

#### **ASX Announcement**

22 November 2012

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Carbon Energy Limited ABN 56 057 552 137 Carbon Energy (Operations) Pty Ltd ABN 61 105 176 967

#### AGM – 22 NOVEMBER 2012: CHAIRMAN'S ADDRESS & MANAGING DIRECTOR'S PRESENTATION

Carbon Energy Limited (ASX Code: CNX) (OTCQX Code: CNXAY) will present the attached Chairman's address and Managing Director's Presentation at the Annual General Meeting of Shareholders being held at the Brisbane Convention Centre, Room M2, Cnr Merivale & Glenelg Streets, South Brisbane, Queensland, this morning.

The Meeting will commence at 9.30 am.

For and on behalf of the Board,

Morné Engelbrecht CFO & Company Secretary

#### Carbon Energy Limited Annual General Meeting 2012

#### Dr Chris Rawlings, Chairman

Good morning Ladies and Gentlemen. My name is Chris Rawlings.

I Chair The Board of Carbon Energy Limited.

Welcome to your Company's 2012 Annual General Meeting.

On behalf of your Board, I would like to report to you on the performance of Carbon Energy during the past financial year.

I would now like to introduce you to your Board of Directors and your Management Team.

From your far left:

Mr Peter Hogan, Non Executive Director; Dr Helen Garnett, Non Executive Director; Mr Louis Rozman, Non Executive Director; Mr Max Cozijn, Non Executive Director; Mr Morné Engelbrecht, CFO & Company Secretary; and Mr Andrew Dash, Managing Director.

This will be Andrew's final Annual General Meeting as he has chosen not to renew his contract and will leave the Company at the end of 2012. On behalf of the Board I thank Andrew for his contribution to the business and progressing Carbon Energy from a start up into the initial commercialization of our keyseam technology. The past 4 years of Andrew's tenure have been some of the toughest in our history and this achievement is no mean feat. We wish you well Andrew.

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Also In the front row, your executives are: Cliff Mallett, Technical Director; Justin Haines, General Mgr Technical Services; and Terry Moore, General Manager Operation.

Our Auditors are also present, Mr Stephen Stavrou & Julie Garner of Deloitte Touche Tohmatsu Limited. And we also have our Corporate Lawyers Hopgood Ganim present represented by Partner Michelle Eastwell.

I encourage you to engage, all of the personnel mentioned and any Carbon Energy staff member, in conversation, after the formal business of this meeting is concluded.

So let's begin with the strategic review that was undertaken this year.

Every value accreting company builds on a clear strategy. During the year a strategic review of your Company was undertaken. At the core of this strategy is the development of the unique keyseam Underground Coal Gasification (UCG) technology.

Previously, Carbon Energy's commercial pathway was to be a joint venture developer of projects utilising our keyseam technology. This would have required a proven and approved technology and the financial capacity to fund our share of expensive energy utilising projects. Funds would need to be found from investors and debt providers.

Clearly the market environment for a small company to raise significant capital for large projects, whilst utilising a unique technology had diminished significantly since the Global Financial crisis.

Delays to Queensland Government approvals further eroded investor confidence in Australian based UCG projects.

Despite these impediments the keyseam UCG technology project trial at Bloodwood Creek, near Dalby, in South East Queensland was deemed successful, having achieved a "Proof of Concept," that was endorsed by an independent third party. This determination is the milestone required for commercialisation.

At this stage of corporate development we asked the question is Carbon Energy an energy company with a unique UCG technology or is it a technology company aspiring to be an energy company?

With the keyseam technology proven and the opportunity to commercialise our technology and services in overseas jurisdictions, we can clearly define our path forward.

The key strategic objective of the Company is to become a globally recognised, selffunded, provider of UCG technology and services.

This is a significant and focused change in the short to medium term.

The potential to become an independent UCG energy provider remains a longer term purpose, once financial and regulatory capabilities are realised.

A strong strategic direction must be backed by a solid execution plan to get there. Our plan to realise our goal is founded around three core areas of focus:

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#### Firstly, Carbon Energy will provide technology licences and services for customers requiring reliable keyseam UCG produced syngas.

