



carbonenergy

Carbon Energy Limited | ABN 56 057 552 137

Level 9, 301 Coronation Drive,
Milton QLD 4064 Australia
PO Box 2118, Toowong DC
QLD 4066 Australia

phone + 61 (0) 7 3156 7777

fax + 61 (0) 7 3156 7776

www.carbonenergy.com.au

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ABN 56 057 552 137

Carbon Energy (Operations) Pty Ltd

ABN 61 105 176 967

ASX Announcement

16 October 2014

Gas Assets Valued at More Than 3 Times Current Market Capitalisation¹

- **Independent expert values Carbon Energy's Surat Basin gas assets at between \$91m and \$600m with a preferred valuation of \$205m**
- **Fully risk weighted, independent valuation of gas assets**

Carbon Energy (ASX: CNX, OTCQX: CNXAY) today announces that it has received an independent expert valuation of its Surat Basin gas assets. The valuation was conducted by Xstract Mining Consultants, an internationally recognised resource and asset evaluator who have valued the Company's in situ gas assets between \$91m and \$600m, with a preferred valuation of \$205m².

The independent expert has fully risk weighted its valuation being cognisant of the current policy regime as it pertains to underground coal gasification (UCG) development, in addition to the likely capital costs to bring the Blue Gum Gas Project into production. Should either of these key risks be resolved Xstract considers there would likely be a sizable uplift in the valuation.

Of significance, the valuation has been undertaken prior to a Queensland Government decision around the future of UCG in Queensland.

To arrive at the valuation, Xstract applied a number of valuation methods outlined in the 2005 edition of the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (VALMIN).

Carbon Energy's CEO Morné Engelbrecht said "This valuation reflects the current fully risked valuation of our Queensland gas assets and follows the Company's recent significant gas reserve upgrade. As we proceed further down the path of de-

¹ Based on Xstract Mining Consultants preferred valuation of \$205m and Carbon Energy's market capitalisation as at close of trading on 15 October 2014 of \$63m.

² Please see accompanying Basis of Valuation for disclosure details.

risking our Blue Gum Gas Project in Queensland, we will continue to build on the value of our Surat Basin gas assets.”

Last month, Carbon Energy announced an upgrade of its 2P gas reserves to 1,128 PJ (1 Tcf or 188 mmboe) of natural gas equivalent or 188 million barrels of oil equivalent (mmboe), making its 2P gas Reserves the fifth-largest in Queensland.³

ENDS

For an behalf of the Board

Morne Engelbrecht
Managing Director & CEO

³ Please see Basis of Valuation endnote i for disclosure details.

Basis of Valuation

Xstract Mining Consultants Pty Ltd (Xstract) provided the “Eastern Surat Syngas Reserves Independent Valuation” (the Report) to Carbon Energy Ltd on 15 October 2014. Carbon Energy’s wholly owned Eastern Surat Syngas Reserves in the Surat Basin, Queensland, form the reserve base underpinning the Blue Gum Gas Project (the Project). This Basis of Valuation provides a summary of the key methodologies used and risks identified in the Report.

The information in the Report is deemed commercially sensitive as the Company has not received the requisite approvals from the Queensland government to commence the Project. This impacts on the negotiations underway to secure off-take agreements and investment funding for the Project.

Valuation methodology

To arrive at the valuation Xstract applied a number of valuation methods outlined in the 2005 edition of the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (VALMIN).

Xstract relied heavily on transaction market multiples and comparable transaction data however had to make adjustments for the Company’s Keyseam technology against other extractive technologies. The factors taken into account are listed below:

- Comparable energy recovery to conventional coal mining without the need to transport inert ash;
- Around 50 times greater energy recovery per square kilometre than CSG;
- Produces gas which is raw material for a wide range of saleable products;
- Does not impact on regional water quantity or quality;
- Accesses coal resources otherwise not commercially viable;
- Very small extractive area;
- Utilises off-the-shelf enabling technologies such as gas & water processing;
- Project is near to all required major infrastructure e.g. natural gas pipelines to ready markets, power lines, roads, skilled workforce;
- Negligible remediation costs;
- Queensland Government approvals process for UCG technology is in development;
- Emerging technology may be difficult to fund;
- Emerging technology may be difficult to gain social licence;
- Up-front capital costs;
- Project timeline dependent upon policy and approvals process; and
- Constraints with existing resource holders.

Reserves¹

Xstract used the Reserves detailed in Carbon Energy's ASX announcement dated 19 September 2014 as the basis for Reserves underpinning the financial assessment presented in the Report.

