



**CarbonEnergy**

Level 12, 301 Coronation Drive,  
Milton QLD 4064 Australia  
PO Box 2118, Toowong DC  
QLD 4066 Australia  
phone +61 (0) 7 3337 9944  
fax +61 (0) 7 3337 9945  
[www.carbonenergy.com.au](http://www.carbonenergy.com.au)

Carbon Energy Limited  
ABN 56 057 552 137

Carbon Energy (Operations) Pty Ltd  
ABN 61 105 176 967

29 October 2009

ASX Limited  
10<sup>th</sup> Floor, 20 Bond Street  
SYDNEY NSW 2000

Dear Sir/Madam,

**RE: Carbon Energy Limited – Investor Presentation October 2009**

Investor presentations will be delivered this week in Melbourne, Sydney and Brisbane by Carbon Energy Limited's Managing Director, Andrew Dash. A copy of the presentation is attached.

Yours Faithfully

Prem Nair  
CFO & Company Secretary



**Carbon**Energy

# Carbon Energy Investor Presentation

Managing Director – Mr. Andrew Dash

October 2009



CarbonEnergy

# Statements

## Disclaimer

The information contained in this presentation is given without any liability whatsoever to Carbon Energy Ltd or any of its related entities or their respective directors or officers, and is not intended to constitute legal, tax or accounting advice or opinion. No representation or warranty, expressed or implied, is made as to the accuracy, completeness or thoroughness of the content of the information. The recipient should consult with its own legal, tax or accounting advisers as to the accuracy and application of the information contained herein and should conduct its own due diligence and other enquiries in relation to such information.

The information in this presentation has not been independently verified by Carbon Energy Ltd. Carbon Energy disclaims any responsibility for any errors or omissions in such information, including the financial calculations, projections and forecasts set forth herein. No representation or warranty is made by or on behalf of Carbon Energy that any projection, forecast, calculation, forward-looking statement, assumption or estimate contained in this presentation should or will be achieved.

Please note that, in providing this presentation, Carbon Energy has not considered the objectives, financial position or needs of the recipient. The recipient should obtain and rely on its own professional advice from its tax, legal, accounting and other professional advisers in respect of the addressee's objectives, financial position or needs.

This presentation does not carry any right of publication. This presentation is incomplete without reference to, and should be viewed solely in conjunction with, the oral briefing provided by Carbon Energy. Neither this presentation nor any of its contents may be reproduced or used for any other purpose without the prior written consent of Carbon Energy.

## Competent Person

The information in this presentation (where it relates to resources) is based on information compiled by Dr C.W. Mallett, Executive Director Carbon Energy Limited who is a member of the Australian Institute of Mining and Metallurgy. Dr Mallett has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Mallett consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.



CarbonEnergy

# Carbon Energy (CNX)

## Strategic Focus

*“To produce clean energy and chemical feedstock from UCG syngas”*

Shares on issue 579.1 million

Highly liquid with 140-150% turnover

Market Capitalisation: \$405 million (@ \$0.70 ps)

Admitted to S&P/ASX 300 Index September 2008

- S&P/ASX Energy Index
- S&P/ASX Oil and Gas Explorers Index

Major Shareholders

- CSIRO 15%
- Corporate (Incitec Pivot Limited) 11%
- Institutional 9%
- Directors 4%



CarbonEnergy

# Underground Coal Gasification (UCG)

UCG is the gasification of coal underground

- the energy in coal is extracted without the environmental impacts associated with coal mining

