Corporate Presentation
September 2015

“Upgrading low value resources, improving environmental outcomes”
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# Table of Contents

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Section 1 Corporate Information</td>
</tr>
<tr>
<td>13</td>
<td>Section 2 Coldry Technology</td>
</tr>
<tr>
<td>26</td>
<td>Section 3 Matmor Technology</td>
</tr>
<tr>
<td>39</td>
<td>Section 4 Projects</td>
</tr>
<tr>
<td>44</td>
<td>Section 5 Value Proposition</td>
</tr>
</tbody>
</table>
Corporate Information

Corporate Overview
Company Highlights
Company Projects
Board & Management
Corporate Milestones
Strategic Partners
Corporate Overview

Issued Capital (as at 23 Sept 2015)

<table>
<thead>
<tr>
<th>ASX Code</th>
<th>ESI</th>
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<tbody>
<tr>
<td>Shares (pre-issue)</td>
<td>2,547 M</td>
</tr>
<tr>
<td>Options ESIOA</td>
<td>1,258 M</td>
</tr>
<tr>
<td>Options ESIOB</td>
<td>896 M</td>
</tr>
<tr>
<td>Market Capitalisation</td>
<td>~$43M</td>
</tr>
<tr>
<td>Share Price</td>
<td>1.7¢</td>
</tr>
<tr>
<td>2015 Trading Range</td>
<td>0.6¢ - 2.8¢</td>
</tr>
</tbody>
</table>

Cash and Debt

| Cash (as at 30 June 2015) | $940k |
| Short Term Debt | $1.74 M |
| Long Term Debt | Nil |

Shareholders (as at 15 Sept 2015)

| Total shareholders | 3,853 |
| Top 20 | 30% |
| Top 50 | 42% |
| Top 100 | 51% |
Corporate Overview

- ASX Listed since 2006
- Technology R&D & Commercialisation
- Energy & Resource Focus
- Emerging market focus, global application
- Unique technologies:
  - Low rank coal upgrading – Coldry
  - Primary Iron production – Matmor
- E³ – Drivers for ECT technology adoption:
  - Energy & Resource flexibility & security underpins improved economic outcomes
  - Economic improvement to low value resources underpins improved environmental outcomes
  - Environmental Improvement is a product of higher GDP per capita, which is the product of affordable energy and resources driving economic development.
Innovative resource upgrading technologies

Minerals processing technologies focused on transforming low-value resource streams into higher grade, valuable products delivering positive economic, energy, resource and environmental security outcomes.

Unique low rank coal drying technology - Coldry
- IP owned 100% by ECT and protected in all major markets
- World’s most efficient pre-drying process for high moisture content coals
- Enables low-rank coal use in downstream conversion process for high value products
- Outstanding environmental credentials including a zero net CO₂ footprint from the process
- Construction-ready designs for first commercial scale plant ready to go

Primary iron processing technology – Matmor
- Intellectual property owned 100% by ECT, patented in Australia and protected in all major markets via Coldry patents as the required, integrated front-end raw material preparation process for Matmor
- Reduces feedstock costs by ~40-70% through use of low cost, abundant raw materials
- Reduces energy costs by up to 50% through innovative thermo-chemical pathway
Targeted Commercialisation Activities

India represents the ideal convergence of macro economic drivers, supportive government policy settings and frugal innovation, making it the focus of our development activities.

Australia has an advanced lignite demonstration program underway, with Coldry as the enabling drying solution for one of the program proponents.

Indian integrated Coldry and Matmor project

- Large Government of India owned partners, National Minerals Development Corporation and Neyveli Lignite Corporation, for an integrated Coldry & Matmor plant.
- Stage 1 commenced July 2015 with construction to follow
- Aiming to prove at a large scale, a multi product plant to service a broad spectrum of energy and steel industry needs

Australian Coldry PCI project

- Techno economic feasibility study to start Q3 2015 for a >200,000 tonne per annum plant to produce high grade PCI coal from lignite
- Coldry is the leading front-end drying solution, enabling high value-add outcomes
Chairman – Glenn Fozard
Glenn has a strong commercial background and extensive experience in finance and capital markets at both board and executive level. With a deep understanding of tailored financial solutions for SMEs in the Cleantech and Agricultural sectors, he supports the company with valuable guidance in the technology development, risk management and capital raising areas. Glenn is the founder of Greenard Willing and Chairman of Platinum Road, both specialist financial advisory firms. Glenn has held an advisory position with the company for over five years and has contributed significantly towards the capital raising for the company during that time.

