

MicroCoal™ Technologies Inc.

Investor Presentation

September 13, 2013

Strictly private & confidential



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The presentation includes certain statements, estimates, forecasts and projections which reflect our views regarding our anticipated future performance and trends in the technology and energy sector, and which constitute "forward looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward looking statements and estimates reflect various assumptions concerning anticipated results and industry trends, which may or may not prove to be correct. There can be no assurance that any anticipated trends will develop or that projected results are attainable or will be realized. Actual results may differ materially from the projections set forth herein. No representations are made by us as to the accuracy of such statements and estimates. Statements and estimates included herein with respect to our future strategies, policies or practices are subject to change at any time without prior notice.

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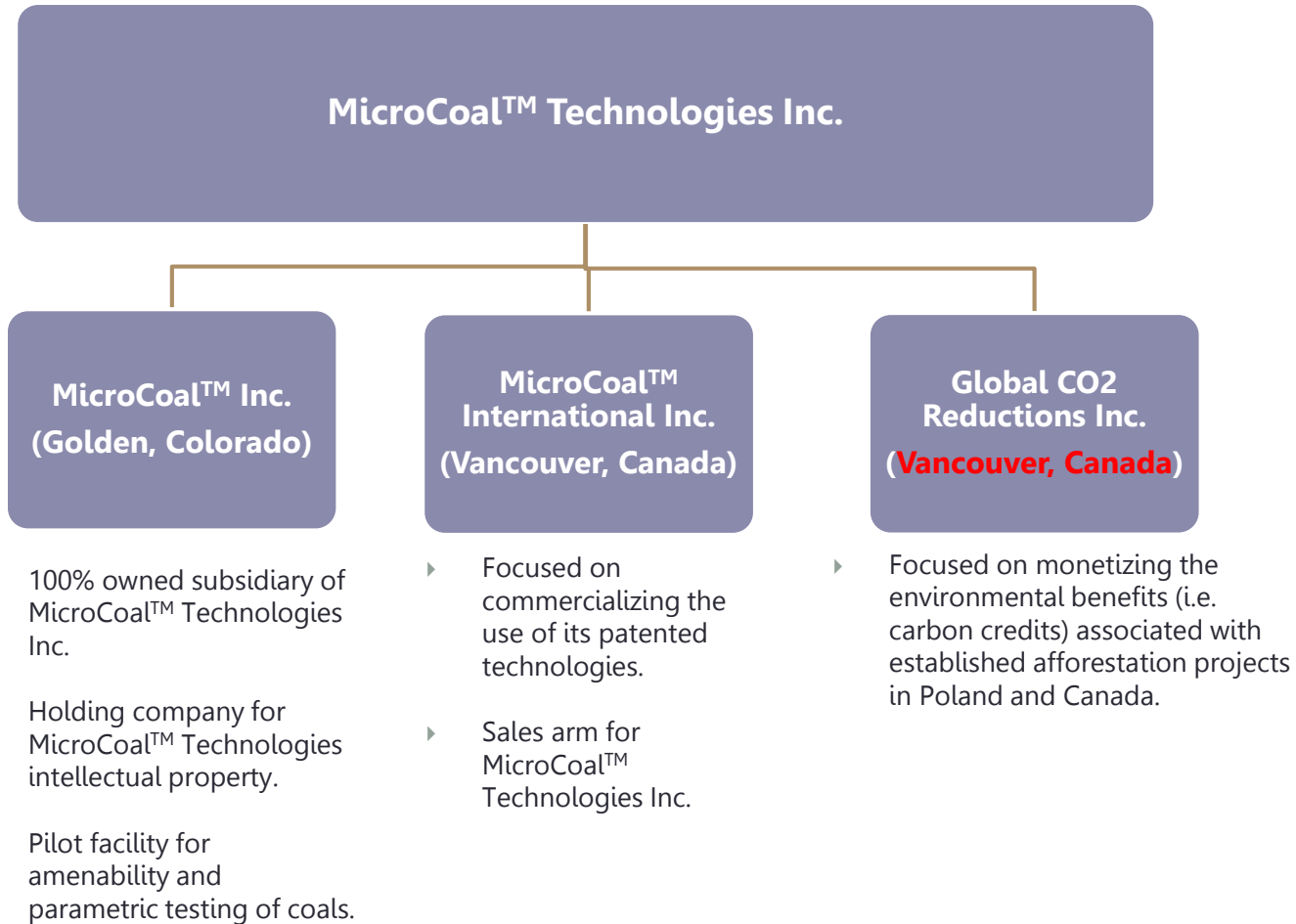
Company Overview