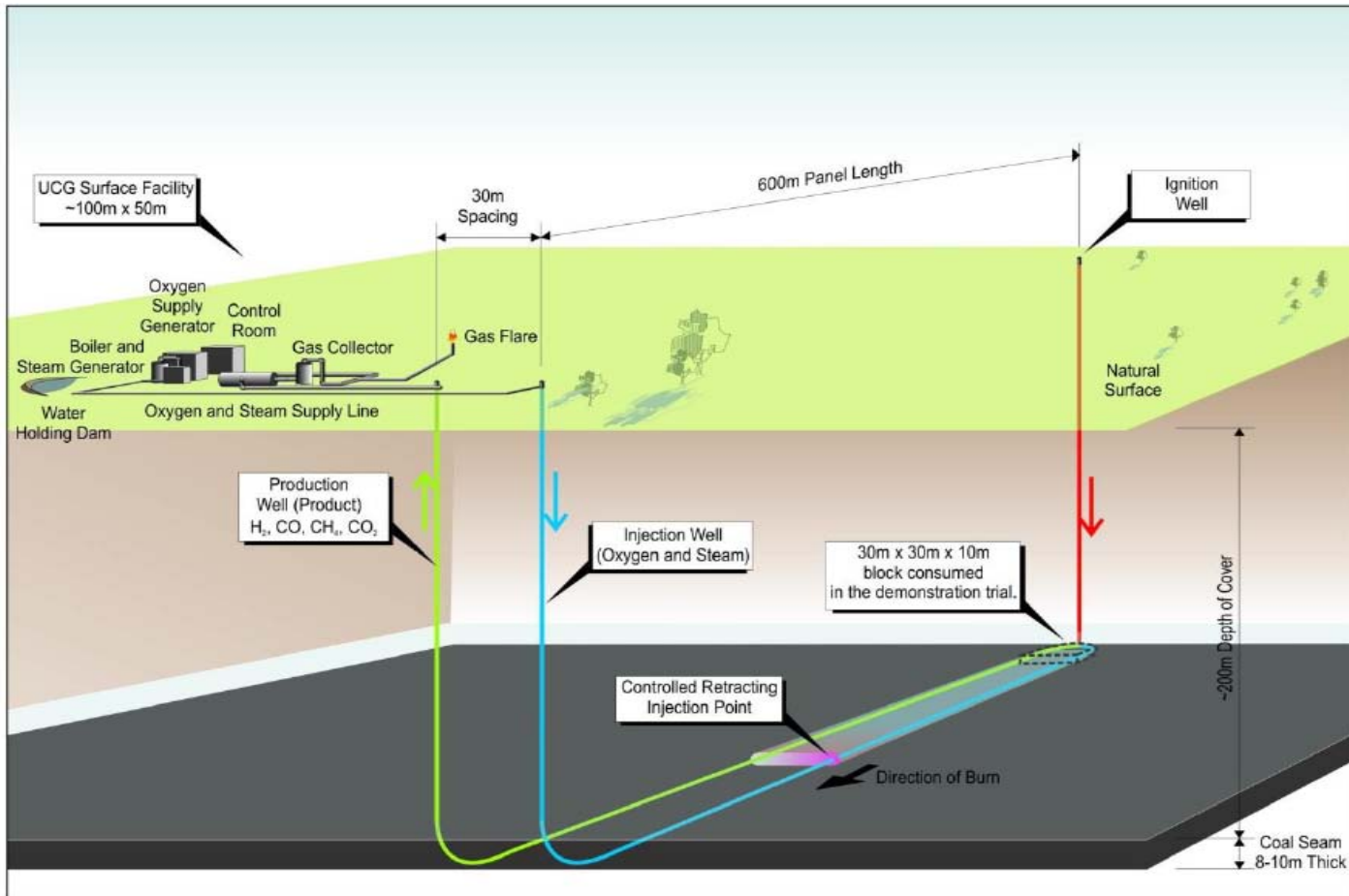
Gasification is a process where Oxygen and Steam react with coal at high temperatures

- an energy rich gas mixture is produced called **syngas**



CarbonEnergy

# Carbon Energy 1PJ UCG design





# Strategy

To achieve our business goals Carbon Energy are pursuing a simple strategy that encompasses 3 key elements, these being;

## 1. Resource Availability

Carbon Energy's strategy is to build a portfolio of coal resource assets through acquisition or partnership, suitable for UCG, both in Australia and internationally

## 2. Superior Technology

Carbon Energy's proprietary technology incorporates sophisticated modeling tools and UCG methodology – enabling the company to take a market leading position.

## 3. Ready Access to key Markets

Location, product mix and partner capabilities, involves identifying suitable resource availability located within close proximity to key markets and infrastructure.





## Leadership in UCG Technology

- Sophisticated, proprietary modelling tools developed by the CSIRO for gasification, hydrology and geology
  - we can model any coal deposit over a 30 year plus life to ensure the deposit has the integrity to support a long term operation.
- Unique panel design - provides continuous, consistent gas quality.
  - modular design enables scalability with no additional technical risk





**CarbonEnergy**

# Focused on Pathway to Commercialisation

## Commercial Partners

- Technology – CSIRO, Australia's leading science & research organisation
- Ammonia – Incitec Pivot Limited, top 50 ASX fertiliser and industrial explosives company
- Power Generation – Ergon Energy, a QLD Government owned electricity utility
- CO2 Sequestration – ZeroGen, a leader in low emission coal technology
- Synthetic Natural Gas – tba
- International - tba