The team at Carbon Energy have operationally proven that keyseam delivers a steady volumetric flow of consistent high quality gas, which until now has been a barrier to the successful commercialisation of UCG. These advances followed 10 years of research by CSIRO, five years of in-field trials and development and over \$100 million in investment.

The engineering team have also developed a profound set of design and operating skills for the keyseam technology, which are required to successfully operate UCG facilities.

UCG's relevance in the global energy mix is its capacity to maximise resource efficiency, minimise surface disturbance and to reduce the need to send miners underground, into life threatening situations. Additionally the opportunity of relatively low costs for gas derived from UCG is set to become a far more commercially attractive solution.

The first of these technology license transactions has already been agreed.

Carbon Energy has entered into an agreement to become the exclusive UCG technology partner to Shanxi Sanyuan Coal, China's second largest coal company, located in the Shanxi Province. The license is exclusive to Shanxi Sanyuan and limited to Shanxi Province only.

A trial funded by Shanxi Sanyuan coal will be undertaken prior to full commercialisation. This trial should take 12 to 18 months to commence. Carbon Energy will provide the engineering services for this trial.

Carbon Energy has also been renegotiating its previous Joint Venture arrangement with Antofagasta Minerals in Chile. We have proposed a change from being an equity partner of a UCG project at Mulpun, southern Chile to becoming the technology licensor and technology services provider.

We will keep you informed of progress.

Other companies across Asia, North America and South America are investigating the potential application of keyseam UCG in their markets.

The new strategic direction defines a fundamental shift in the way we have done business. Carbon Energy will become the UCG technology provider for partners, who have access to suitable coal assets. Our aim is to position the Company as the preferred partner of choice for international UCG technology projects.

#### Secondly, Carbon Energy is to monetise its very large coal assets in the Surat Basin to fund ongoing corporate and UCG development expenditure.

The International Energy Agency (IEA) predicts the use of coal in energy production is set to increase by 65% over the next 20 years.

Carbon Energy has 1400 km<sup>2</sup> of coal bearing tenements held in its exploration portfolio in South East Queensland. We are fortunate to have access to exploration drill-hole data, held on open file in the Queensland Government records.

In May of 2012 we announced that we had defined an exploration target of between 4 and 8 billion tonnes. In September, we announced a 1.4 billion tonne Inferred Resource and will have more exploration data to include in our analysis, once this information becomes available in the public domain.

The land on which the Inferred Resource has been defined is largely free of Strategic cropping Land and urban Buffer Zone restrictions.

These assets are valuable and will have significantly higher value once the Surat Basin begins development of the requisite rail and port infrastructure.

The potential size of these resources is large enough to attract the interest of overseas investors who wish to gain access to large coal deposits.

We have announced, today, the outcomes of a concept study, that identifies at least three longwall mining areas, each capable of producing 5 million product tonnes per annum. This study confirms that these large coal deposits have the potential for development into substantial mining operations.

It is your Company's intention to spend a modest amount on drilling coal quality holes in 2013 and expanding the JORC resources of these assets. This will provide further confidence in, and understanding of these coal opportunities.

Once the information on the coal quality data is available, a marketing program to monetise these assets will be undertaken. It is anticipated that any purchaser will be required to pay for access to a minority share of the inferred resources, fund further exploration and development to earn a majority share and make milestone payments on increases in tonnes of resource.

It is your Board's intention to ultimately retain a non-controlling equity share of these assets.

Thirdly, Carbon energy will look to commercialise the 743PJ of Certified 2P syngas resource at Bloodwood Creek, in Queensland, once a clear and supportive regulatory regime has been established.

The Bloodwood Creek resource is a valuable syngas asset. It contains enough gas to supply Brisbane for 15 years at current rates.

A recent engineering study conducted by Logicamms for Carbon energy found the cost of producing pipeline quality gas from syngas feedstock was estimated in the range of \$3.50 (25 PJ per annum) to \$4.50 (8PJ per annum).