Managing Director – Ashley Moore
Ashley is a Chartered Professional Engineer, with extensive experience in all facets of manufacturing, plant operations, supply chain management, sales and marketing and major project delivery from 30 years in industry. Ashley joined the company in October 2009 as Business Manager, Coldry. Ashley was appointed to the role of Chief Operating Officer of the company in August 2011, and then to Managing Director in 2013.

Non-executive Director - David Smith
David has a strong legal and commercial background, having practiced commercial law for over 24 years including nearly 17 years as a partner in national firms. He is currently a partner in the intellectual property and technology group at Gadens Lawyers. He has assisted many companies with protecting their intellectual property, IP commercialisation agreements, collaborative research agreements and international negotiations. This year David was recognised as a ‘Best Lawyer - Intellectual Property’ for the second year running. He is currently Vice President of Bicycle Network where he also chairs the Audit and Risk Committee.

Non-executive Director – Barry Richards
Barry has a strong industry and commercial background of over 30 years including his role as Managing Director of Mecrus Pty Ltd since its formation over 16 years ago, contract and business development roles with Siemens / Silcar, and operations and maintenance management experience with the State Electricity Commission of Victoria (SECV). He provides extensive experience in business management, major project development and delivery, coal plant operations and maintenance and has a broad understanding of technology and process development.
Board & Management continued

Operations Manager & Company Secretary - Adam Giles
Adam has over 20 years business and management experience across both private and public sectors. His long-term involvement with the development of the Coldry and Matmor technologies and as a founding shareholder of the Company provides valuable background, helping inform strategic direction. Key responsibility areas include Operations, Investor and Media Relations and Corporate Governance.

Coldry Development Manager – Warrick Boyle
Warrick is a Manufacturing and Chemical Engineer with 20 years experience across diverse manufacturing roles in medical, chemical, industrial, pharmaceutical and consumer goods. Warrick’s core responsibility is the fundamental process development of the Coldry technology and product, management of strategic engineering and research stakeholders and pilot plant operations and maintenance.

Matmor Research Manager – Keith Henley-Smith
Keith is a chemical engineer, metallurgist and inventor, having developed and patented a fully austenitic stainless steel, called PAK-450. Keith also holds the honour of being the only Australian invited by the Culham Centre for Fusion Energy (CCFE) in Oxford UK to consult on the development of the world’s largest Tokamak fusion device in Cadarache, France, the Joint European Torus (JET) Project. Mr Henley-Smith’s PAK-450, with its inert magnetic properties, has been identified as a potential key material in the development of the fusion reactor. Mr Henley-Smith leads the fundamental research and development efforts for Matmor and views it as one of the single greatest innovations in primary iron making since the introduction of coke based methods over 200 years ago.
Corporate Milestones

2006
ASX Listing

2007
Matmor Test Plant
Semi-continuous Production

2007
Coldry Pilot plant
Ver. 1
Continuous Production

2009
Coldry Pilot plant Ver. 2
Water recovery

2013
Coldry Pilot plant Ver. 3
Detailed commercial-scale design

2014
Matmor acquisition

2015
Matmor test plant upgrade commenced

2015
Coldry Commercial-scale demonstration (proposed)
Strategic Partners

- ARUP
- GHD
- Matmor Design Partner (tba)
- MECRUS
- THERMAX LIMITED
- STEELE
- Monash University
- Nixton Rose Fulbright
- RSM Bird Cameron
- Yes/ Bank
Coldry

Value Proposition
Thermal Coal Market
Technology Introduction
The Low Rank Coal Challenge
The Drying Challenge

The Coldry Process
Value Transformation
Market Opportunity
Competing Technology
Coldry Business Model
Coldry Value Proposition

- Opens new markets
- Establishes new revenue streams
- Diversifies energy and resource options
- Upward revaluation of stranded or low value low rank coal assets
- Enhanced efficiencies
- Mitigate CO$_2$ emissions

Cost effective low rank coal drying is the 'gateway' enabler.

