

Carbon Energy Limited

CNX A\$0.016

TARGET PRICE A\$0.09

SPECULATIVE BUY

Carbon Energy Limited (CNX) is a resources development company targeting the development of UCG in Australia and Asia (China). CNX has entered into a strategic JV with a Chinese partner which is likely to enable a relatively rapid rollout of its patented keyseam UCG business model throughout targeted sites. This technology has globally significant ramifications.

Chris Mears

+61 2 9226 0295

chris.mears@appsecurities.com.au

Asia Pacific
Prudential Securities

This Research has been prepared and issued by APP Securities Pty Ltd and remains the property of APP Securities Pty Ltd. No material contained in this Research may be reproduced or distributed without prior written approval of APP Securities Pty Ltd, except as allowed by the Copyright Act. This Research is current at the date of publishing. For updates or further information regarding this research, please contact your advisor. APP Securities Pty Ltd does or seeks to undertake business with companies covered in its research, including being paid for research and therefore, Investors should consider this report as only a single factor in making their investment decisions. For explanations regarding ratings and other important disclosures, please refer to the disclosure section at the end of this document.

CNX commercialises Chinese JV...

Carbon Energy Limited (ASX: CNX) is a QLD based energy technology company focussed on the development and commercialisation of underground coal gasification (UCG) projects, primarily overseas.

China Jinhong JV Registered/Ratified

As mentioned in our February initiation report, CNX entered into a joint venture with the Beijing JinHong Investment Co Ltd (JinHong) in November 2015.

The strategic rationale for the JV was to license and commercialise the company's keyseam technology for use within China.

The establishment of the partnership was subject to both Chinese Government approvals and receipt of US\$10M (being the first tranche of a total US\$30M in capital contributions).

On 17/06/2016 CNX announced the formal ratification of the JV hence triggering Jinhong's initial capital contribution of US\$10M into the JV. Under the agreement, Jinhong is to contribute a further US\$20M towards developing a commercial UCG Demonstration Project (within 3 years) upon meeting certain milestones (total commitment US\$30M)

The registration has also triggered the formal signing of the Technology Licensing and Technical Services Agreements.

Other agreed terms of the JV include:

- CNX to initially contribute a non-exclusive license (Technology License Agreement) to the JV for development of a UCG demonstration facility;
- Upon successful commissioning of the demonstration facility, CNX to grant an exclusive license for the use/sub-licensing of keyseam in China;
- CNX to be entitled to 90% of license fees before the JV is allocated an exclusive license and
- Post exclusivity, JV profit distributions to be allocated in the ratio CNX (30%), JinHong (70%);
- CNX to be engaged directly to provide the technical services to all licencing and sub-licencing of the technology.

CEO Morne Englebrecht departs

On 8/06/2016, CNX announced that CEO Morne Englebrecht would be leaving the company on 12/08/2016 after 5 years of service with the company. CNX announced it was seeking a replacement for his position. We believe the successful candidate is likely to be someone with extensive previous Asian markets experience given the company's focus on the roll out of its Asian development strategy.

Recommendation

The registration of the Jinhong China JV is a further concrete step in the development of CNX's China technology license roll out strategy and provides further impetus to our positive stance on the stock. Given our revised valuation and price target still significantly exceeds current share price our **Speculative Buy recommendation remains.**

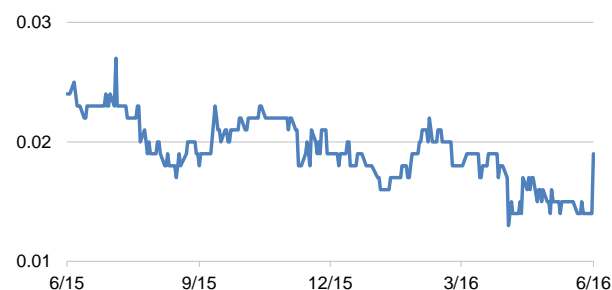
Company Data

Number of shares	1763.483
Market capitalisation	\$28.6M
Free Float (%)	61%
12 month high/low	\$0.024 / \$0.008
Average Daily Turnover (\$M)	
% S&P/ASX 200	n/a
% All Ordinaries	n/a
DDM Ranking	n/a
GICS Industry Group	

Data Source: Fact set, APP Securities

Earnings Summary (AUD)

Year end June	2015A	2016F	2017F	2018F
Revenue (\$M)	4.2	3.3	27.0	28.0
EBITDA (\$M)	-3.6	-3.8	11.4	12.9
Reported NPAT (\$M)	-6.2	-4.8	10.8	12.2
Adjusted NPAT (\$M)	-6.2	-4.8	10.8	12.2
Adjusted EPS (¢ - FD)	-0.5	-0.3	0.6	0.7
Adjusted EPS growth (%)	n/a	n/a	n/a	13.5
Adjusted P/E (x)	n/a	n/a	1.6	1.4
Dividend (¢/sh)	0.0	0.0	0.0	0.0
Gross yield (%)	0.0	0.0	0.0	0.0
Net yield (%)	0.0	0.0	0.0	0.0
ROIC (%)	0.0	n/a	n/a	n/a

Share Price Performance

Source: APP Securities, Company Reports. APP Securities contribute all company estimates to Bloomberg, Thomson Reuters, Fact Set and Capital IQ.