Bloodwood Creek is located adjacent to the Roma to Brisbane pipeline. With domestic gas prices set to rise significantly, once the 3 LNG projects in Gladstone begin taking gas for export in 2015, the gas opportunity at Bloodwood Creek takes on a new significance.

In addition Queensland manufacturing companies, who are high users of gas and who have had long term gas supply contracts at domestic prices, are finding it increasingly more difficult to arrange long term gas contracts at prices, which allow them to continue to operate profitably. If the gas is available they will have to pay the equivalent of export prices to retain access to gas supply.

Your management team and I have advised the Queensland Government of the opportunity Carbon Energy can provide the state both as providing domestic supply gas for industrial use or to become a baseload provider of cleaner energy.

As we look beyond Australia, many international economies recognise that UCG has a role in the world's future energy mix. UCG's significant economic and environmental advantages make it particularly attractive to existing and emerging domestic and world markets – however a strong, supportive regulatory environment at home is essential if UCG is to gain the same foothold here as it has elsewhere around the world.

Despite its potential, the challenge of regulatory uncertainty in Queensland over UCG remains., The Queensland LNP Government received the report of the Independent Scientific Panel(ISP) on the UCG industry back in September and is considering their response. Investors in UCG projects in Queensland require regulatory certainty, before they consider investing in commercial scale projects.

A lack of a supportive and defined regulatory regime in this State and slow progress in commercialising the UCG industry puts Queensland at risk of being left as the UCG laboratory while the rest of the world embraces the technology for commercial energy solutions. Industry eagerly awaits a regulatory outcome.

There is one strategically significant energy event taking place on the background of increasing energy demand from developing countries, particularly China and India.

The burgeoning shale gas discoveries coming from North Dakota and Texas are rapidly transforming the energy market in the United States. This gas has become available due to hydraulic fracturing of deep shales previously thought to contain little or no gas. The gas is also wet so oil is also being produced, enough for the US to become independent of Middle East oil in 2-3 years.

As a consequence US gas prices have plummeted and there is potential for the US to become a supplier of LNG to world markets and hence a price disruptor to major LNG markets.

The major benefits of low energy prices in the US will be the revitalisation of the petro chemical industry using gas as a feedstock. Industry will return to the US with low costs of energy inputs powering a recovery of the US economy.

The specific impact of this situation on Carbon Energy is that the development of UCG production facilities at our coal tenements in Wyoming will not take place until the domestic price of gas returns to more acceptable levels. This may take some time.

Despite this situation there are many jurisdictions with stranded coal assets that could be turned into energy supply via UCG technology. Carbon energy's opportunities will be specific to the availability of suitable coal deposits and a localised energy shortage.

I would now like to talk a little about capital management.

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It has been a difficult time for small companies listed on the ASX since the Global Financial Crisis. Access to placement or reinvested capital has been severely constrained for non-cash producing companies.

Your Company has explored many avenues for capital-raising. A key consideration was that dilution for existing shareholders would be minimised at the current low share prices.

The Company announced on the 16<sup>th</sup> November that it had entered in to a secured debt facility for \$10 million with Credit Suisse as bridging finance between the timing of the \$7.5 million Shanxi payment and the \$6.9 million Research and Development Rebate form the Commonwealth Government. This debt instrument was not chosen without consideration being given to other sources of funds.

Lastly I would like to talk about the management team. During the year we have welcomed Morne Engelbrecht as Chief Financial Officer & Company Secretary, Justin Haines as General Manager Technical Services and Terry Moore as General Manager Operations. In the short time they have been with us they have made a significant contribution both individually and as a dynamic team. They are of course supported by an enthusiastic support team of engineers, technologists, finance and administrative staff.

In September, Andrew Dash your Managing Director gave notice of his intention to resign at Christmas. An executive search is currently under way and I expect to be provided with a short list of potential candidates imminently.

I would like on your behalf to thank Andrew for his contribution during a difficult and uncertain time. I know the toll this takes on a Chief Executive and would like to wish him well for the future.

