6%	78.5%	14.8%	59.5%	(17.4)%	76.1%	69.3%	85.6%	**53.7%**	176.0%	27.5%	37.6%	26.0%	**50.0%**

Source: Company filings and Taglich Brothers' estimates

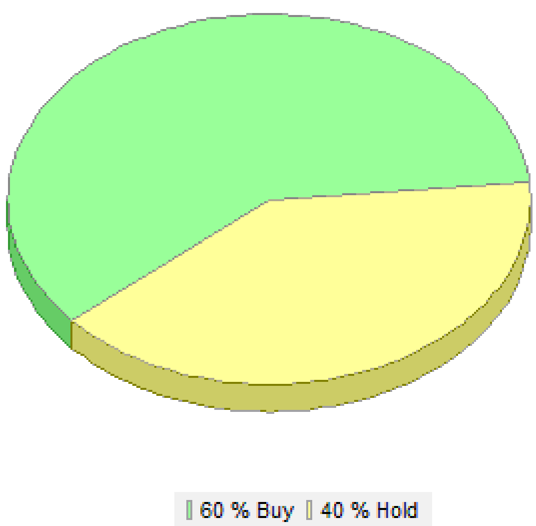
Statement of Cash Flows for the Periods Ended
(in thousands $)

	2019A	2020A	2021A	**2022E**	**2023E**
Net income (loss)	(6,097)	(5,826)	(3,632)	**(900)**	**2,180**
Stock-based compensation	1,810	1,710	1,368	**1,400**	**1,400**
Amortization of discount of notes payable	1,753	1,974	2,250	**885**	**885**
Amortization of debt issuance costs	102	122	122	**122**	**122**
Amortization of right to use assets	378	311	406	**390**	**-**
Amortization of customer acquisition costs	34	-	-	**-**	**-**
Amortization of patent rights	201	214	204	**204**	**204**
Depreciation expense	315	189	68	**20**	**6**
(Gain) loss on change in fair value of profit share	374	(24)	531	**-**	**-**
(Gain) loss on sale of equipment / foregiveness of debt	(30)	(36)	(601)	**-**	**-**
Cash earnings (loss)	(1,160)	(1,366)	716	**2,121**	**4,797**
Changes in assets and liabilities					
Accounts receivable	419	107	101	**(429)**	**(722)**
Inventory	(4)	(46)	(515)	**(424)**	**(750)**
Prepaid expenses and other	35	(6)	(60)	**(209)**	**(166)**
Security deposits	-	-	2	**-**	**-**
Accounts payable and accrued liabilities	(426)	(65)	656	**299**	**946**
Deferred compensation	(198)	492	(286)	**-**	**-**
Accrued interest	129	33	-	**-**	**-**
Operating lease liability	(372)	(388)	(408)	**(408)**	**(408)**
Deferred revenue and customer credits	-	-	-	**-**	**-**
(Increase) decrease in working capital	(417)	127	(510)	**(1,171)**	**(1,100)**
Net cash provided by (used in) operations	(1,577)	(1,239)	206	**950**	**3,697**
Cash received from sale of equipment	30	43	-	**-**	**-**
Purchase of property and equipment	-	-	(11)	**-**	**-**
Net cash used in investing	30	43	(11)	**-**	**-**
Payments on debt	(139)	(211)	(70)	**(1,300)**	**(3,800)**
Proceeds from exercise of warrants	-	-	247	**-**	**-**
Proceeds from the issuance of stock and options	-	-	126	**-**	**-**
Proceeds from the issuance of debt	2,600	499	299	**-**	**-**
Net cash provided by (used in) financing	2,461	288	602	**(1,300)**	**(3,800)**
Net change in cash	914	(908)	797	**(350)**	**(103)**
Cash - beginning of period	585	1,499	591	**1,388**	**1,038**
Cash - end of period	1,499	591	1,388	**1,038**	**934**

Source: Company filings and Taglich Brothers' estimates

Price Chart

Taglich Brothers' Current Ratings Distribution



Investment Banking Services for Companies Covered in the Past 12 Months		
Rating	#	%
Buy	**5**	**25**
Hold		
Sell		
Not Rated		

Important Disclosures

As of the date of this report, we, our affiliates, any officer, director or stockholder, or any member of their families do not have a position in the stock of the company mentioned in this report. Taglich Brothers, Inc. does not currently have an Investment Banking relationship with the company mentioned in this report and was not a manager or co-manager of any offering for the company within the last three years.

All research issued by Taglich Brothers, Inc. is based on public information. The company paid a monetary fee of $4,500 (USD) in March 2021 for the creation and dissemination of research reports for the first three months. After the first three months from initial publication (August 2021), the company will pay a monthly monetary fee of $1,500 (USD) to Taglich Brothers, Inc., for a minimum of twelve months for the creation and dissemination of research reports.

General Disclosures

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Analyst Certification

I, John Nobile, the research analyst of this report, hereby certify that the views expressed in this report accurately reflect my personal views about the subject securities and issuers; and that no part of my compensation was, is, or will be, directly, or indirectly, related to the specific recommendations or views contained in this report.

Public companies mentioned in this report:

Advanced Emissions Solutions, Inc. (NASDAQ: ADES)
Albemarle Corporation (NYSE: ALB)
Cabot Corporation (NYSE: CBT)

Meaning of Ratings

Buy – The growth prospects, degree of investment risk, and valuation make the stock attractive relative to the general market or comparable stocks.

Speculative Buy – Long term prospects of the company are promising but investment risk is significantly higher than it is in our BUY-rated stocks. Risk-reward considerations justify purchase mainly by high risk-tolerant accounts. In the short run, the stock may be subject to high volatility and could continue to trade at a discount to its market.

Neutral – Based on our outlook the stock is adequately valued. If investment risks are within acceptable parameters, this equity could remain a holding if already owned.

Sell – Based on our outlook the stock is significantly overvalued. A weak company or sector outlook and a high degree of investment risk make it likely that the stock will underperform relative to the general market.

Discontinued – Research coverage discontinued due to the acquisition of the company, termination of research services (includes non-payment for such services), diminished investor interest, or departure of the analyst.

Some notable Risks within the Microcap Market

Stocks in the Microcap segment of the market have many risks that are not as prevalent in Large-cap, Blue Chips or even Small-cap stocks. Often it is these risks that cause Microcap stocks to trade at discounts to their peers. The most common of these risks is liquidity risk, which is typically caused by small trading floats and very low trading volume which can lead to large spreads and high volatility in stock price. In addition, Microcaps tend to have significant company specific risks that contribute to lower valuations. Investors need to be aware of the higher probability of financial default and higher degree of financial distress inherent in the microcap segment of the market.

From time to time our analysts may choose to withhold or suspend a rating on a company. We continue to publish informational reports on such companies; however, they have no ratings or price targets. In general, we will not rate any company that has too much business or financial uncertainty for our analysts to form an investment conclusion, or that is currently in the process of being acquired.