



**CarbonEnergy**

Level 12, 301 Coronation Drive,  
Milton QLD 4064 Australia  
PO Box 2118, Toowong DC  
QLD 4066 Australia  
[phone +61 \(0\) 7 3337 9944](tel:+61733379944)  
[fax +61 \(0\) 7 3337 9945](tel:+61733379945)  
[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

12 March 2010

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

Dear Sir/Madam,

**RE: Carbon Energy Limited – Presentation March 2010**

A presentation to be delivered by Carbon Energy Limited's Managing Director, Andrew Dash at the ASX Emerging Growth Conference in London on the 12<sup>th</sup> March 2010. A copy of the presentation is attached

Yours Faithfully

Prem Nair  
CFO & Company Secretary



**CarbonEnergy**

# Carbon Energy

ASX Emerging Growth Conference - London

Andrew Dash – Managing Director

Friday 12<sup>th</sup> March 2010



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.



CarbonEnergy

# Statements

## 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.

The reserve estimates used in this document were compiled by Mr Timothy Hower of MHA Petroleum Consultants, Colorado, USA, a qualified person under ASX Listing Rule 5.11. Mr Hower has consented to the use of the reserve information contained within this document in the form and context in which it appears.



# Agenda

- Overview of Carbon Energy
- Underground Coal Gasification (UCG)
- Resources and Reserves
- Commercialisation
  - 5 MW plant
  - 20MW Plant
  - Blue Gum Energy Park (300MW)
  - International projects and opportunities



CarbonEnergy

# Carbon Energy (CNX)

## Strategic Focus

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

Shares on issue 586 million

Highly liquid with 140-150% turnover

Market Capitalisation: \$246 million (@ \$0.42 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**

# Executive Management team

## **Andrew Dash (CEO) and Managing Director**

BE(Chem), Mcom.

Andrew has a degree in Chemical Engineering from the University of Sydney and a Masters Degree in Commerce from the University of New South Wales. Andrew has extensive experience in the energy sector, with particular experience in the commercial development of gas operations and associated infrastructure on a national scale.

## **Dr Cliff Mallett - Technical Director - UCG**

MSc, PhD, FAIE -.

Cliff has been associated for more than 12 years in advancing the development ("UCG") process technology. Cliff has degrees in Geology from the Universities of Queensland and Melbourne. He has almost 30 years experience in mining research at CSIRO culminating in acting as Chief of CSIRO Exploration and Mining Division, interim Director of the Centre for Low Emission Technology, and Executive Manager, Queensland Centre of Advanced Technologies

## **Prem Nair - Chief Financial Officer and Company Secretary**

B Bus (Acctg), MBA, FCA, FCIS, FTIA, MAICD -

Mr Nair has over 30 years experience in the accounting profession and commercial arena. His experience includes leading finance teams in public listed entities covering exploration, resources, technology and construction industries. He has over 20 years experience in corporate governance and company secretarial roles.

## **Andy Mifflin - General Manager -Technical Services**

Bachelors Degree in Science, Mining Engineering (Hons.) and a Master of Business Administration.

Andy is a professional mining engineer with over 30 years experience in senior management roles in the coal industry in Australia and the UK. He has significant experience in the development and operation of underground coal mines having held senior roles with AMCI/Vale Australia, Centennial Coal and Xstrata/MIM.

## **John Wedgwood General Manager - Operations**

Mr Wedgwood has a Bachelor of Commerce degree, formally an officer in the Australian Armed Forces with communications projects in South East Asia. John has worked in general manager roles for Cable and Wireless and Hong Kong Telecom. He has held technical management roles in South East Asia , China, NZ

## **Peter Swaddle - General Manager Commercial**

Senior Commercial and Marketing Executive with over 16 years experience with two of Australia's major national brand leaders. Mr Swaddle has a proven track record in commercial development and strategic brand positioning with extensive experience in both product development and project management.





