

## A clean power company

Investor Presentation
April 2012



## Company snapshot

Australian Stock Exchange - ERJ		
Issued Shares: ERJ	892,296,815	
Options: ERJO (exercise price of \$0.20 by 31/12/16)	64,737,700	
Options: ERJAO (exercise price of \$0.03 by 30/6/15)	438,704,782	
Share Price: ERJ <sup>1</sup>	\$0.014	
Market Capitalisation (Undiluted)	\$12.5 M	
Market Capitalisation (Diluted)	\$19.5 M	





An clean power company focused on providing recovered heat energy to multiple sectors, including mining and resources



Australian exclusive commercial rights for proven waste heat conversion technology – the "Opcon Powerbox"



Opcon Powerbox can produce up to 20% more power and lower CO<sub>2</sub> emissions by ~15% without burning additional fuel



# Progressive leadership team

17 years in Federal Parliament (including Minister for Environment & Heritage and responsible for climate change policy)	
Former CEO, Clarinet Australia; Former MD, Halcyon group; Co-founder & inaugural CEO Request Broadband	
Current Opcon CEO, provider of organic Rankine cycle Powerbox technology	
20 years in Senior Engineering roles in maintenance, technical support and marketing	
Former Australasian Financial Controller MI-SWACO	



## What we do

Capture heat Sell this Use this revenue Generate electricity using electricity back to wasted as a to drive shareholder by-product of the customer the Opcon industrial power Powerbox value generation without fuel or creating emissions or capital costs to the customer



## **Business model**



Each 0.7 MW unit generates 6,000 MWh per year



Long term energy off-take agreements to deliver electricity from waste heat at a fixed price



Build, own and operate power generation capacity



\$6.25M zero coupon convertible bond facility to fund early installations

Currently exploring debt funding to minimise shareholder dilution

	Per unit	Per MW
CAPEX (installed)	\$2.9M to \$3.5M	\$4.1M to \$5M
Revenue	\$1M to \$1.2M per annum <sup>1</sup>	\$1.4M to \$1.7M per annum <sup>1</sup>
Operating costs	\$160K to \$195K per annum <sup>2</sup>	\$230K to \$275K per annum <sup>2</sup>
Gross Margin (as % of Revenue)	83% to 88% <sup>3</sup>	83% to 88% <sup>3</sup>
IRR for project	24% to 39% <sup>3</sup>	24% to 39% <sup>3</sup>

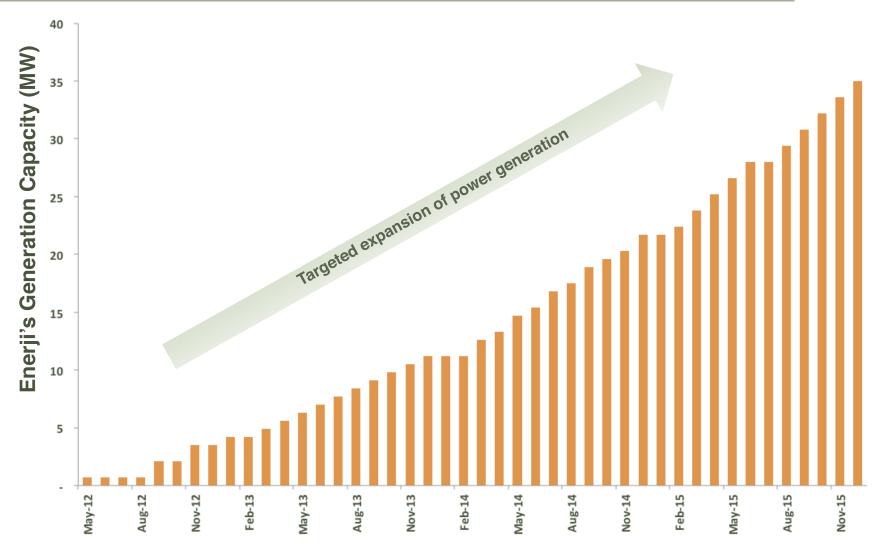
<sup>&</sup>lt;sup>1</sup> Based on electricity sale price of AUD\$170-\$200/MWh, off-grid diesel fuelled sites, assumes 97% uptime

<sup>&</sup>lt;sup>2</sup> Project Operating includes maintenance 5% of Capex, insurance 0.5% of Capex

<sup>&</sup>lt;sup>3</sup>5% yearly price increase, 3% inflation, 10 year project life