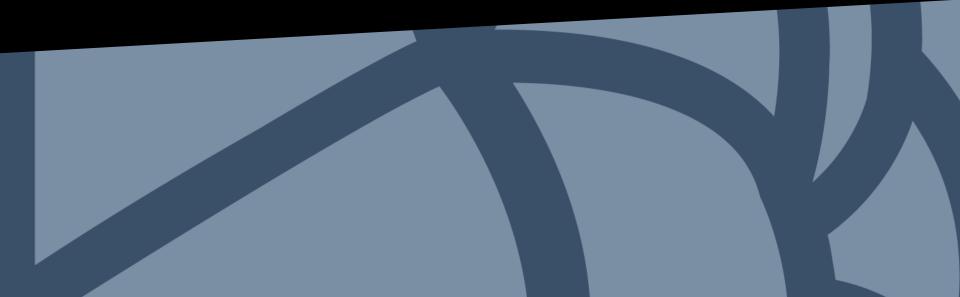
I would like to thank you, the shareholders, for the ongoing faith you have shown.

These have been frustrating times but despite this, solid progress has been made. We look forward to delivering you value in the years ahead by growing Carbon Energy into a strong, profitable company.

Thank you



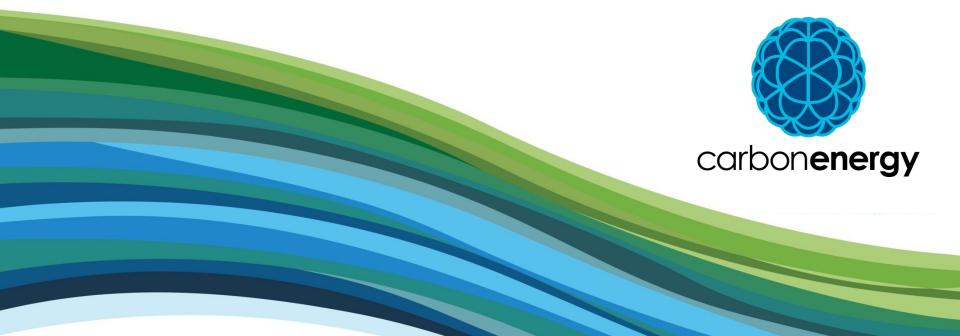
# CARBON ENERGY LIMITED ANNUAL MEETING GENERAL MEETING OF SHAREHOLDERS 2012



# 2012 CARBON ENERGY ANNUAL GENERAL MEETING

22 NOVEMBER 2012

MANAGING DIRECTOR'S PRESENTATION Mr Andrew Dash



### **IMPORTANT STATEMENTS**

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#### **Competent Persons**

The estimates of the Conventional Coal Resources presented in this Report are considered to be a true reflection of the Coal Resources as at 9 September 2012 and have been carried out in accordance with the principles and guidelines of the Australian Code for Reporting of Coal Resources and Coal Reserves published in September 2004 (JORC Code). Where quoted, it should be noted that the Exploration Target tonnages presented herein are considered non-JORC and are conceptual in nature. There has been insufficient exploration to define a Coal Resource and that it is uncertain if further exploration will result in the determination of a Coal Resource. The information in this presentation (where it relates to Conventional Coal Resources) is based on information compiled by Mr Mark Biggs who is an employee of Moultrie Database & Geology and is a member of the Australian Institute of Mining and Metallurgy. Mr Biggs 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". Mr Biggs 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 (where it relates to the syngas reserves at Bloodwood Creek) 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.

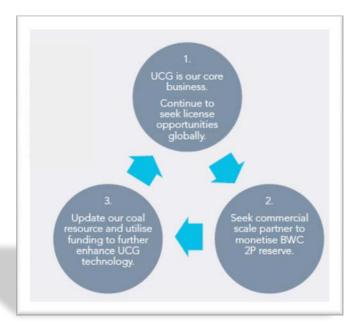
keyseam<sub>®</sub> is a registerd trademark of Carbon Energy.