# 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

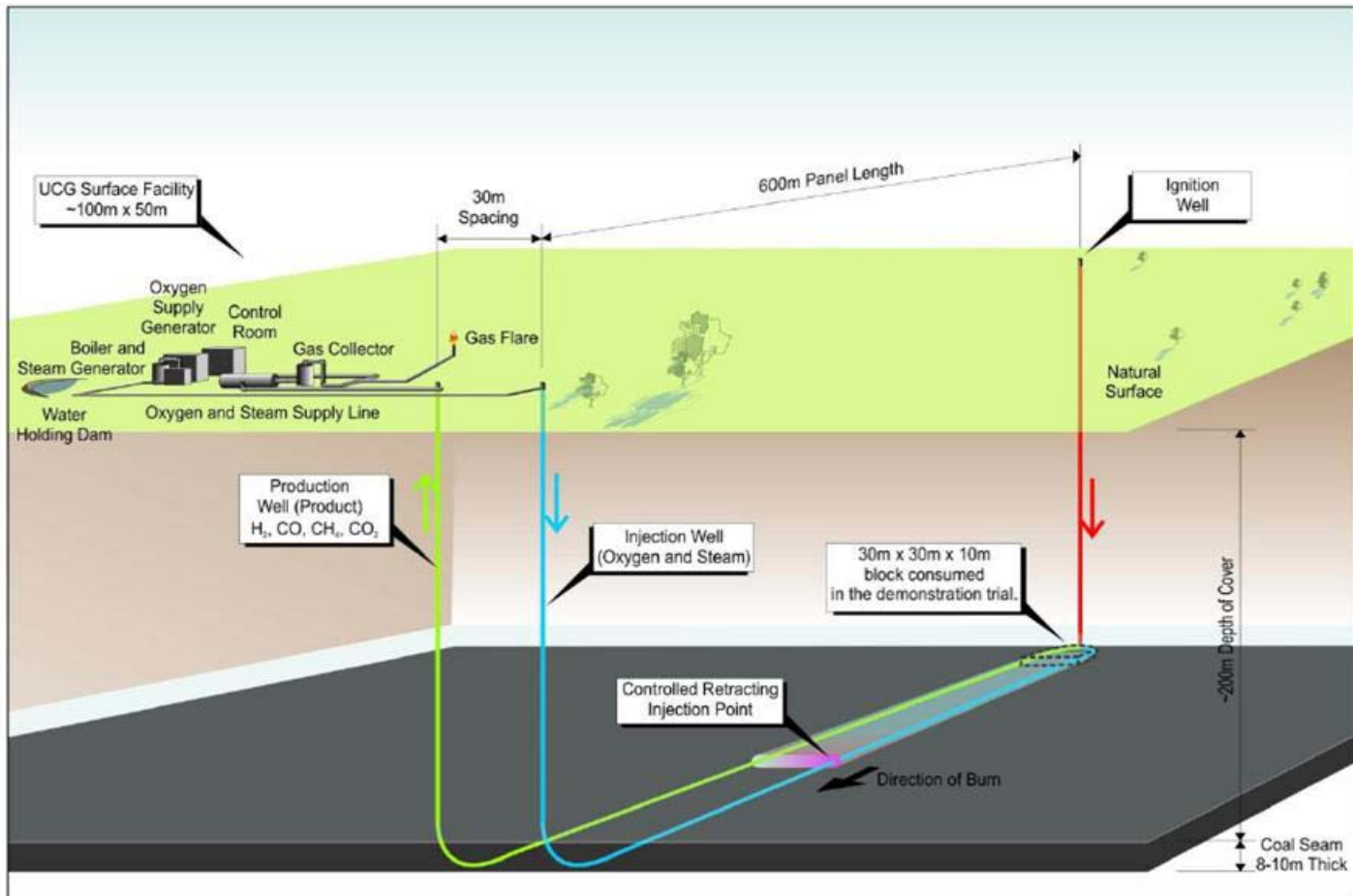
- an energy rich gas mixture is produced called **syngas**





CarbonEnergy

# Carbon Energy 1PJ UCG design





## Milestones – Past 12 Months

- **Feb`09**      **Trial complete (gasification and data collection continues)**
- Feb          Government Policy Delivers Certainty of Tenure for CNX
- Mar          Coal Resource Upgrade Exceeds Expectations (668 Mt )
- June         Capital Raising – First tranche completed
- June         Completed Pre –Feasibility for Power Gen, Synthetic Natural Gas and Chemicals
- **July**         **Off take for Electricity agreement signed with Ergon Energy**
- **July**         **5MW Power Station construction commence**
- Aug          Sale of Gold asset and spin out of uranium tenements announced
- Oct          Sale of interest in Magma Metals
- **Dec**         **Third Party Certification of Gas Reserves**
- **Dec**         **Agreement signed with Antofagasta Minerals (Chile) for international power project**
- **Feb `10**      **5MW Power Station final stages of construction underway**



