



carbonenergy

Carbon Energy Limited | ABN 56 057 552 137

ASX / Media Announcement

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Independent cavity survey reinforces Carbon Energy's technically advanced UCG technology

- **Innovative geophysical technique confirms location and size of Carbon Energy's second UCG reactor;**
- **Validates modelling and operation parameters of the Company's patented keyseam UCG technology; and**
- **Geophysical technique allows for continuous monitoring of reactor growth during UCG operations.**

In a world first, Carbon Energy (ASX: CNX, OTCQX: CNXAY) today released the results of a survey which confirms the size and nature of the Underground Coal Gasification (UCG) cavity following trials of the Company's proprietary keyseam® UCG technology.

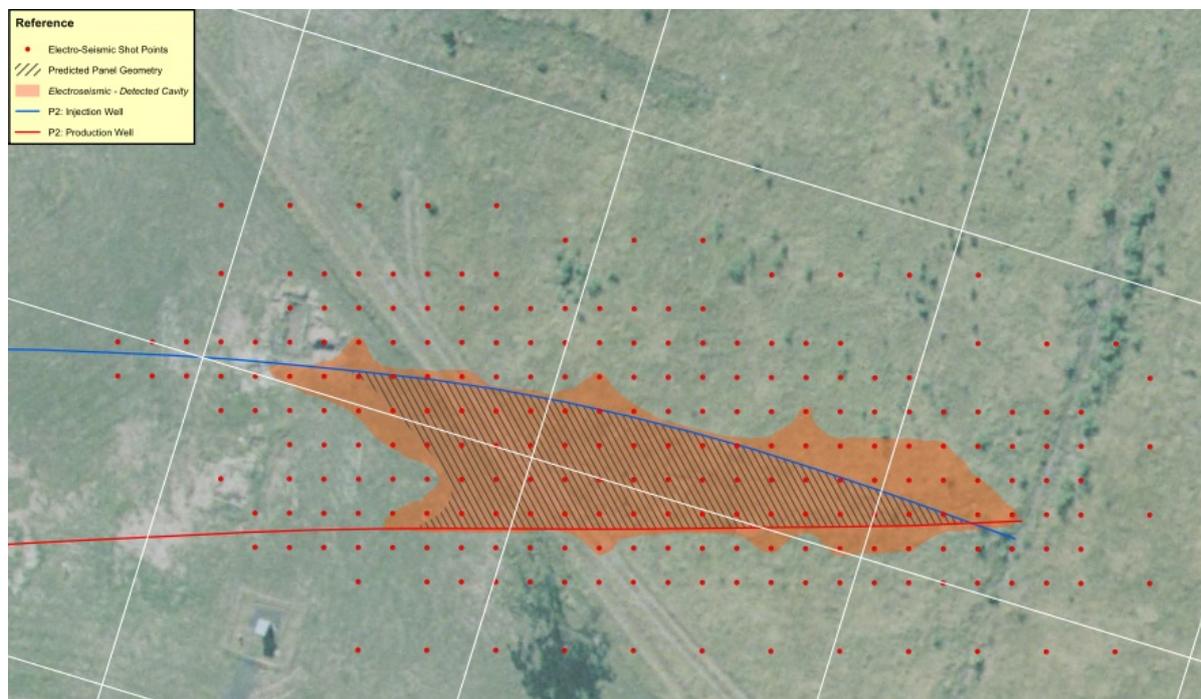
The independent electro-seismic survey was conducted by Aquatronic Solutions, developers of this innovative technique, at the Company's Bloodwood Creek pilot site.

Aquatronic Solutions produced an image of Carbon Energy's UCG cavity following the decommissioning of the Company's Panel 2 at the site. The image was created by detecting the heated rock in the roof of the cavity (see Diagram 1).

The Bloodwood Creek Panel 2 UCG reactor was operated continuously for 20 months and gasified approximately 13,000 tonnes of coal and formed a cavity of approximately 8,500 cubic metres in size. In March 2012 Carbon Energy announced that Proof of Concept was achieved during the Panel 2 trial, including the following key outcomes:

- High quality syngas produced – a 12 month average of 6.45 MJ/Sm³ HHV;
- Consistent gas quality;
- No physical intervention or re-ignition required once reactor initiated; and
- No impact on groundwater quality or quantity beyond trial area.

Diagram 1 Electro-Seismic Grid, Carbon Energy Panel 2



The location of the reactor cavity is clearly shown and confirms:

- Containment and control of the gasification process, evidenced by the limited gasification impact outside the defined panel;
- Predictability and therefore validation of the Company's gasification prediction models. The image highlights that as the gasification process proceeded, it followed very closely to the path predicted from the modelling;
- Cavity size and location is in line with expectations; and
- Confirmation that the Company's patented, automated CRIP system operates effectively.

The electro-seismic method also allows for continuous monitoring of the reactor growth during the gasification process. As Carbon Energy's keyseam technology is operating, the size, shape, and location of the cavity can be monitored to confirm it is performing in-line with expectations.

Acting CEO for Carbon Energy, Morné Engelbrecht, said the survey was an exciting development as it once again proved the technically advanced nature of the Company's proprietary keyseam UCG technology.

"The survey concluded that Carbon Energy's keyseam technology operates in a manner consistent with expected outcomes" Mr Engelbrecht said.

“These latest findings further support one of our key strategic pillars, which is to pursue global expansion by becoming the preferred partner of choice, nationally and internationally, through delivering the most technically advanced and demonstrated UCG technology.”

ENDS

For and on behalf of the Board

A handwritten signature in black ink, appearing to read 'Morné Engelbrecht', with a small dot at the end.

Morné Engelbrecht
Acting Chief Executive Officer

**For more information please contact Andrew Crook on +61 419 788 431
or refer to our website at www.carbonenergy.com.au**

About Carbon Energy:

Carbon Energy specialises in underground coal gasification (UCG). Our proprietary keyseam® technology is the key to unlocking new energy sources, transforming stranded, deep or otherwise uneconomic coal resources into high-value fuels with lower carbon emissions.

Carbon Energy delivers end-to-end UCG services from initial project assessment through to commercial project development, operations, site decommissioning and rehabilitation.

Carbon Energy achieved Proof of Concept of its keyseam technology following 10 years of research by Australia's premier scientific research agency, the Commonwealth Scientific and Industrial Research organisation (CSIRO), 5 years of in-field trials and over \$100 million investment in technology development.

By successfully proving our keyseam technology, we have earned a reputation for delivering consistent, high quality product gas which can be used for many purposes including power generation, fertilisers and production of pipeline quality gas. keyseam maximises resource efficiency, whilst minimising surface disturbance and preserving groundwater quality.

Carbon Energy also has previously announced the following assets:

- 2.0 Billion tonnes¹ of coal JORC Inferred Resource in southeast Queensland's Surat Basin;
- 743PJ² of Certified 2P syngas reserves in southeast Queensland's Surat Basin; and,
- 910 Million tonnes³ of coal JORC Inferred Resource at its Bridger, Wyoming USA farm-in area.

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

¹ See CNX ASX/Media Announcement 2 April 2013. CNX is not aware of any new information that would materially affect the Resources stated.

² See CNX ASX/Media Announcement 8 December 2009. CNX is not aware of any new information that would materially affect the Reserves stated.

³ See ASX/Media Announcement 23 January 2013. CNX is not aware of any new information that would materially affect the Resources stated.