## CARBON ENERGY (ASX:CNX, OTCQX:CNXAY)

#### **Executive Summary**

- CNX specialises in underground coal gasification (UCG). Our proprietary keyseam<sub>®</sub> technology is the key to unlocking new energy sources.
- CNX has 3 strategies for growth
  - 1. keyseam UCG technology
    - Technology licenses (upfront fee + royalty)
    - Technology services
  - 2. Coal tenements (Surat Basin, QLD)
  - 3. Gas reserve (Bloodwood Creek, QLD)





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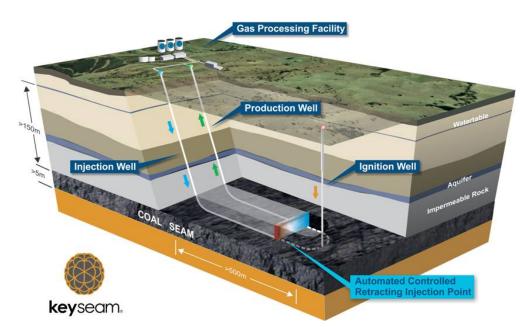
## **KEY MILESTONES** – 2011/12

- Achieved "Proof of Concept" for keyseam UCG technology
- Announced new corporate strategy
  - UCG is core business licence technology globally
  - Monetise Surat Basin coal assets
  - Develop, with a partner, Bloodwood Creek Syngas reserve
- Delivered against New Strategy
  - Announced first licensing agreement for keyseamUCG technology
  - Established coal resource & completed concept study
  - Completed study to produce cost effective pipeline quality natural gas from syngas



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# PROOF OF CONCEPT Keyseam TECHNOLOGY



Carbon Energy has achieved Proof of Concept and has demonstrated the following key elements:

- Drilling and construction of unique panel design
- Ignition and commissioning of two UCG panels
- Over 4 years of in-field UCG syngas trials
- 18 months continuous syngas production from UCG Panel 2
- Consistent production of high quality syngas
- Export of 1.5 MW of electricity to the local grid
- Validation of gasification prediction models with operational data
- Environmental management during operations
- Independently verified by third party engineering firm





# GROWTH DRIVERS: 2012 & BEYOND

Carbon Energy is moving toward the next phase of development through the following three strategies

	1. Licensing Technology	<ul> <li>Partner with coal companies and large energy users</li> <li>Upfront technology fee, plus ongoing royalty</li> <li>Technology Services on a schedule of rates</li> <li>International focus –China, Chile, US, Canada, India, South East Asia, South America</li> </ul>
carbonenergy	2. Surat Basin Coal Commercialisation	<ul> <li>Partner with international coal companies to monetise Surat Basin coal asset</li> <li>1.4billion tonne coal resource and growing</li> <li>Concept study complete</li> </ul>
	<ol> <li>Development of Bloodwood Creek Gas Project</li> </ol>	<ul> <li>2P Reserves: 743 PJ</li> <li>Proof of concept verified by third party</li> <li>East Coast Gas Market tightening ahead of LNG start</li> <li>Awaiting a QLD Government regulatory regime</li> <li>Potential partners awaiting finalisation of regulatory regime</li> </ul>

### LICENSING TECHNOLOGY

New Approach – Shanxi Sanyuan Coal	<ul> <li>Announced on 14 May 2012, Definitive Agreement signed 17 October 2012</li> <li>72nd largest of China's top 500 enterprises &amp; 2nd largest coal company in China &amp; Fortune 500</li> <li>In 2011 produced 40 million tonnes &amp; transported 350 million tonnes &amp; traded 250 million tonnes</li> <li>Aim to produce 100 million tonne &amp; trade 300 million tonnes</li> </ul>
The Project – Stage 1	<ul> <li>The first phase involves a demonstration panel adjacent to Changzhi city</li> <li>Exclusive Technology license agreement for Shanxi Province</li> <li>Recommendation for Carbon Energy's technology was provided by Peking University</li> </ul>
The Project – Stage 2	<ul> <li>The second phase is the development of major commercial projects with a minimum production rate of 30 PJ p.a of syngas.</li> </ul>
The Commercial Structure	<ul> <li>CNX does not provide development capital</li> <li>Upfront technology fee of \$7.5 million (payable prior to commencement) &amp; a further US\$2.5 million as gas production milestones are met</li> <li>Ongoing technical &amp; engineering service fees</li> <li>Royalties <ul> <li>Stage 1: Up to US\$3 million once gas from demonstration project is sold to market</li> <li>Stage 2: US\$400 million in royalties over a 20 year project life (based on a single 30 PJ p.a project).</li> </ul> </li> </ul>
Replicating Shanxi	<ul> <li>CNX's technology partnering strategy means it can take a multi project &amp; multi country approach</li> <li>Discussions are underway with companies in Chile, US, Canada, India, South East Asia and South America, on the application of CNX's UCG technology</li> </ul>