# Power generation capacity target





## Australia's first Opcon Powerbox

Enerji's first heat recovery unit being installed at Carnarvon



Enerji's Opcon Powerbox – installed on site in Carnarvon with the cooling tower assembly occurring in the foreground

# Installation timeline at Horizon Power's Carnaryon Power Station

### September 2011

Powerbox arrived 29<sup>th</sup> September

## February 2012

- DEC Works Approval granted
- Site works commenced

### **March 2012**

- Opcon Powerbox installed on site
- Heat recovery units installation
- Cooling tower assembly

## **April 2012**

- Pipeworks completion
- · Electrical and control works
- Generating power

## May 2012

• First Invoice = Revenue



## What is the Opcon Powerbox?

- Generates electric power using heat captured as a by-product of fossil fuel energy
- Uses zero fuel and creates zero emissions
- Generates power when and where it is needed
- 6,000 MWh produced annually by each unit
- Modular design use multiple Powerboxes when required
- Designed and manufactured in Sweden by Opcon





## **About Opcon**



- Opcon is an energy and environmental technology group that develops, produces and markets systems and products for eco-friendly, efficient and resource-effective use of energy.
- Opcon is over 100 years old and has activities in Sweden, China, Germany, the UK & Denmark. There are around 380 employees. The company's shares are listed on Nasdaq OMX Stockholm.
- Opcon and related entities own approximately 13% of ERJ

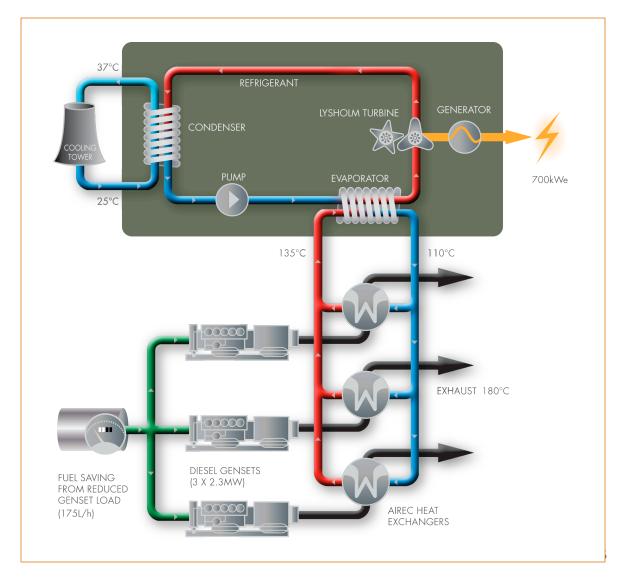


# Enerji's recovered energy solution









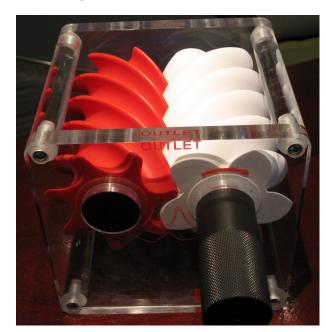


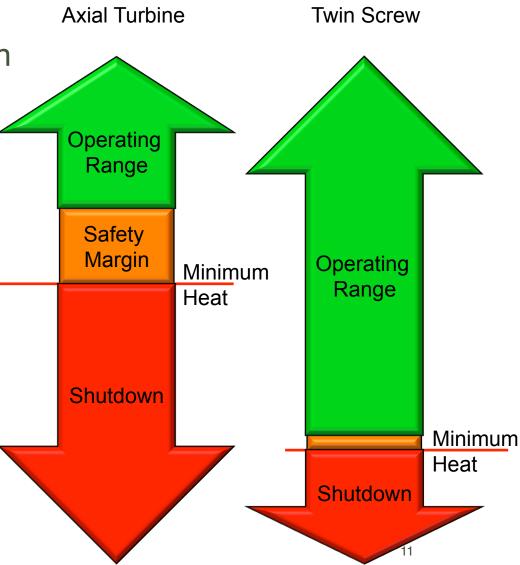
# **Opcon Powerbox Competitive Advantage**

Uses a twin screw expander instead of an axial fin and blade turbine



Greater operating range and flexibility







## Customer case study

# Current Situation

# Add one Powerbox

# Customer Benefit

### Capacity

7 MW of Diesel Generator capacity produces 61.4 GWh/year of electricity

6.3 MW of Diesel capacity used, plus 0.7 MW from Powerbox. Total= 61.4 GWh/year.

Electricity
Generation:
7 MW capacity
with or without
Powerbox

### Fuel

Diesel Fuel use of 16.1 million Litres per year

Diesel Fuel use reduced to 14.5 million Litres per year

Fuel Savings: 1.6M litres reduction in diesel fuel use

#### Cost

Diesel Fuel Costs of \$16.5M per year at a price of \$1.0221/I(1)

Fuel and Electricity Costs of \$15.8M per year including \$1M to Enerji for electricity (2).