Traditional utilisation pathway is 'low value'.
Coldry Value Proposition: Spotlight on the thermal coal market

- Incremental income from sales of upgraded product enabled by low marginal upgrade cost
- Competition – Seaborne Thermal coal trade
- To gain competitive space, you must be able to displace others on the supply curve
- With current pricing, less than half of supply generates profitable sales for traditional suppliers (horizontal dashed line). Via Coldry (blue line), ample margin is available even at lower pricing levels.

Energy Transition Advisors stated: “...Current spot prices to be below the “cash costs” of production for nearly one-half of total capacity and to be below the “breakeven coal price” (which includes capital costs and economic returns) for two-thirds of total capacity. Over half of China’s coal producers have cash costs in excess of domestic Chinese spot prices....”

October 2014

Source: Australian Treasury publication 2014 – Long term commodity pricing projections
Coldry technology introduction

Low-rank coal drying

- Enhanced efficiency
- Greater energy security
- High value applications
- Low emissions
Coldry technology introduction

<table>
<thead>
<tr>
<th>Product Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low moisture, high energy value</td>
<td>Higher price, broader market applications</td>
</tr>
<tr>
<td>Stable</td>
<td>Won't permanently reabsorb moisture, low spontaneous combusting risk, storable, transportable</td>
</tr>
<tr>
<td>Retained volatile matter</td>
<td>Ideal for coal conversion technologies, yielding more gas and oil than black coal</td>
</tr>
</tbody>
</table>
| Variable product output (pictured left) | Fit for purpose product format tailors hardness to customer needs:  
• ‘Gateway’ is ECT’s ‘fast dry’ product, producing a cheaper but more friable product, ideal as a cost-effective front end feedstock for conversion processes.  
• ‘Domestic’ grade is the ‘standard’ Coldry product, robust enough to withstand handling and transport in local markets with minimal fines generation.  
• ‘Export’ grade is designed to withstand the rigors of multiple bulk handing points over long distances with minimal fines generation. |

Coldry Product 'Toughness' Indicators

![Compressive Strength vs Relative Density Graph]

- Export
- Domestic
- 'Gateway'
The low rank coal challenge

To enable low rank coal use in higher value applications, it needs to be dried.

- High moisture content
  - Low energy content
- Not suitable for use in black coal applications or further upgrading
- CO₂ intensive power generation
- Significant risk of spontaneous combustion compared to bituminous coal
  - Limits storage volume and duration
  - Increased transport cost
- Inefficient transportation cost due to carting mostly water

The challenge is to get the moisture down from here... and increase energy content up from there... to here...
The Drying Challenge

Drying is easy.

Drying efficiently and cost-effectively is the challenge.

Coldry meets the challenge.

Achieving a net energy uplift and zero CO₂ emissions at the lowest possible marginal cost, is the goal.

“It is difficult to dry low rank coal with high efficiency. For hard coals, the majority of the moisture is present on the surface of coal particles. Energy required to remove free moisture is simply the latent heat of evaporation (~2.27MJ/kg). In contrast a considerable portion of the moisture is held by hydrogen bonds in the capillary pores or interstices of low rank coal particles. Hydrogen bonding increases the strength of moisture holding and more energy is needed to remove a certain amount of moisture from low rank coal. Another severe problem with drying low rank coal is the ease of reabsorption of moisture. To achieve deep drying of low rank coal, the number of hydrogen bonds has to be reduced by destroying them either using thermal or mechanical methods, which is the key to any effective drying process.”

Dr Nigel S Dong, IEA Clean Coal Centre
Coldry Process

“One distinct advantage of Coldry is the relative low heat requirements in the drying process, allowing for the opportunity to make use of waste heat from an industrial facility or power plant.”

Dr Victor Der
Former Assistant Secretary for Fossil Energy, US Dept. of Energy
General Manager, North America, Global CCS Institute
Coldry Value Transformation

“Given India’s large demand-supply mismatch of thermal coal, the Coldry technology offers an efficient and cost-effective solution to utilize the 43 BT (est.) lignite reserves of India efficiently to bolster the energy security of the country while mitigating any adverse impact on the climate.”

YES Bank Ltd, India

* Indian lignite via ‘gateway’ product used as an example
Market Opportunity

Coldry enables enhanced utilisation of low-rank coal resources by allowing them to service higher-rank coal applications.