Permits	Category	Gross (100%) Syngas Energy (PJ)	Gross (100%) SNG Energy (PJ)
MDL374	1P Reserves	11.0	7.1
	2P Reserves	1,737.9	1,128.5
	3P Reserves	2,512.4	1,631.5
EPC867	3P Reserves	5,650.0	3,668.9
	2C Contingent Resources	7,734.3	5,022.3
EPC869	2C Contingent Resources	4,150.3	2,695.0
EPC1132	2C Contingent Resources	1,220.1	792.3

Key risks

The results of the valuation detailed in the Report are forward looking information that is subject to a number of known and unknown risks, uncertainties and other factors that may cause the actual results to differ materially from those presented here. Key risks to the Project are considered by Xstract to be:

- Carbon Energy requires approval from the Queensland Government in order to continue with activities designed to commission the Project site and commence commercial production of syngas for conversion to SNG. Having recently submitted a decommissioning report and rehabilitation plan, Carbon Energy is hopeful that it will receive the requisite approvals in order to commence construction activities in calendar year 2015, targeting first production in 2017. Xstract considers this timeline may be pushed out by up to two years pending support from the Queensland Government.
- Delineating a second area capable of supporting up to 47 panels may prove more difficult than currently expected given the various geological, hydrological and geotechnical requirements for commercial production.
- The classification of the syngas reserve for Carbon Energy's EPCs 867, 869 and 1132 located in the Surat Basin, Queensland (i.e. outside of Carbon Energy's MDL374) may be overstated in terms of confidence.
- Relative to historic transactions, the current market is heavily discounting certain unconventional gas assets, including NSW CSG and Queensland UCG pending greater clarity regarding the development pathway for projects in these sectors. Any change in the current political landscape for unconventional gas may result in a marked re-rating of these sectors.
- The current price outlook for SNG is heavily dependent upon the on-going development of CSG and LNG infrastructure, which is due to come on-line within the next few years. Whilst current prices are comparatively low relative to near to medium term forecasts, gas prices are expected to rise dramatically during the transition from a domestic focussed to export oriented marketplace.

Reporting standard

The Report has been prepared in accordance with the following codes:

- The 2005 edition of the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (VALMIN Code); and
- The 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code).

For the purposes of the Report, value is defined as 'fair market value' (FMV), being the amount for which a mineral asset should change hands between a willing buyer and a willing seller in an arm's length transaction where each party is assumed to have acted knowledgeably, prudently and without compulsion.

The estimates of syngas reserves and contingent resources presented in the Report have been prepared by MHA Petroleum Consultants (MHA) in accordance with the definitions and guidelines set forth in the 2007 Petroleum Resources Management System (PRMS) approved by the Society of Petroleum Engineers (SPE).

Data sources

In developing its assumptions for the Report, Xstract relied upon information provided by Carbon Energy and information available in the public domain including:

- Various papers extracted from technical conference proceedings and Australasian Institute of Mining and Metallurgy (AusIMM) Monographs;
- Press releases, public announcements, media and analyst presentation material and other public filings, including information available on Carbon Energy's website;
- Brokers' reports and recent press articles on Carbon Energy and other comparable companies, as well as the coal and coal gasification industry;
- Share market data and related information on Australian and international listed companies engaged in the coal and gas industries and on acquisitions of companies and businesses in these industries; and
- Information relating to the coal and gas markets including forecasts regarding supply and demand, commodity price, inflation rates and exchange rates.

In the execution of its mandate, Xstract reviewed all relevant pertinent technical and corporate information made available by representatives of Carbon Energy, which has been accepted in good faith as being true, accurate and complete, after having made due enquiry.

Reliance on other Experts

Xstract has not relied on any third party opinion in compiling its value opinion. The technical personnel responsible are based entirely in Xstract's Brisbane office. Xstract has held discussions with Carbon Energy personnel in its Brisbane office to facilitate an understanding of the Project.

For the technical assessment, Xstract sent two representatives (a geologist and mining engineer) to carry out a visit to Carbon Energy's Project site. In addition, Xstract has completed a data review of the available technical data and held discussions with independent parties regarding Carbon Energy's proposed development and exploration assets. Based on these validation steps, Xstract has developed a good in-house understanding of the assets and has no reason to question the validity of the technical information supplied.

Competent Persons and Experts statement

Xstract's consultants involved are Independent Experts as defined by the VALMIN Code. They are also members of either the AusIMM or the Australian Institute of Geoscientists (AIG), for which compliance with the JORC and VALMIN Codes is mandatory. Xstract's Competent Persons involved in the preparation of the Report are members in good standing with one or more of these professional institutions and have the required qualifications and experience as defined in the JORC and VALMIN codes to conduct this technical assessment and valuation.

Xstract's consultants have extensive experience in preparing competent persons, mineral specialist, independent geologist and valuation reports for mineral exploration and production companies. The authors of the Report are qualified to express their professional opinions on the values of the mineral assets described.