# 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.



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

## GROSS GAS VOLUMES(PJ)

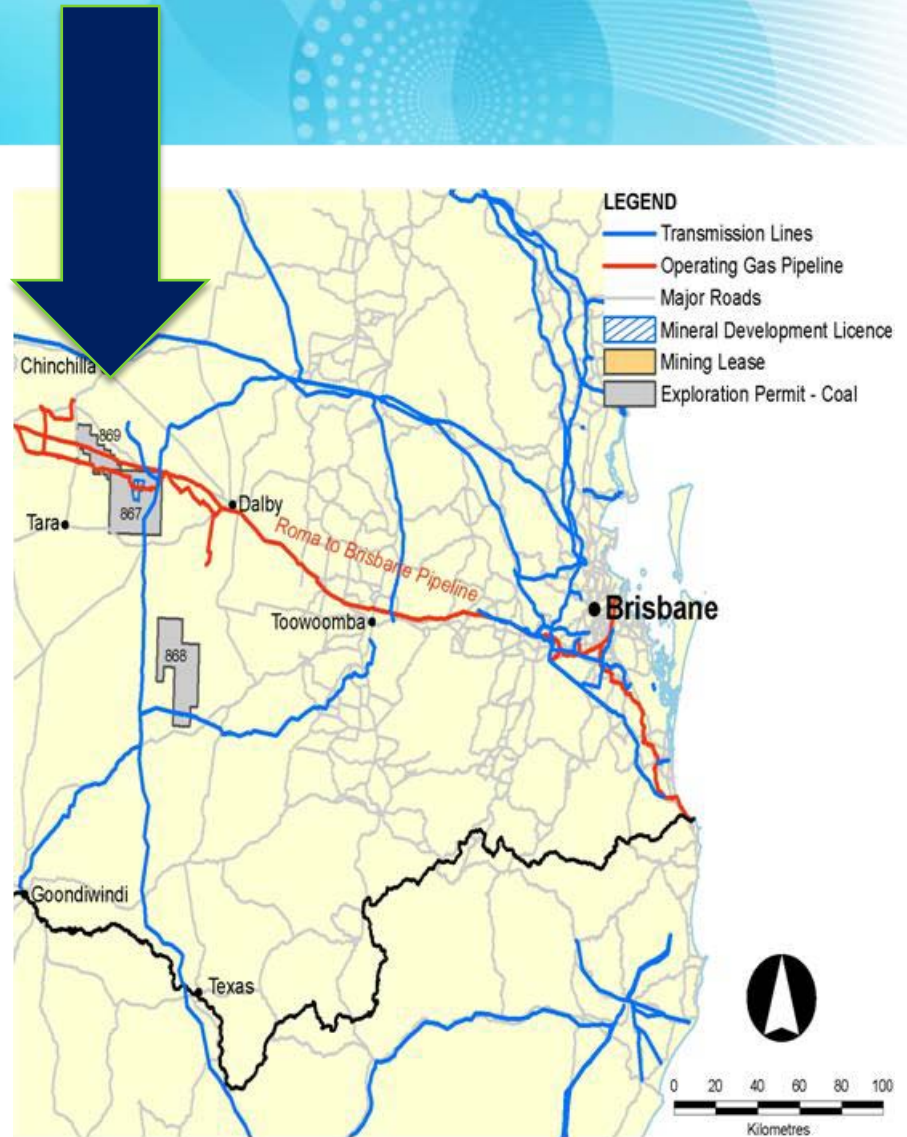
1P Reserve (Proven)	11.0
2P Reserve (Proven + Probable)	743.9
3P Reserve (Proven + Probable + Possible)	1,042.8

### Short term commercialisation

- Power generation into the NEM
- Synthetic natural gas

### Medium term commercialisation

- Chemicals (eg ammonia)
- Liquid fuels







# Resource - Continued

## Chile – Antofagasta

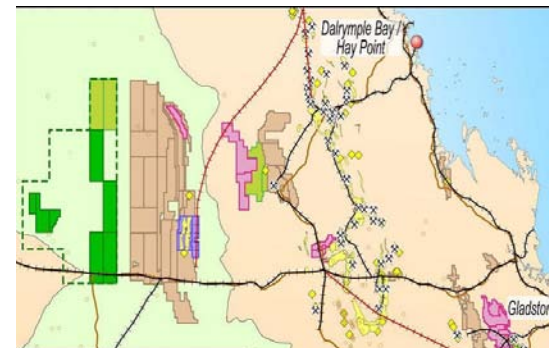
Carbon Energy (CNX) has executed an Agreement with Antofagasta Minerals S.A to jointly assess and develop a coal deposit in Mulpun.

Mulpun is located in southern central Chile, 800 km south of Santiago. It is 40km east of Valdivia, a city of half a million people.