- ▶ MicroCoal™ Technologies Inc. is focused on commercializing its unique, clean-coal upgrading technology through its 100% owned subsidiary MicroCoal™ International Inc. MicroCoal™ is a low-cost, patented microwave technology for reducing moisture in low-rank coal, thereby upgrading it to the same heating value as bituminous coal.
 - ▶ Decontaminating and upgrading low-cost, low-rank lignite coal to match the energy levels of high-cost bituminous coal could result in significant cost-advantages for utilities.
 - ▶ The technology produces chemical reactions that reduce SOx, NOx, mercury and other impurities.
 - ▶ Ability to store unused off peak power and sell during peak power period.
- ▶ Strong relationships with strategic partners and customers
 - ▶ A 1MW Commercial Coal Upgrading Facility under construction at PT Wijaya Tri Utama (Kalimantan, Indonesia)
 - ▶ **Negotiations with Indonesian state-owned electrical utility PLN Batubara nearing completion for Phase One commercial installation . Expected value +/- \$35 million**
 - ▶ **Agreement nearing completion with large North American utility for demonstration facility prior to construction of estimated \$40 million MicroCoal installation.**
 - ▶ **Agreement with state owned Polish utility expected soon. Expected value \$40 million, Talks with other utilities underway.**
- ▶ Exceptional and well-qualified executive team
 - ▶ Proven expertise and long histories in senior executive roles
 - ▶ Comprised of experts in the science, technology, management, start-up and commercialization arenas

*"Because the
World Can't
Replace Coal...
We Created a
Better Way To
Process It"*



Company Structure



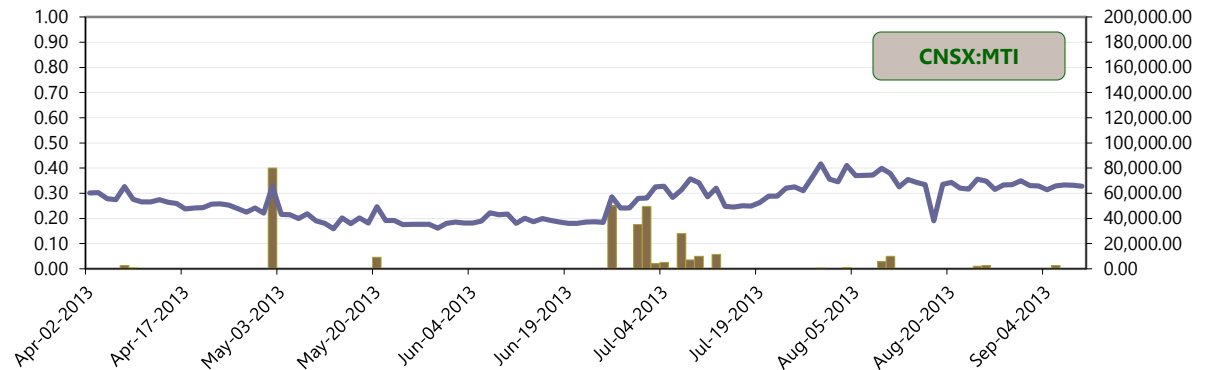
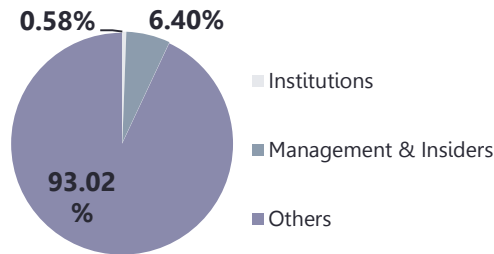
Capital Structure & Market Metrics

Market Metrics



| | | |
|-----------------------|-------|---------------------------|
| Current Price | C\$ | \$0.305 |
| 52-Week Range | C\$ | \$0.420 to \$0.104 |
| Float % of Shares O/S | % | 100 |
| Shares Outstanding | MM | 74.20 |
| Market Cap | C\$MM | \$22.26 |
| Enterprise Value | C\$MM | \$17.21 |
| Cash & Equivalents | C\$MM | \$0.23 |
| Debt | C\$MM | \$1.02 |

| | | |
|------------------------------|-----|---------------------------|
| Warrants O/S | | 30,323,175 |
| Weighted Avg. Exercise Price | C\$ | \$0.40 |
| Expiry Date Range | | June 13' - Dec 14' |
| Stock Options O/S | | 5,850,000 |
| Weighted Avg. Exercise Price | C\$ | \$0.21 |
| Expiry Date Range | | Oct 13' - Jan 18' |