World Recoverable Coal Reserves & consumption

<table>
<thead>
<tr>
<th>% of World Reserves</th>
<th>% of Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>55% Low rank coal</td>
<td>14% Lignite</td>
</tr>
<tr>
<td>23% Lignite</td>
<td>13% Sub-bituminous</td>
</tr>
<tr>
<td>32% Sub-bituminous</td>
<td></td>
</tr>
<tr>
<td>45% High rank coal</td>
<td>73% Bituminous</td>
</tr>
</tbody>
</table>

0.1 Bn tonnes market penetration = 250 Modules of capacity similar to India project

*Energy: electricity, steam and conversion to gas and liquid fuels
**Including cement manufacture, fertiliser
Source: World Energy Energy Council
Major low rank coal reserves
- Australia
- China
- Indonesia
- India & Pakistan
- Turkey
- Thailand
- Germany
- Czech / Serbia / Poland …
- North America

Fast Fact – Capacity represents significantly more than 500 years of consumption at current rates, i.e. ample space for growth if achieved with improved sustainability.
Coldry Competitors

- This graph is a proxy for process energy efficiency.
- High temperature and pressure requires energy input.
- Energy needs to be generated, either from gas or coal, adding cost to a process.
- ECT have ‘cracked the code’ of efficient low rank coal drying.

Coldry is the world’s first low temperature, low pressure drying method capable of producing a black coal equivalent product via a low cost, zero CO₂ process.
## Coldry Business Model

<table>
<thead>
<tr>
<th>Key Partners</th>
<th>Key Activities</th>
<th>Value Propositions</th>
<th>Customer Relationships</th>
<th>Customer Segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Thermax</td>
<td>• Fundamental R&amp;D</td>
<td>• Cost effective low rank coal drying</td>
<td>Direct relationships with:</td>
<td>Process integration</td>
</tr>
<tr>
<td>• ARUP</td>
<td>• IP development &amp; protection</td>
<td>• Open new markets</td>
<td>• Mine and power station owners</td>
<td>• Mine &amp; power station owners</td>
</tr>
<tr>
<td>• JC Steele</td>
<td>• Platform Development</td>
<td>• Establish new revenue streams</td>
<td>• Plant &amp; Equipment Vendors</td>
<td>• Conversion process owners</td>
</tr>
<tr>
<td>• YES Bank</td>
<td>• Engineering</td>
<td>• Diversify energy and resource options</td>
<td>• Regulatory authorities</td>
<td></td>
</tr>
<tr>
<td>• Mecrus</td>
<td>• Business Development</td>
<td>• Revalue assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Platinum Road</td>
<td></td>
<td>• Enhance efficiency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Greenard Willing India</td>
<td></td>
<td>• Mitigate CO₂ emissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Norton Rose</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>• RSM Bird Cameron</td>
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<tr>
<td>• GHD</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>• Monash University</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Resources</th>
<th>Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Researchers</td>
<td>• Direct</td>
</tr>
<tr>
<td>• Engineers</td>
<td>• Indirect via route-to-market</td>
</tr>
<tr>
<td>• Business development</td>
<td>• Indirect via partner vendors</td>
</tr>
<tr>
<td>• Sales Support</td>
<td></td>
</tr>
<tr>
<td>• OM&amp;S support</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost Structure</th>
<th>Revenue Streams</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Patents</td>
<td>• License fees – plant sales</td>
</tr>
<tr>
<td>• Salaries</td>
<td>• Royalty fees – plant capacity deployed</td>
</tr>
<tr>
<td>• Plant &amp; equipment</td>
<td>• Maintenance and servicing fees</td>
</tr>
<tr>
<td>• Business development</td>
<td></td>
</tr>
<tr>
<td>• Business admin &amp; support</td>
<td></td>
</tr>
</tbody>
</table>
Matmor

“The world’s first low rank coal based primary iron making solution.”
Matmor Value Proposition

- Lower cost raw materials
- Lower capital cost plant
- Lower emissions
- Higher value products
- Resource diversity & security
- Waste remediation solution
- Coldry provides essential feed preparation step
## Matmor technology introduction