> Fuel Cost Savings: \$660k pa (5)

> > \$770k pa

#### **Maintenance**

Maintenance cost of \$1.08M/ per annum (3)

Reduced load reduces cost to \$0.97M/ per

Maintenance Savings: \$108 K pa

### **Emissions**

7MW Diesel Generator produces 40,000 tCO<sub>2</sub> annually <sup>(4)</sup>

Diesel Generator load reduced to 6.3MW, reducing tCO<sub>2</sub> to 36,000 annually (4)

> Emissions Savings: 4,000 tCO<sub>2</sub>



## Rising fuel prices fuelling growth

### US DOE Oil Price<sup>(1)</sup>



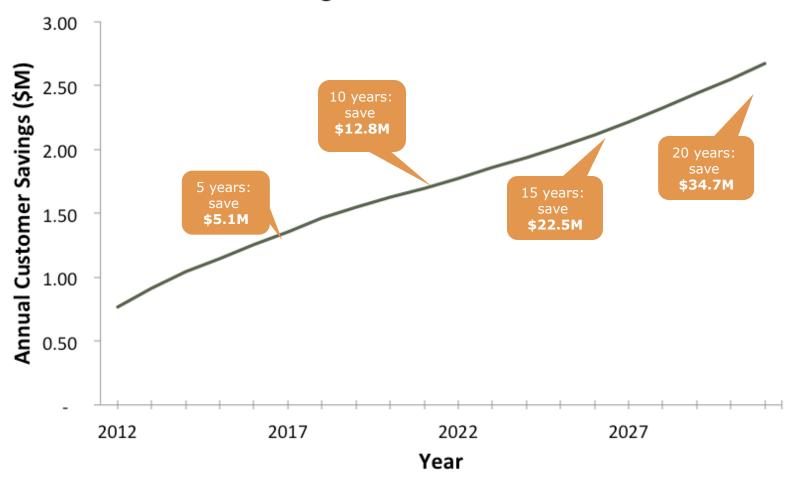


Opcon Powerboxes offer a hedge against rising fuel prices – they do not use fuel and pricing can be locked in for the entire contract period.



## Savings increase with rising fuel prices

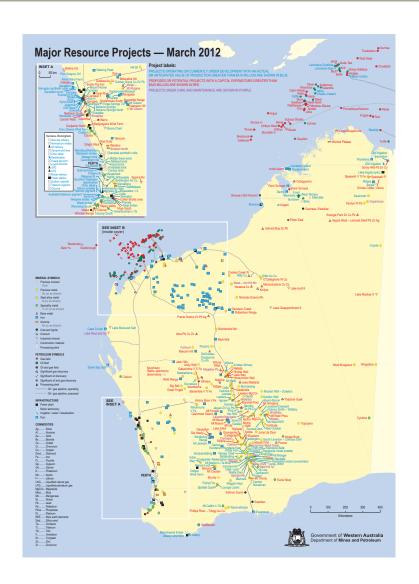
## **Annual Customer Savings with Forecasted Fuel Price Increase**



Note: this slide uses the same assumptions as the customer case study. (1) fuel price increase based on forecast in US DOE Report #:DOE/EIA-0484(2009) (2) Fuel consumption reduces from 16.1 Million L/pa to 14.5 Million L/pa as Enerji provides 1 Powerbox unit of 0.7MW. (3) Diesel Fuel price at 2012 is \$0.96/L (4) Enerji electricity price increase = 2.5% pa.



## **Massive target market**



Enerji's primary target is off-grid power stations that supply electricity to remote mine sites.

In Western Australia alone there are 1,030 operating mines and 556 mining projects<sup>1</sup>.

We can sell direct to the mining company or via the Independent Power Producer (IPP).



# **Conclusion – The Enerji Advantage**



Customers are not required to invest any capital to capture this waste energy

Compelling commercial proposition to generate revenue and shareholder returns with or without a

carbon price

Power generation using zero fuel and producing zero emissions





## **Contact details**



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