Recent Financing

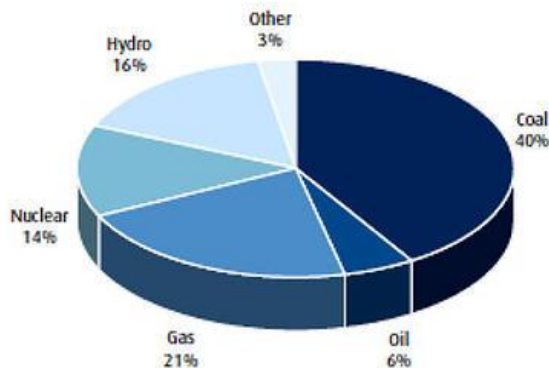
| 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Total (Since 2008) |
|-----------------------------------------------|-----------------------------------------------|------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------|
| Sept 2 – Private Placement for \$2.07M | Dec 11 – Private Placement for \$1.98M | | Jun 30 – Private Placement for \$1.05M Oct 19 – Private Placement for \$1.10M | Feb 13 – Private Placement for \$1.92M Dec 28 – Private Placement for \$1.74M | Sept 5 – Private Placement for \$2.85M????? | \$9.86M |

Source: CapitalIQ, company filings
¹ Stock price as of Sep, 18, 2013

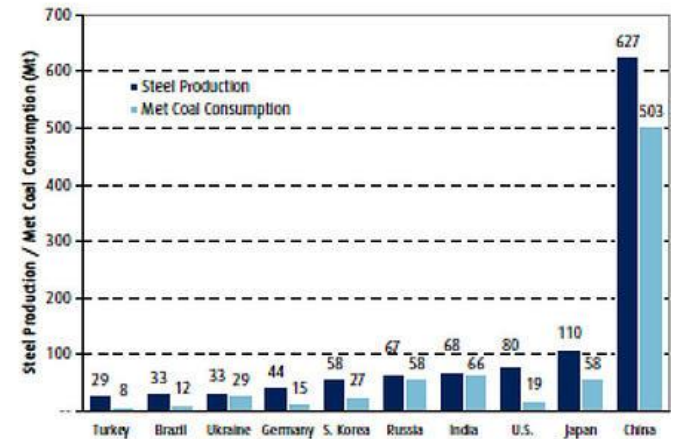
Name changes from Carbon Friendly Solutions Inc. to MicroCoal Technologies Inc.

Market & Industry Landscape

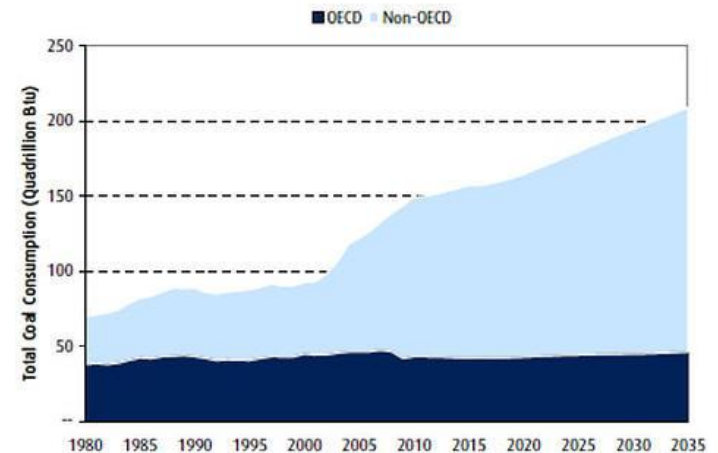
- ▶ Global demand for energy is expected to grow at a rate of **1.6%** per year while coal production is expected to reach 10 billion tonnes in 2035 as predicted by the US Department of Energy (DOE);
- ▶ Coal represents **26.5%** of global primary energy consumption, and generates **40%** of the world's electricity;
- ▶ The U.S electricity market is a **US\$ 360** billion market - half of which is fueled by coal;
- ▶ Coal makes up approximately **95%** of the US energy reserves, most of which consists of low-ranked coal;
- ▶ 1,400+ generation units in over 500+ power stations in the US are fueled by coal, totaling 338,000 MW in capacity; and
- ▶ Market represents a potential annual revenue opportunity of \$XX **(NTD: QUANTIFY – and explain method)**



Source: IEA



Source: IEA, World Steel Association



Source: U.S. Energy Information Administration



MicroCoal Key Personnel

Executive Team & Board of Directors

EXECUTIVE TEAM

CHIEF EXECUTIVE OFFICER

Slawek Smulewicz, M.Sc.