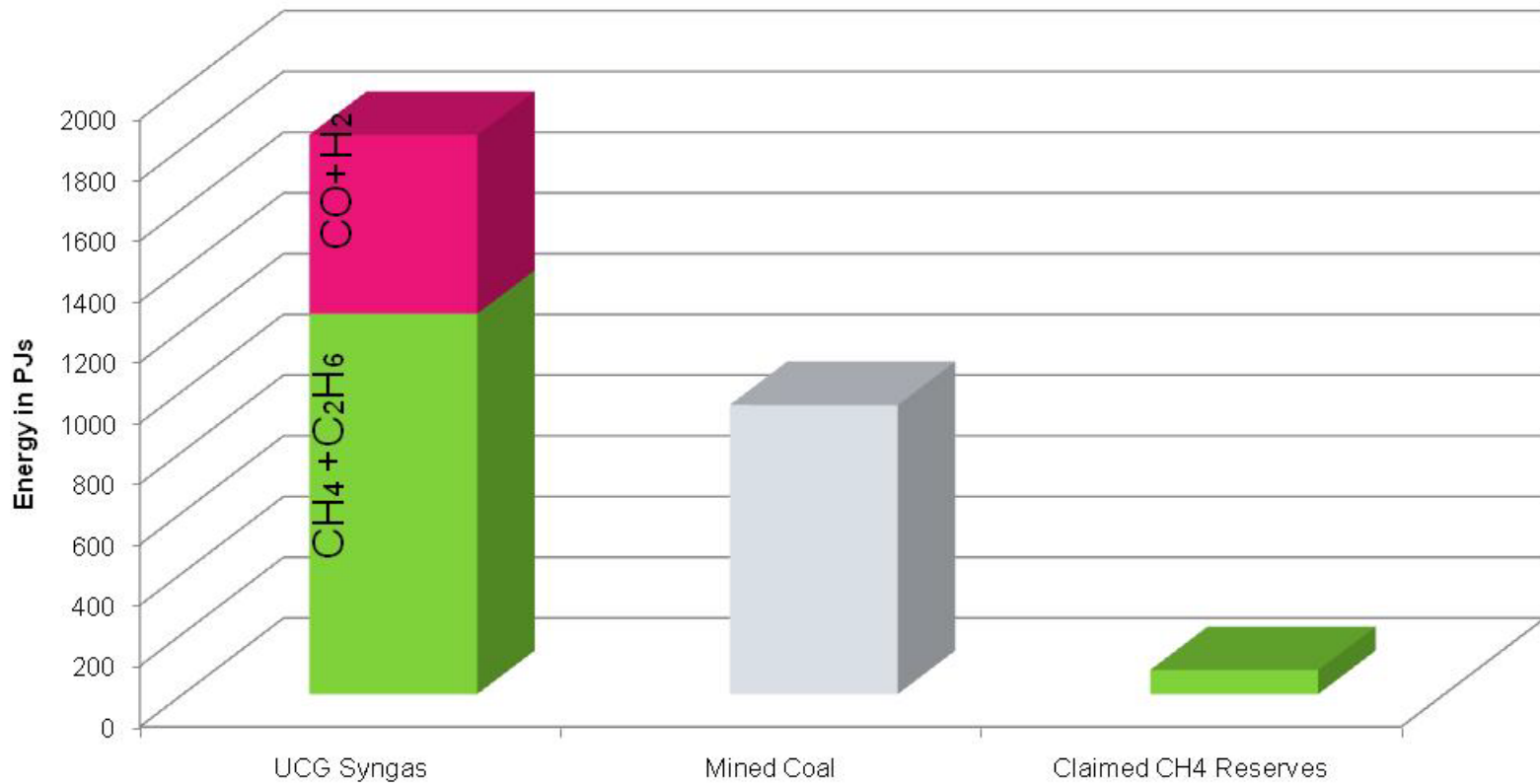
## Galilee Basin - Queensland -

Carbon Energy has signed a Heads of Agreement (HoA) with Liberty Resources Limited ASX: LBY (“Liberty”) to establish a joint venture to develop Liberty’s coal deposit in the Galilee Basin. Carbon Energy will hold 80% of the Joint Venture and will be the operator. Carbon Energy will contribute its expertise in Underground Coal Gasification to assess the optimal development of the resource