**ECT Matmor Test Plant**
Melbourne, Australia

<table>
<thead>
<tr>
<th>Process Features</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| Uses low-rank coal and alternative iron ore materials. | • Low rank coal replaces coking coal  
• Wide range of iron oxide sources  
• Ability to use lower grades of iron ore  
• Lower raw material cost  
• Diversified supply chain  
• Decoupling from coking coal and high grade iron ore improves energy and resource security  
• Waste remediation solution improves environmental outcomes  
• Economic advantages: Import replacement, monetise waste streams and add value to lower grade coal and iron oxide resources |
| Lower operating temperature, <1,000°C | • Lower capital cost plant  
• Higher quality metal product  
• Increased energy efficiency |
| Uses Coldry as the feed preparation process | • Low cost, zero CO₂ drying and pelletising  
• Eliminates coking ovens and sinter plants |
Matmor technology introduction

<table>
<thead>
<tr>
<th>Product Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Fe yield</td>
<td>• Metallic yield of 95%+ means maximum value extracted</td>
</tr>
<tr>
<td></td>
<td>• Fe content of the finished product is 95%-99%, delivering a high quality iron with minimal impurities</td>
</tr>
<tr>
<td>High Fe content</td>
<td>• Low impurities</td>
</tr>
<tr>
<td></td>
<td>• Lower downstream processing cost</td>
</tr>
<tr>
<td>Flexible output:</td>
<td>• Flexible applications</td>
</tr>
<tr>
<td></td>
<td>• Integrate seamlessly with existing steelmaking operations</td>
</tr>
<tr>
<td></td>
<td>• Feed Induction or Electric Arc furnaces</td>
</tr>
<tr>
<td></td>
<td>• Export</td>
</tr>
</tbody>
</table>

Input flexibility: Matmor has successfully processed iron oxide inputs ranging from 45% to 65% Fe content.

Output: In solid metal form, Matmor delivers a high quality product with >95% Fe content.
The ‘alternative raw material’ opportunity

There exists a vast, distributed ‘above ground ore body’ in the form of iron ore mine fines and slimes, and industrial wastes such as millscale and nickel refinery tailings.

Matmor enables a lower cost primary iron production pathway by leveraging two unique features:

1. **Decoupling iron making from coking coal**
   By utilising the rich organic chemistry within low rank coal, the Matmor process is able to deliver a high quality product without the need for high quality coking coal, resulting in decreased raw material cost and diversified supply options.

2. **Exploiting the ‘above ground ore body’**
   By harnessing the vast above ground ore body that exists as mine tailings, fines and slimes and from industrial wastes such as millscale and nickel refinery tailings, Matmor is able to leverage sunk mining and processing costs by providing a waste remediation solution that turns a contingent liability into a revenue stream.
The ‘steel intensity’ challenge

India is positioned to substantially increase its steel demand, yet is heavily reliant on imports of coking coal and iron ore.

Matmor opens up new domestic raw material supply options in support of growth in emerging nations.

In countries with mature steel intensity curves, Matmor is an ideal waste remediation solution.

The most powerful forces driving steel demand are aligned. As economies develop and modernise, steel consumption per capita grows, reflecting a wide range of growing applications – basic infrastructure, water treatment plants, food processing distribution centres, roads, bridges – and, as the middle class emerges, durable goods such as appliances and cars.

Data: World Steel Association
Bubble size represents population
Matmor employs a different chemical pathway, making it the world’s first and only low temperature, low rank coal-based iron making process.
The Matmor process combines metal oxide bearing media, low rank coal and a flux via the Coldry process to produce a composite pellet.

Feedstock flexibility: Matmor can reduce the following metal oxides to metal:

- Iron Ore:
  - Hematite: Fe₂O₃
  - Magnetite: Fe₃O₄ – without the need for sintering

- Waste streams:
  - Mill scale
  - Blue Dust

- Fe within Nickel ores (Limonite) and Nickel refinery tailings:
  - Also recovers Ni within the alloy
  - Has also recovered Cr content within these same materials

- Positive test results on both Ilmenite (Ti source) & Mn ores with further development required
Matmor
Commercialisation Pathway

Bench Scale

Test Scale

Pilot Scale

Demo Scale

Commercial Scale

Current stage of development

Bench Test Unit
- 10kg output
- Batch Process
- Complete and in active service

Test Plant
- 1 tonne per day
- Semi-continuous process
- No pellet making integration
- Stage 1 complete
- Stage 2 due to commence H2 2015