- ▶ Acting CEO of MicroCoal™ Technologies Inc. since June 2011
- ▶ Former VP at Carbon Friendly Solutions
- ▶ Served on the Board of several European private companies in consulting, IT and construction industries
- ▶ Founded various other companies where he acted as CEO and Director

PRESIDENT

Stan Lis

- ▶ Co-founder, President & Director of MicroCoal™ Technologies Inc. Since its inception in 2006
- ▶ Former president, CEO and director of Stream Communications Network & Media Inc.
- ▶ President, CEO and Director of Trooper Technologies Inc., an environmental company focused on waste management in Central Europe.

CHIEF FINANCIAL OFFICER

Ping Shen

- ▶ Chief Financial Officer of MicroCoal™ Technologies Inc. since 2008.
- ▶ 18 years of professional experience in both China and Canada and a member of the Certified General Accountant Association of Canada.

CHIEF EXECUTIVE OFFICER (MICROCOAL™ INTERNATIONAL)

Steve E. Sears, MBA, B.Sc.

- ▶ Joined MicroCoal™ International Inc. in July, 2012.
- ▶ 31 years of knowledge and experience in the coal industry.
- ▶ Former VP Sales and Marketing of Massey Energy.

FINANCE DIRECTOR (MICROCOAL™ INTERNATIONAL)

Larry Palmer, CMA, MBA

- ▶ Joined MicroCoal™ International in July, 2012. Mr. Palmer has been in the coal industry since 1980, focused on financial, legal and tax aspects of coal transactions.
- ▶ Served in a transitional position at Alpha Natural Resources during its acquisition of Massey Energy Company.

EVP OF MARKETING & INVESTOR RELATIONS

Randall Johnson, P.Eng.

- ▶ Former VP of Operations and Chief Engineer at Massey Energy's Martin County Coal corp. Responsible for numerous projects with their budgets, permits and operations at Massey Energy.
- ▶ Former VP at Coal Handling Solutions LLC, a JV between Massey Energy and Penn Virginia.

BOARD OF DIRECTORS

DIRECTOR AND CHAIRMAN

James Young, PhD

- ▶ Chairman of Board of Directors of Novavax, Inc. and is on the Board of Directors for 3-V Biosciences, Inc.
- ▶ President of R&D for MedImmune, Inc.

INDEPENDENT DIRECTOR

William C. Hudson

- ▶ Independent Director of MicroCoal™ Technologies Inc. since 2010
- ▶ Founder of The Domus Group

INDEPENDENT DIRECTOR

Ian Hume

- ▶ Independent Director of MicroCoal™ Technologies Inc. since 2010
- ▶ Former economist at World Bank including a position at Assistant Director of Energy Department.

DIRECTOR

Slawek Smulewicz, M.Sc.

DIRECTOR

Stan Lis

ADVISORY BOARD

Dr. Isaac Yaniv

- ▶ 35 years of experience as a material scientist to Carbon Friendly
- ▶ Responsible for more than 20 patents related to materials and mineral processing, including key patents in separation of contaminants from coal.
- ▶ Currently, CEO of ORIS Advanced Materials Ltd.

Thomas Drolet

- ▶ 43 years of experience in energy and technology innovation industries.
- ▶ Former President and CEO of Ontario Hydro International.

The Technology

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| Page 13 | Schematic Chart of the Reactor |
| Page 14 | Competitive Advantage |
| Page 15 | Pilot Plant – Hazen Research |

Global Presence

- ▶ Representative offices strategically positioned in:
 - ▶ United States of America (North America)
 - ▶ Poland (Europe)
 - ▶ Indonesia (Asia)
- ▶ Coal provides fuel for 42% of U.S electricity generation in 2011. In some key states such as Ohio, the figure is more like 80%

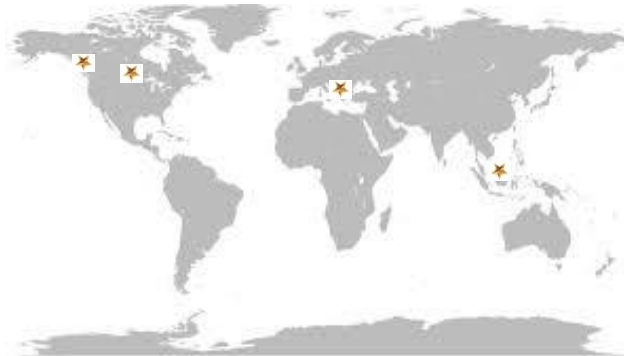
Representative offices across geographies.

Poland

- ▶ 50 coal fired power plants
- ▶ Potential Market Value*: \$310 million

United States of America

- ▶ 1,436 coal fire power installations
- ▶ Potential Market Value*: \$3.4 billion



Indonesia

- ▶ 50 coal fired power plants
- ▶ Potential Market Value*: \$170 million

*(NTD, explain Potential market Value – recurring? What is this based on?)