Independence, disclaimer and warranty

Xstract is an independent mining consultancy. Xstract confirms its independence for the purpose of the Australian Securities and Investment Commission's Regulatory Guide 112 – Independence of experts (ASIC, 2011). Xstract was commissioned by Carbon Energy on a fee for service basis according to Xstract's standard schedule of rates. Xstract's fee is not contingent on the outcome of its valuation. None of Xstract's consultants or their immediate families involved in the preparation of the Valuation have (or had) a pecuniary or beneficial interest in Carbon Energy prior to or during the preparation of the Valuation.

Xstract has made due enquiries to the Queensland Department of Natural Resources and Mines (DNRM) in order to validate information provided by Carbon Energy. However, Xstract is not qualified to express legal opinion and has not sought any independent legal opinion on the ownership rights and obligations relating to the respective mineral assets under licence or any other fiscal or legal agreements that Carbon Energy may have with any third party in relation to its Queensland assets.

The Valuation may contain or refer to forward-looking information based on current expectations, including, but not limited to timing of mineral resource estimates, future exploration or project development programmes and the impact of these events on Carbon Energy's projects. Forward-looking information is subject to significant risks and uncertainties, as actual results may differ materially from forecasted results. Forward-looking information is provided as of the date hereof and Xstract assumes no responsibility to update or revise them to reflect new events or circumstances.

The valuation is appropriate as at 15 October 2014. The valuation is only appropriate for this date and may change in time in response to variations in economic, market, legal or political factors, in addition to ongoing exploration and development studies. All monetary values outlined in the Report are expressed in AUD unless otherwise stated.

Forward-looking Statements

This announcement contains certain "forward-looking statements". Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors and are subject to significant business, economic and competitive uncertainties and contingencies associated with exploration and/or production, many of which are beyond the control of Carbon Energy, that may cause actual results to differ materially from those predicted or implied by any forward-looking statements. No representation or warranty is made by or on behalf of Carbon Energy, Xstract or their respective directors or officers, employees, advisers or agents that any projection, forecast, calculation, forward-looking statement, assumption or estimate contained in this presentation should or will be achieved or that actual outcomes will not differ materially from any forward-looking statements.

ⁱ All Reserve and Resource estimates (**Estimates**) in this document are reported in accordance with the requirements of ASX Listing Rules 5.25 to 5.28. It is noted in particular that:

- (a) This document refers to Estimates reported on 19 September 2014 and released to the market on 22 September 2014 (**Updated Reserves Statement**);
- (b) All Estimates are based on the deterministic method for estimation of petroleum resources at the field and project levels and are attributable to the gross (100 percent) ownership interest of Carbon Energy in certain coal properties located in MDL374, EPC867, EPC869 and EPC1132 located in the Surat Basin of Queensland, Australia;
- (c) All Estimates are reported using the following conversion factors as relevant:
 - (i) UCG Energy conversion factor is 16.73 GJ of syngas per tonne of coal gasified;
 - (ii) UCG syngas to Synthetic Natural Gas (SNG) conversion factor is 38.5 to 25;
 - (iii) 1,055 Petajoule (PJ) = 1 Trillion cubic feet (Tcf); and
 - (iv) 1 barrel of oil equivalent (boe) = 6,000 cubic feet.

Further, Carbon Energy confirms that it is not aware of any new information or data that materially affects the information included in the Updated Reserves Statement and that all material assumptions and technical parameters underpinning the estimates in the Updated Reserves Statement continue to apply and have not materially changed.

About Carbon Energy

Carbon Energy (ASX: CNX) (OTCQX: CNXAY) is building a Queensland gas business.

The Company is committed to providing Australian industrial gas users with an affordable and secure source of high quality gas, as gas prices continue to rise with increased overseas demand.

Carbon Energy is developing a new Queensland-based energy portfolio. Subject to government approvals, the Company is currently developing its first commercial project, the Blue Gum Gas Project, near Dalby in Queensland. This plant will supply 25PJ of natural gas per annum and is located within easy access to markets, and close to existing infrastructure.

Additionally, Carbon Energy has the potential to supply the growing overseas markets.

A key competitive advantage for Carbon Energy has been the development of its unique keyseam technology. This proven and highly controlled technology enables access to productive gas resources that were previously considered too deep or uneconomic.

keyseam maximises resource efficiency, while minimising surface disturbance and preserving groundwater quality. Originally developed by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) it has been proven through six years of field trials.

Alongside its local operations, Carbon Energy works with international partners to unlock new energy resources offshore. The Company delivers end-to-end services from initial project assessment through to commercial project development, operations, site decommissioning and rehabilitation. It also has an established project in Inner Mongolia, China.

Carbon Energy is headquartered in Brisbane, Australia, is listed on the Australian Securities Exchange (ASX) as CNX and is quoted on the OTCQX International Exchange as CNXAY in the United States.

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