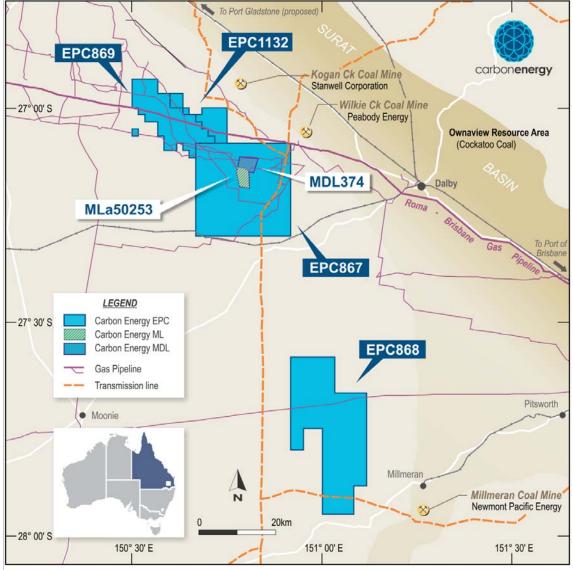
#### SURAT BASIN COAL COMMERCIALISATION

Surat Basin Coal Resource	<ul> <li>17 May 2012 – announcement of 4 to 8 Bt exploration target</li> <li>7 July 2012 – announcement of 1.2 Bt Inferred Resource</li> <li>10 September 2012 – announcement of 1.4 Bt Inferred Resource</li> <li>22 November 2012 – announced concept study, three mines @ 5 million product tonnes p.a each</li> </ul>
Ideal Location	<ul> <li>CNX Eastern Surat Exploration Leases are close to: <ul> <li>Existing domestic and export thermal mines</li> <li>Existing rail and proposed infrastructure (including the future Surat Basin Rail link to the Moura coal handling system)</li> <li>Existing power, gas and water infrastructure</li> <li>Significant population and service centres</li> </ul> </li> <li>Leases are largely free from: <ul> <li>Strategic Cropping Land and Buffer Zones</li> <li>Environmentally sensitive areas</li> <li>Culturally significant areas</li> <li>Urban areas</li> </ul> </li> </ul>
CNX delivering on its plan to monetise its coal resource	<ul> <li>Provides a quality opportunity for a party looking for a large export thermal coal resource</li> </ul>

• CNX is on schedule in its development & packaging of the Surat Basin coal resource for sale and / or potential partnership opportunities