MicroCoal Technology

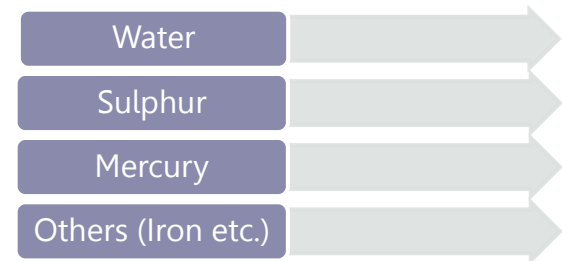
- ▶ Microwaving of raw coal in a MicroCoal™ vertical reactor, where the coal being microwaved is in free fall, has been continuously proven and independently verified.
- ▶ The technology...
 - ▶ Reduces moisture content from 45% to less than 10%
 - ▶ Can increase the calorific value from 4200 Kcal to over 11,000 Kcal
 - ▶ Produces chemical reaction that reduce SOx, NOx and other impurities.
- ▶ Over \$10.0 Million invested in technology development and commercialization;
 - ▶ Co developed by Orica Ltd., an \$8 billion market cap conglomerate
- ▶ Technology secured by multiple process patents;
 - ▶ For onsite use at the power utilities prior to combustion
- ▶ Vertical Configuration, small footprint; Low capital cost and quick amortization
- ▶ Designed for intermittent on-off operation to allow for effective load balancing.