CarbonEnergy

# Queensland

Interest in 2,000 km<sup>2</sup> of EPC's

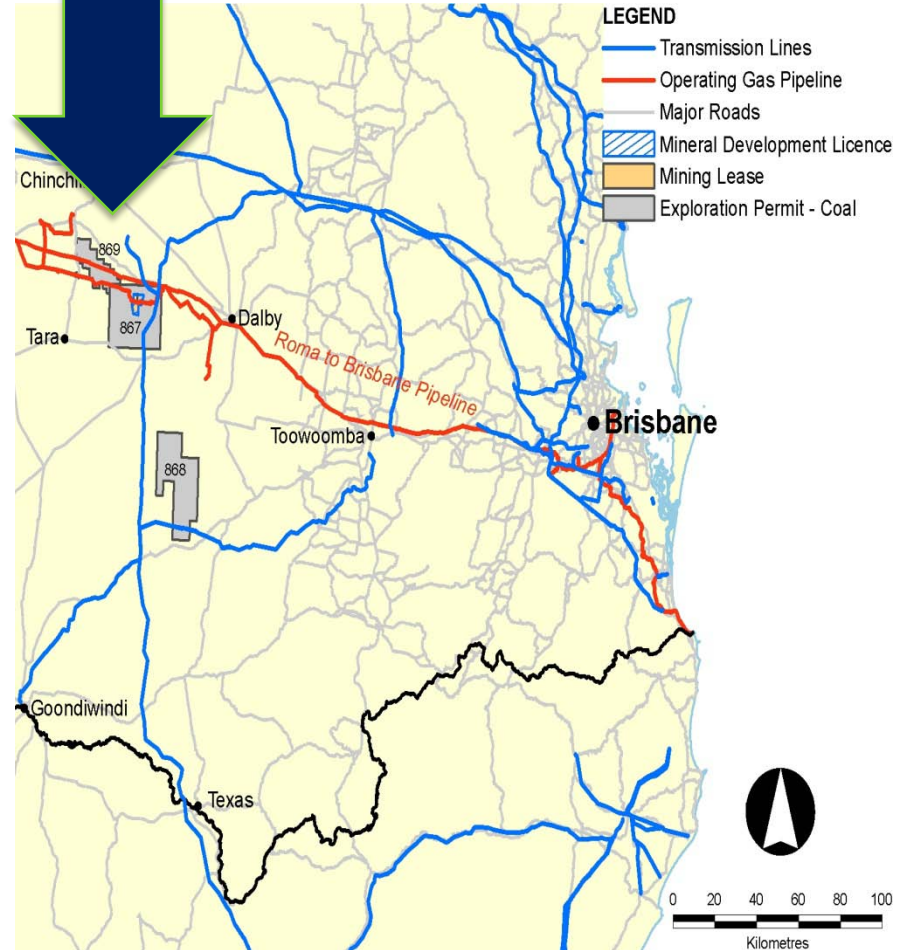
668 Mt (450 Mt Inferred and 218 Mt indicated with 2m cut-off) of JORC compliant coal resource (13,360 PJ of in-situ energy, of which at least 7,750 PJ is recoverable)