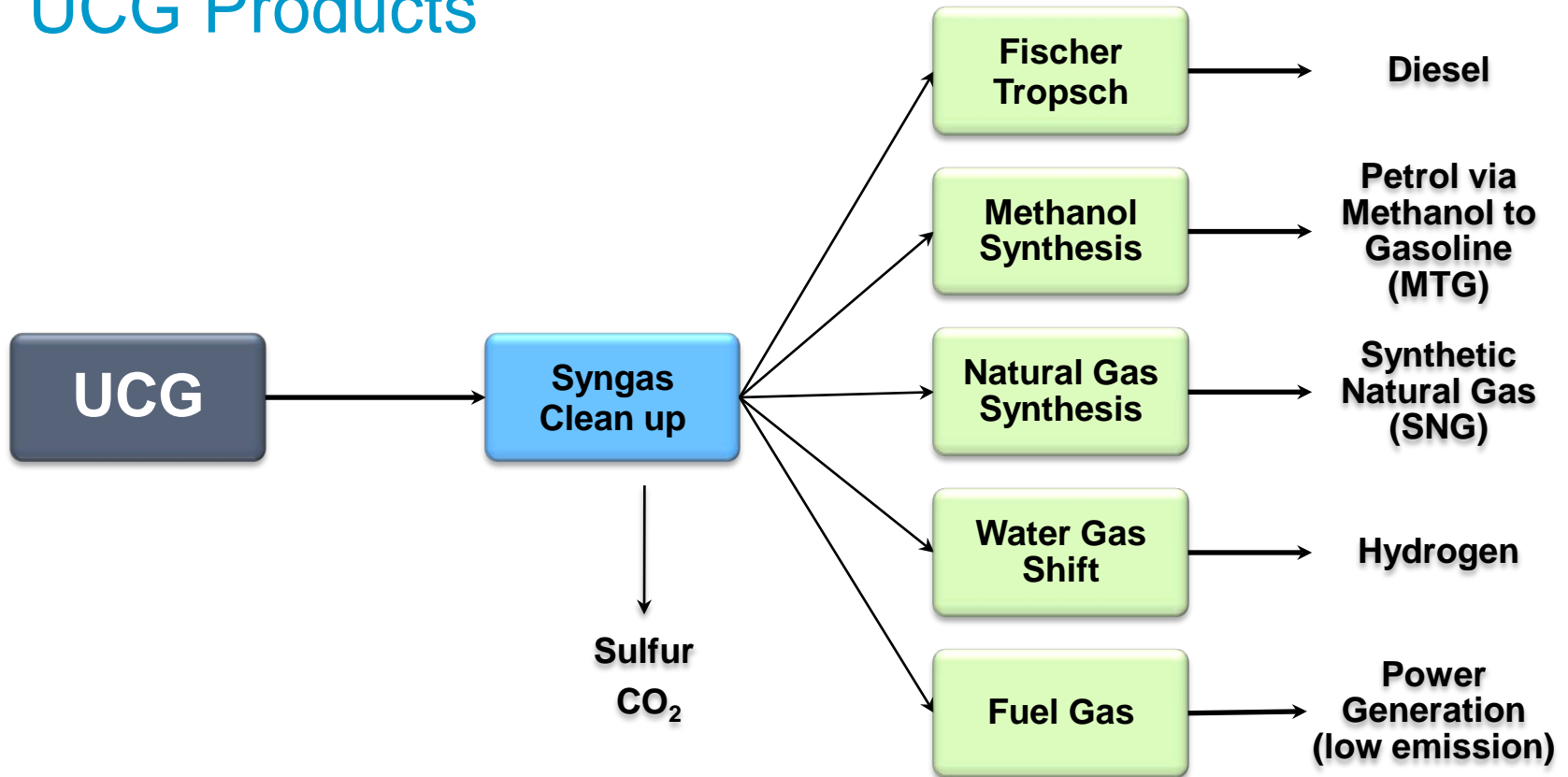
# Comparative Energy Recovery



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



# UCG Products







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 approx
<b>Revenue</b>	<b>\$2 million p.a (approximately)</b>
First Generation	2 <sup>nd</sup> Qtr 2010





CarbonEnergy

# Power Generation

# Phase

# 1

Construction of the power facility underway –



Gas engines being positioned  
On site - October



Power station buildings  
Constructed - December



External equipment in  
place - January



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	Commenced
FID	June 2010
First Generation	Approx 12 Months later







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)



## 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 with Liberty Resources for potential JV project in the Galilee Basin (Qld)

### Other States

Discussions underway targeting other potential Australian coal resources

### International

Market opportunities are significant and discussions are advanced with key focus on North America our recent agreement signed with Antofagasta Minerals S.A, for a project in South America