Microwave energy introduced via proprietary MicroCoal™ reactor

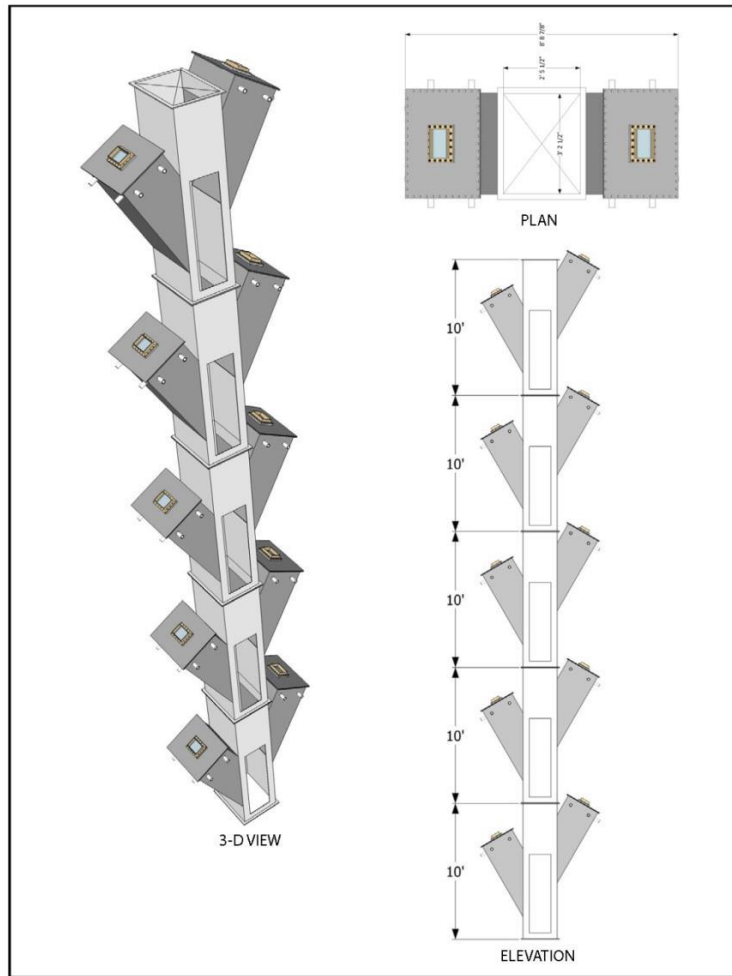


Microwave energizes water and contaminants without changing coal

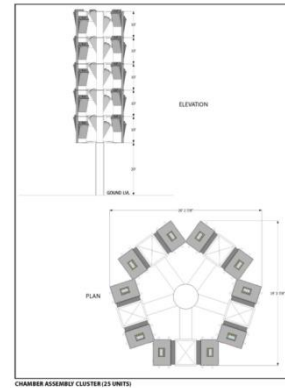


Water and water vapour driven out of coal along with contaminants

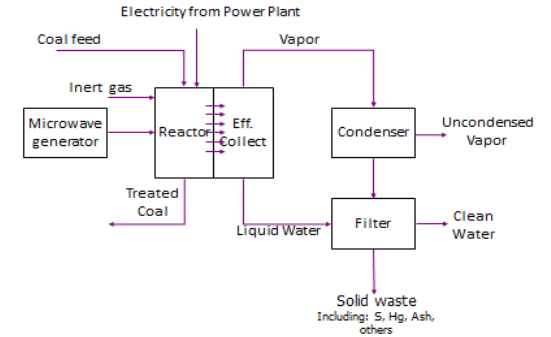
Schematic Chart of the Reactor



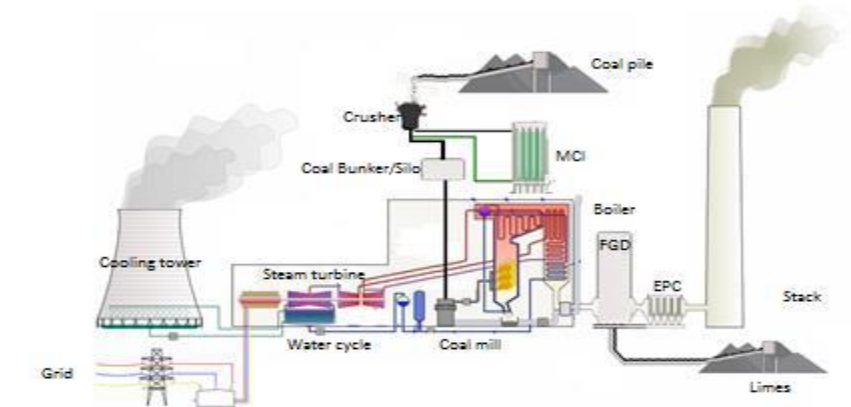
CHAMBER ASSEMBLY STACK (5 UNITS)



CHAMBER ASSEMBLY CLUSTER (12 UNITS)



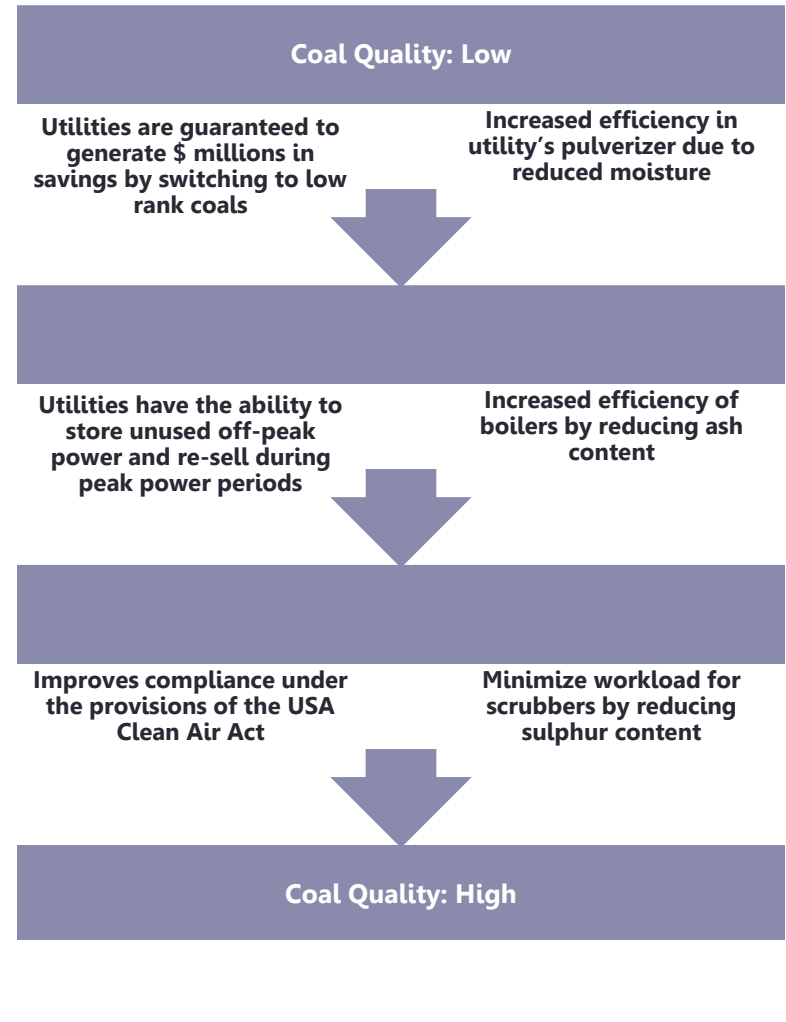
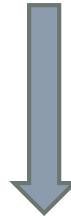
MCI Integration with the power plant