Short term commercialisation

- Power generation into the NEM
- Synthetic natural gas

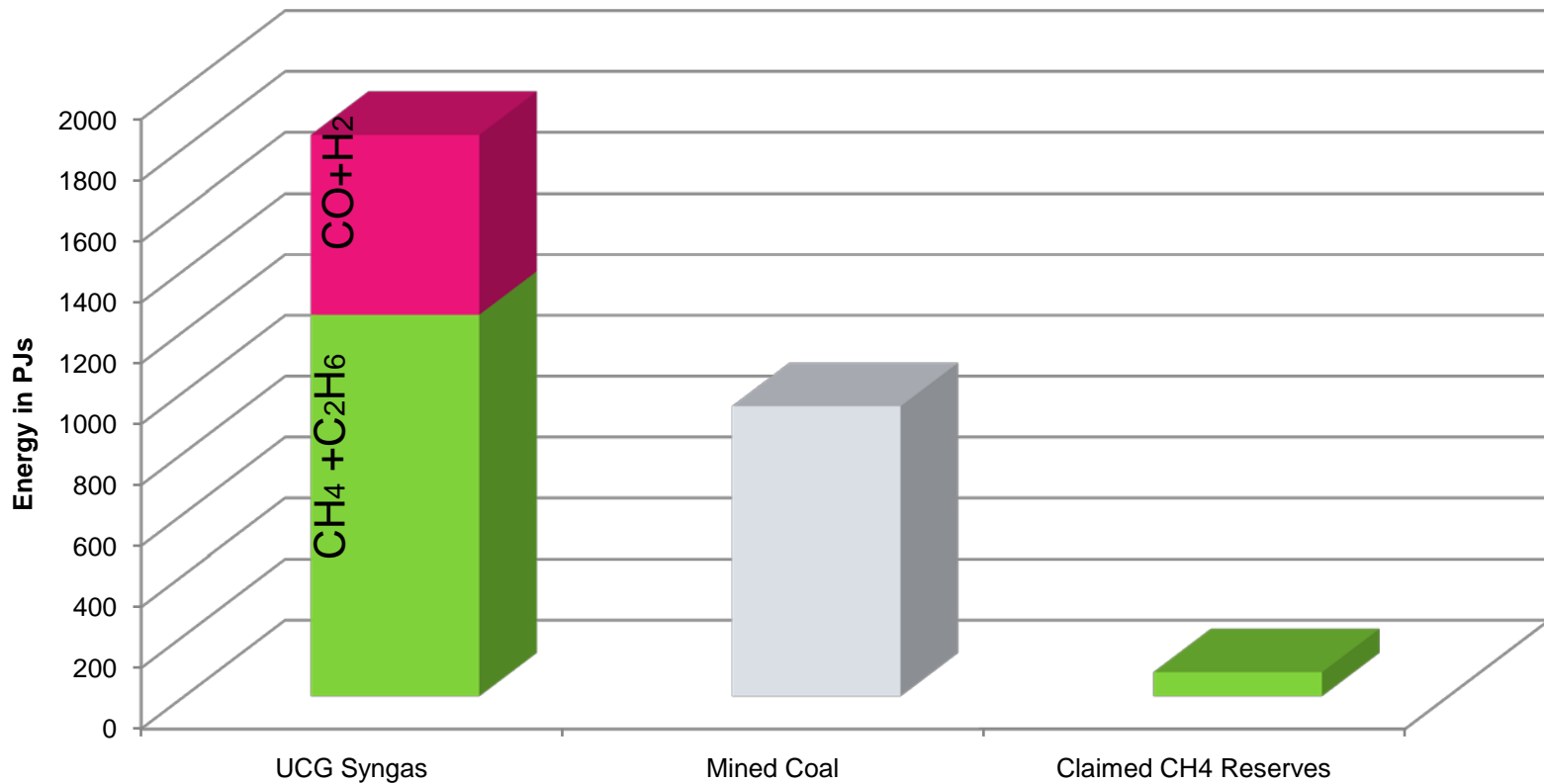
Medium term commercialisation

- Chemicals (eg ammonia)
- Liquid fuels





# Comparative Energy Recovery



Energy extraction by method for a typical 13.3 Km<sup>2</sup> deposit



CarbonEnergy

# Power Generation

# Phase

# 1

Power Plant size	5MW (electricity for 4,000 homes pa)
Location	Bloodwood Creek (Queensland)
Off-Take Agreement	Ergon Energy (Qld Gov owned Corp)
Network Connection	Ergon Network
Project commenced	July 2009
Capital Expenditure	\$8 million
<b>Revenue</b>	<b>\$2 million p.a (approximately)</b>
<b>First Generation</b>	<b>December 2009</b>







CarbonEnergy

# Power Generation

# Phase

# 1

Construction of the power facility underway –



Foundations being laid



Gas Engines being transported to Queensland



Equipment arriving on site



CarbonEnergy

# Power Generation

# Phase

# 2

Power Plant size	20 – 25 MW
Scope to include	Carbon Capture & Storage
Location	Bloodwood Creek (Queensland)
Network Connection	Local distribution system
Commercial	Partner discussions -underway
FEED	Commence August – Finish Nov
FID	Jan 2010
First Generation	Approx 12 Months later





# Low emission (Clean) Coal Process



- 30 – 50% reduction in capex
- Lower environmental impact
- UCG lowest cost pathway to clean coal





**CarbonEnergy**

# Low emission (Clean) Coal Technology

The company is currently scoping a 20MW power plant at Bloodwood Creek this facility will incorporate Carbon Capture and storage technologies.

July (2009) Carbon Energy signed an agreement with Queensland company ZeroGen. This signals the first phase of a CO<sub>2</sub> injection test program, which will see Carbon Energy combine their successful Underground Coal Gasification (UCG) technology with ZeroGen's techniques for CO<sub>2</sub> injection.



When constructed this facility will be Australia's first demonstration of Underground Coal Gasification (UCG) with Carbon Capture and Storage (CCS)



CarbonEnergy

# Power Generation Blue Gum Energy Park

Phase

3



- 1 - Central gas processing and Gas Power-Station
- 2 - Ammonia Plant
- 3 - Chemical Plant
- 4 - Transport Fuel manufacture

- 5 - Synthetic Natural Gas manufacture
- 6 - Commercial and Administration Facilities
- 7 - Carbon Energy's existing UCG facility (Bloodwood Creek)



CarbonEnergy

## Summary – Strategy on track

### Queensland

Expanded Resource achieved (JORC compliant)

5MW Power Plant underway

20MW Power Plant – Planning and Partnering in advanced stages

Land purchased ( Blue Gum) for future expansion and Mining Lease approvals underway

Heads of Agreement signed in July with Liberty Resources for potential JV project in the Galilee Basin (Qld)

### Other States

Drilling program progressing – Sargon Group tenements (WA)

Targeting other potential Australian coal resources

### International

Market opportunities are significant and discussions are advanced with key focus on North and South America