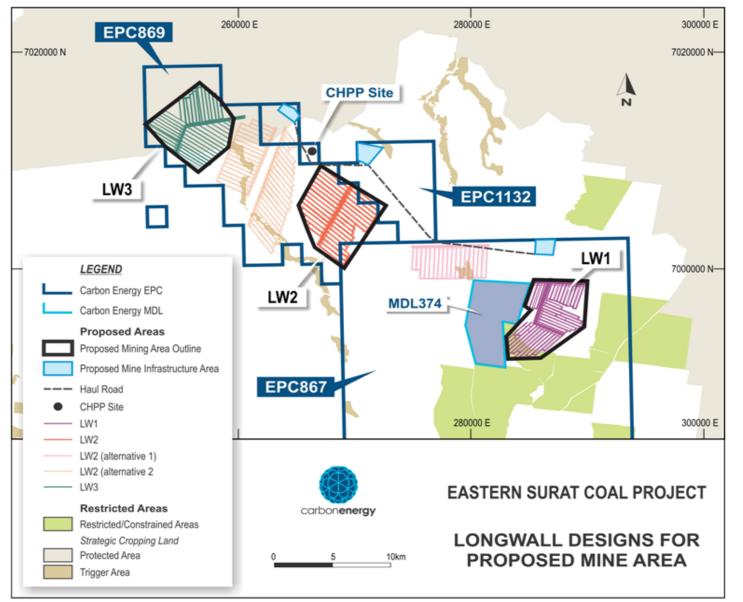
#### TENURE MAP



Carbon Energy Coal Tenure Surat Basin



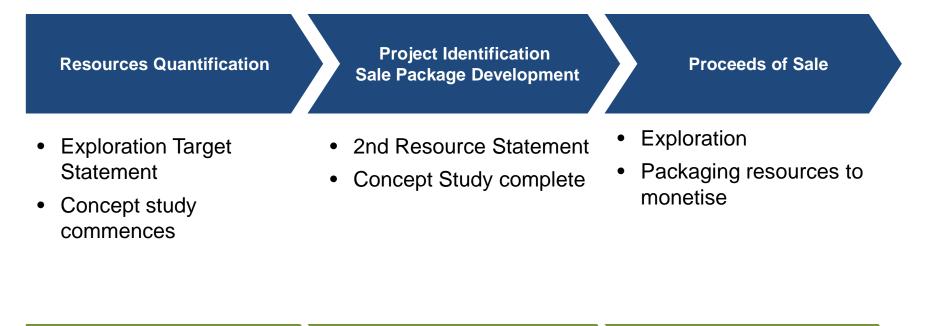
### CONCEPTUAL MINE PLAN LAYOUTS





## COAL STRATEGY TIMELINE

Seeking Commercial Partners for potential sale or partnership opportunities





# SYNGAS:BLOODWOOD CREEK, QLD

#### Strategic asset in an attractive gas market

Surat Basin Reserves	<ul> <li>2P Reserves – 743 PJs of syngas, equivalent to Brisbane's gas requirements for 15 years</li> <li>Located on the Roma to Brisbane Pipeline</li> <li>Application in power generation, natural gas, ammonia, liquid fuels and chemicals (such as methanol)</li> </ul>
LNP QLD Govt	<ul> <li>CNX is constructively working with the LNP Government to obtain a regulatory regime for UCG syngas production</li> <li>The report by the Independent Scientific Panel (ISP) has been submitted to the Department of Natural Resources &amp; Mines for review and comment</li> </ul>
The QLD Gas Market	<ul> <li>CSM gas reserves being committed to the LNG projects scheduled to start in 2014/2015</li> <li>Domestic gas users unable to renew long term contracts</li> <li>The Queensland Government, 2012 Gas Market Review includes the following findings: <ul> <li>"The Queensland Market lacks liquidity, with gas in short supply for new contacts both pre and post 2015"</li> <li>A modest oil and LNG development outlook could see prices in the order of \$6.50/GJ by 2015. Under the same scenarios, gas prices in 2020 would be in the range (High to Low) of \$12/GJ to \$7/GJ"</li> </ul> </li> </ul>
CNX Ideally positioned	<ul> <li>CNX requires partners on the production development of the Bloodwood Creek gas reserve</li> <li>Recent engineering study by LogiCamms found the cost of producing pipeline quality natural gas from Carbon Energy's UCG Syngas was estimated to be in the range of \$3.50/GJ to \$4.50/GJ (capex and opex combined cost for 25PJ to 8PJ projects respectively at FEL1 and excluding taxes)</li> <li>Discussions with off-takers &amp; partners are at an early stage</li> </ul>

## CONCLUSION

- Proof of Concept achieved for keyseam technology and independently verified
- First UCG technology license agreement executed,
- Early cash flow to be generated from upfront technology license fees and ongoing technical and engineering service fees
- Large thermal coal resource in Surat Basin, QLD with plans to value add and monetise on track
- Awaiting QLD UCG Policy early 2013



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# CARBON ENERGY LIMITED ANNUAL MEETING GENERAL MEETING OF SHAREHOLDERS 2012