Source: MCI Analysis

Competitive Advantage

- ▶ **Improve Coal Rank:** The MicroCoal™ process converts low-rank coal into high-rank coal during off peak times using excess electricity.
- ▶ **Effectively Stored Energy:** Higher-energy coal, when combusted during peak hours, returns the electricity used to upgrade the coal onto the grid.
- ▶ **Overall Improved Efficiency:** Pollutants are greatly reduced, ash is minimized, boiler and related efficiencies are improved.
- ▶ **Monetization of los off-peak electricity:** Utility monetizes the electricity usually lost during off-peak periods along with saving money when purchasing low-rank coal and obtaining all the financial benefits that impact the bottom line
- ▶ **Avoids Disruption:** Existing logistics and transportation costs of utility are not disrupted.
- ▶ **Clean Water Recovery:** Clean water recovery to improve water balance and reduce water makeup
- ▶ **Scalability:** Integration of proprietary, modular and scalable facility sized to meet customers' specific needs



Pilot Plant - Hazen Research (Golden, Colorado)



MicroCoal™ Pilot Facility at Golden, Colorado

MicroCoal™ detailed design of the optimized module



MicroCoal™ Inside the Pilot Plant at Hazen Research

- ▶ The pilot facility located in Golden, Colorado, was commissioned on 2009, as has been operating successfully for the amenability and parametric testing of coal sample since then.
- ▶ 30 types of Coal from North American, 4 types of coal from China, 6 types from Indonesia and 2 from Europe have been tested at the above facility in over 200 different tests. Some of the coal that has been successfully tested and processed include:
 - ▶ **Antelope, Powder River Basin, Wyoming USA – Moisture content reduced from 20.46% to 5.21%**
 - ▶ **Wara, Borneo (Kalimantan), Indonesia - Moisture content reduced from 43.09% to 10.59%**
 - ▶ **Inner Mongolia, China - Moisture content reduced from 34.48% to 10.53%**
- ▶ The pilot plant processes coal at a rate of **up to 3 tonnes** per hour

Recent Achievements & Forecasts

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Recent Achievements

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Financial Forecasts - Near Term Installation Pipeline

Recent Achievements



- Kalimantan, Indonesia
- Started construction of Asia's first MicroCoal installation.
- Contracted price for the construction of the facility installation is USD \$6M, plus 6 year royalty stream
- Facility will upgrade the calorific value of approx. 190,000 tonnes per year of low-rank coal by removing up to 10% of the coal moisture.

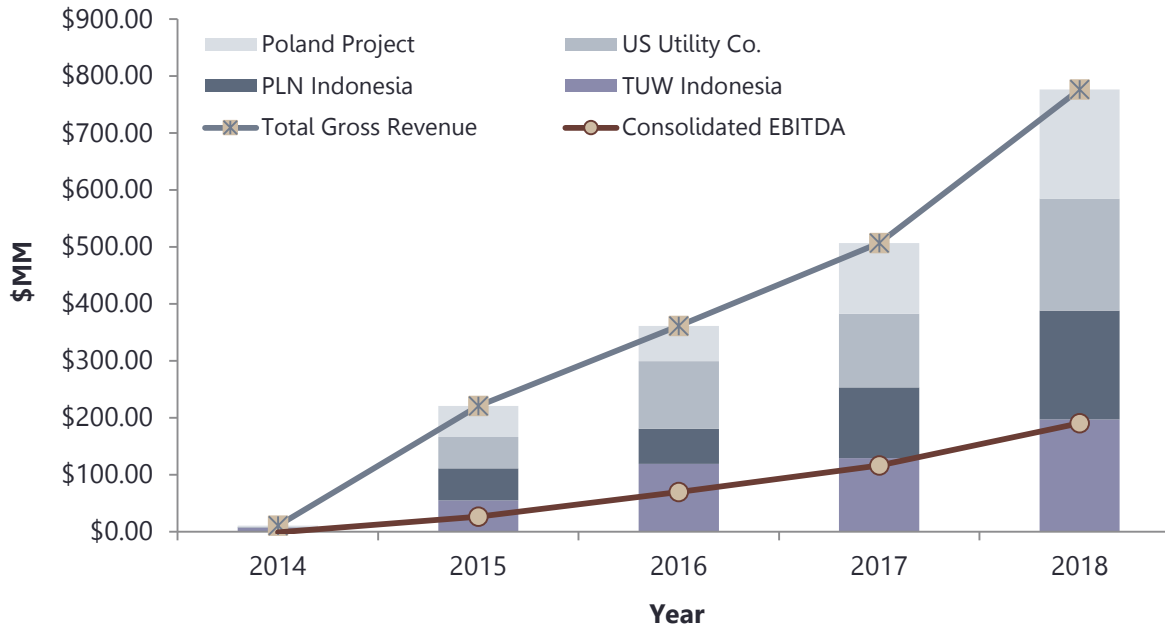
- Kalimantan, Indonesia
- Agreement for demonstration facility and subsequent build out (\$40 million) nearing completion.
- Potential exists to convert additional 5 power plants, Potential contract value of over \$200 million, plus royalty stream