Pilot Plant
- 1 tonne per hour
- Full automation
- Integrated pelletisation

~8,000 tpa capacity

~80,000 tpa capacity

>200,000 tpa capacity
Matmor Process vs. Blast Furnace

**Matmor Process**
- Lower Cost
- Simpler
- More flexible
- Less CO₂

- **Lower cost** inputs
- Utilise domestic raw materials
- Utilise waste grade ore

**Blast Furnace**

- **Efficient**
  - Lower temperature than Blast Furnace:
    - **Lower** capex
    - **Lower** maintenance cost
    - Economic at smaller scale

- High quality product:
  - 95-97% Fe vs 90-95% via Blast Furnace
  - Low inclusions
  - Ideal steel making feedstock
  - Substitute for high-grade scrap steel

**Environmental Improvement**
- Eliminates:
  - Sinter plant
  - Coke ovens

- **Economic**
  - Lower capex
  - Lower maintenance cost
  - Economic at smaller scale
## Benefits vs Blast Furnace

- Coking coal is replaced by low rank coal which can cost as little as $5 a tonne to mine
- Diversified raw material supply; in addition to high grade iron ore, access to the ‘above ground ore body’ or low grade (waste) iron oxide sources is enabled, increasing resource security
- Capital cost is estimated to be less than half that of a comparable traditional blast furnace due to smaller foot print and lower temperature materials of construction
- The need for traditional blast furnaces is eliminated
- Integrates with existing downstream steel making
- Emissions are significantly reduced, as no coking ovens or sinter plants are needed
- Produces a consistent, high quality iron product

<table>
<thead>
<tr>
<th>Raw Material Input</th>
<th>Traditional Iron Making (65% Fe raw material)</th>
<th>Matmor (65% std Fe raw material)</th>
<th>Matmor (Iron Ore Fines as raw material)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reductant</td>
<td>0.75 tonnes coke x 1.37 t/t x ~$120 (coking coal) = $125</td>
<td>2.0 tonnes x ~$20 (lignite) = $40</td>
<td>1.2 tonnes x ~$20 (lignite) = $25</td>
</tr>
<tr>
<td>Iron Ore</td>
<td>1.8 tonnes x $50 = $90</td>
<td>1.8 tonnes x $50 = $90</td>
<td>1.9 tonnes x $15 = $30</td>
</tr>
<tr>
<td>Flux (Limestone)</td>
<td>~$20</td>
<td>~$10</td>
<td>~$10</td>
</tr>
<tr>
<td>Total $/tonne hot metal</td>
<td>~$235</td>
<td>~$140</td>
<td>~$65</td>
</tr>
</tbody>
</table>

Currency: USD

- 40% improvement
- >70% improvement
Benefits vs other methods

- Lower Temperature
- Lower residence time, higher productivity
- Lower Cost

- Residence time is a proxy for asset productivity
- Temperature is a proxy for asset capital intensity
- Bubble size represents ‘Relative Raw Material Cost’
# Matmor Business Model

<table>
<thead>
<tr>
<th>Key Partners</th>
<th>Key Activities</th>
<th>Value Propositions</th>
<th>Customer Relationships</th>
<th>Customer Segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matmor Design Partner (tba)</td>
<td>Fundamental R&amp;D</td>
<td>Matmor</td>
<td>Direct relationships with:</td>
<td></td>
</tr>
<tr>
<td>Thermax</td>
<td>IP development and protection</td>
<td>Cost effective primary iron production</td>
<td>Mine and power station owners</td>
<td></td>
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<tr>
<td>ARUP</td>
<td>Platform Development</td>
<td>Waste remediation solution</td>
<td>Plant &amp; Equipment Vendors</td>
<td></td>
</tr>
<tr>
<td>JC Steele</td>
<td>Engineering</td>
<td>Open new markets</td>
<td>Regulatory authorities</td>
<td></td>
</tr>
<tr>
<td>YES Bank</td>
<td>Business Development</td>
<td>Establish new revenue streams</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mecrus</td>
<td></td>
<td>Diversify energy and resource options</td>
<td></td>
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</tr>
<tr>
<td>Platinum Road</td>
<td></td>
<td>Revalue assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greenard Willing India</td>
<td></td>
<td>Enhance efficiency</td>
<td></td>
<td></td>
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<tr>
<td>Notron Rose</td>
<td></td>
<td>Mitigate CO$_2$ emissions</td>
<td></td>
<td></td>
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<tr>
<td>RSM Bird Cameron</td>
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<tr>
<td>GHD</td>
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<tr>
<td>Monash University</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>University of Newcastle</td>
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</tr>
</tbody>
</table>

| Key Resources | Channels ||
|---------------|----------|
| Researchers | Direct |
| Engineers | Indirect via route-to-market |
| Business development | Indirect via partner vendors |
| Sales Support | |
| OM&S support | |