- Eastern USA
- Initial agreement almost finalized for demonstration facility
- Upon success, installation for North America's first major utility, value \$40 million plus royalty stream
- Potential exists to convert additional 5 power plants, Potential contract value of over \$200 million, plus royalty stream

- Poland
- Currently in process of finalizing an agreement for a demonstration plant
- Upon success, installation of Europe's first MicroCoal facility, estimated value \$40 million
- Talks have begun with other utilities.

Financial Forecasts-Near Term Installation Pipeline

Four projects. All in commissioning, or late stage negotiations. Does not include future customer wins



| Project Summary | 2014E | 2015E | 2016E | 2017E | 2018E |
|-----------------------|---------|---------|----------|----------|----------|
| TUV Indonesia | | | | | |
| Add'l. MW Installed | 1 | 15 | 30 | 30 | 45 |
| Cap.Ex | \$6.00 | \$45.00 | \$90.00 | \$90.00 | \$135.00 |
| Revenue | \$7.18 | \$55.06 | \$119.26 | \$129.46 | \$196.96 |
| Net Revenue | \$1.98 | \$10.06 | \$29.26 | \$39.46 | \$61.96 |
| PLN Indonesia | | | | | |
| Add'l. MW Installed | 0 | 15 | 15 | 30 | 45 |
| Cap.Ex | \$0.50 | \$46.50 | \$45.00 | \$90.00 | \$135.00 |
| Revenue | \$0.59 | \$56.40 | \$61.62 | \$124.02 | \$191.52 |
| Net Revenue | \$0.09 | \$9.90 | \$16.62 | \$34.02 | \$56.52 |
| US Utility Co. | | | | | |
| Add'l. MW Installed | 0 | 15 | 30 | 30 | 45 |
| Cap.Ex | \$0.25 | \$45.00 | \$90.00 | \$90.00 | \$135.00 |
| Revenue | \$0.30 | \$54.62 | \$118.82 | \$129.02 | \$196.52 |
| Net Revenue | -\$1.21 | \$9.61 | \$28.82 | \$39.02 | \$61.52 |
| Poland Project | | | | | |
| Add'l. MW Installed | \$0.00 | \$15.00 | \$15.00 | \$30.00 | \$45.00 |
| Cap.Ex | \$2.00 | \$45.00 | \$45.00 | \$90.00 | \$135.00 |
| Revenue | \$2.36 | \$54.72 | \$61.62 | \$124.02 | \$191.52 |
| Net Revenue | \$0.36 | \$9.72 | \$16.62 | \$34.02 | \$56.52 |

| Projects | Pilot - MW | Full Commercial - MW | Fee Structure | Cap. Ex (Pilot) |
|----------------|------------|----------------------|-------------------------|-----------------|
| TUV Indonesia | 1MW | 15MW | Function of Cap.Ex + MW | \$6M |
| PLN Indonesia | 0.2MW | 15MW | Function of Cap.Ex + MW | \$1.25M |
| US Utility Co. | 0.2MW | 15MW | Function of Cap.Ex + MW | \$1.25M |
| Poland Project | 0.2MW | 15MW | Function of Cap.Ex + MW | \$1.25M |

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Appendix.

Patents

| Description | Filing Date | Awards | Discussion |
|------------------------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Energy management in power plant PCT IL2004/001077 WO 2006/013551 | Filed November 24 th 2004 | Global Patent: Granted in Eurasia, S.A | A method for energy management and storage of electricity in upgraded coal for improved plant's performance and stabilize load. |
| Method and system for water vaporization PCT IL2008/000846 WO 2008/155775 | File June 20 th 2007 | Global Patent | A method of maximizing energy efficiency in water evaporation. |
| Method and system for separation of contaminant from Coal PCT IL2008/000936 Already published | Filed July 19 th 2007 | Global Patent | A process and equipment for physical separation of iron, sulfur and mercury |
| Method for treatment of Materials by Electromagnetic Radiation (EMR) US Provisional 61/129 | Filed 19 th 2008 | US Provisional Patent | Criteria for optimizing design to maximize productivity in microwave treatment of coal. |