<table>
<thead>
<tr>
<th>Cost Structure</th>
<th>Revenue Streams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patents</td>
<td>License fees – plant sales</td>
</tr>
<tr>
<td>Salaries</td>
<td>Royalty fees – plant capacity deployed</td>
</tr>
<tr>
<td>Plant &amp; equipment</td>
<td>Maintenance and servicing fees</td>
</tr>
<tr>
<td>Business development</td>
<td></td>
</tr>
<tr>
<td>Business admin &amp; support</td>
<td></td>
</tr>
</tbody>
</table>
Projects

India - Coldry
India - Matmor
India - Project Pathway
Capital Requirement
India is in a major growth phase:
- Energy demand increasing, outstripping domestic primary energy source growth
- With over 4.5 Bn tonnes of proved recoverable reserves in India, low rank coal is able to play a major supporting role via application of ECT technologies
- India will be the fastest growing major economy in 2016, with the IMF projecting GDP growth of 7.5 percent against China’s 6.8 and a global rate of 3.8 percent.
- India’s coal-based energy production is projected to double by 2030.

India’s coal demand has outstripped supply since 2000, with accelerating divergence since 2009.

India’s per person electricity consumption is lower than advanced economies and many emerging economies.
India: The place to be for Matmor

India is in a major growth phase:
- Infrastructure development requiring substantial increases in iron & steel production
- Domestic coking coal reserves, effectively zero, heavily reliant on imports
- Low value resources (low rank coal & iron ore fines & slimes) able to play a major role in bridging this gap via application of ECT technologies
- World Steel Association projects India’s steel consumption growth rate to remain the highest in the world at 7.3% pa for 2016
- India is currently the world’s third largest producer of crude steel
- If India increase consumption to half of global average, this represents an increase of 85% or ~70Mt pa
- If ECT can capture 5% of the growth via Matmor, this represents 3.5M tpa or ~17 commercial size modules

India’s steel consumption needs to increase from 64kg per capita to several hundred kg to meet growth requirements

*Ernst & Young*
India Project

Objective:
- Development of an integrated Coldry demonstration + Matmor pilot facility in India
- Launchpad for global commercial rollout

Partners:
- Neyveli Lignite Corporation is the custodian of India’s lignite resources, the lead partner on Coldry and the project host
- The NMDC (National Mineral Development Corporation) is India’s largest Iron ore miner.
- Both companies are PSUs (Public Sector Undertakings, i.e. Government entities)

Location
- Neyveli, Tamil Nadu
- ~2.8GW power station
- ~25m tpa mine output
India Project Pathway

- Demonstrate as a platform for subsequent larger scale commercial roll out
- ‘Demonstration’ achieves:
  - Capital defined
  - O&M capability displayed
  - Product quality, value and use validated
  - Business model proven

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>Complete Coldry Module design</td>
</tr>
<tr>
<td>2014</td>
<td>Coldry Feasibility Study</td>
</tr>
<tr>
<td>2015</td>
<td>Coldry EPC partner</td>
</tr>
<tr>
<td>2016</td>
<td>Integrated Plant proposal</td>
</tr>
<tr>
<td>2017</td>
<td>Partnership agreements</td>
</tr>
</tbody>
</table>

- Matmor Pilot Plant development program
- Construction preparation
- Financing
- Operations

Tripartite collaboration agreement with NLC and NMDC
ECT Value Proposition
Value Proposition for Low rank coal asset owners

Incremental sales from existing low rank coal assets into higher value markets:

- Coldry - participate in thermal coal markets on a competitive marginal cost basis against thermal coal miners.
- Matmor - participate in the iron and steel markets with a fundamental raw material and operational cost advantage against incumbent processes.
Thank you.

Glenn Fozard
Chairman

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Ashley Moore
Managing Director