Recent Market Developments – domestic UCG

- Recent closure of current UCG development opportunities in QLD followed the QLD Govt's decision in April 2016 (referred to in our April 2016 note) and a moratorium on all future activities relating to UCG prohibiting UCG development in QLD under the auspices of the QLD Mineral Resources Act 1989,
- Linc Energy Ltd (SGX: BRE) being placed into voluntary administration 15/4/2016 at least partially due to the company's "inability to raise further capital following the QLD Govt's decision to commence legal proceedings against the company for alleged environmental damage" *

*** Administrators report – Section 439A of the Corporations Act 2001 – PPB Advisory – May 2016.**

CNX's share price has likely been impacted by recent media discussion on market developments in QLD. We see these developments as providing a Buying opportunity for CNX Ltd given the current discount to our valuation and price targets (A\$0.15, A\$0.09cps respectively) and the limited impact of any cessation of QLD UCG development in our overall valuation.

This Research has been prepared and issued by APP Securities Pty Ltd ("APP Securities") and remains the property of APP Securities Pty Ltd. No material contained in this Research may be reproduced or distributed, except as allowed by the Copyright Act, without the prior written approval of APP Securities.

This report has been prepared and issued (in Australia) by APP Securities Pty Ltd (ABN 45 112 871 842) (AFS Licence No. 307 706) (APP Securities) and is subject to the disclosures and restrictions set out below.

Analyst Certification:

The research analyst(s) identified on the cover of this report individually certify that in respect of each security or issuer that the research analyst covers that: this report accurately reflects his or her personal views about any and all of the subject issuer(s) or securities; and no part of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or views expressed by the research analyst(s) in this report.

General Disclosure

APP Securities and its associates (as defined in Chapter 1 of the Corporations Act 2001), officers, directors, employees and agents, from time to time, may own or have positions in securities of the company(ies) covered in this report and may trade in the securities mentioned either as principal or agent or may be materially interested in such securities.

APP Securities does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

APP Securities Pty Limited has received during the past 12 month's compensation for financial and advisory services from the company, its parent or it's wholly owned or majority owned subsidiary.

Contact with **Carbon Energy Limited** has been made during the preparation of this report for assistance with the verification of facts.

APP Securities Pty Ltd acted as Lead Manager and Underwriter to the **Carbon Energy Limited** Rights Issue as announced by the ASX on 11 March and 11 April 2016.

Disclaimer & Warning

This report may contain general advice or recommendations which, while believed to be accurate at the time of publication, are not appropriate for all persons or accounts. This report does not purport to contain all the information that a prospective investor may require. Before making an investment or trading decision, the recipient must consider market developments subsequent to the date of this document, and whether the advice is appropriate in light of his or her financial circumstances or seek further advice on its appropriateness or should form his/her own independent view given the person's investment objectives, financial situation and particular needs regarding any securities or Financial Products mentioned herein. Information in this document has been obtained from sources believed to be true but neither APP Securities nor its associates make any recommendation or warranty concerning the Financial Products or the accuracy, or reliability or completeness of the information or the performance of the companies referred to in this document. Past performance is not indicative of future performance. This document is not an offer, invitation, solicitation or recommendation with respect to the subscription for, purchase or sale of any Financial Product, and neither this document or anything in it shall form the basis of any contract or commitment. Although every attempt has been made to verify the accuracy of the information contained in the document, liability for any errors or omissions (except any statutory liability which cannot be excluded) is specifically excluded by APP Securities, its associates, officers, directors, employees and agents. The securities of such company (ies) may not be eligible for sale in all jurisdictions or to all categories of investors.

Analysts' Compensation: The research analysts responsible for the preparation of this report receive compensation based upon various factors, including the quality and accuracy of the analyst(s) research, client evaluation feedback, independent survey rankings and overall firm revenues, which include revenues from, among other business units and corporate finance.

Other International Investors: International investors outside the US, UK, UAE or Canada are encouraged to contact their local regulatory authorities to determine whether any restrictions apply to their ability to purchase this investment and should seek their own advice

Recipient Representations/Warranties: By accepting this report, the recipient represents and warrants that he or she is entitled to receive such report in accordance with the restrictions set out in this document and agrees to be bound by the limitations contained herein. Any failure to comply with these limitations may constitute a violation of law.

Meanings of APP Securities Stock Ratings

Buy – Describes stocks that we expect to provide a total return (price appreciation plus gross yield) of 10% or more within a 12-month period.

Underperform – Describes stocks that we expect to provide a total return (price appreciation plus gross yield) of less than 10% within a 12-month period.

NR – The investment rating and price target have been temporarily suspended. Such suspensions are in compliance with applicable regulations and/or APP Securities policies.

CS – Coverage Suspended. APP Securities has suspended coverage of this company.

Speculative Buy – Describes stocks we research with a positive bias, whose company fundamentals and/or financials are being covered, but for which there is insufficient information for APP Securities to assign a Buy or Underperform rating.

Speculative Underperform – Describes stocks we research with a negative bias, whose company fundamentals and/or financials are being covered, but for which there is insufficient information for APP Securities to assign a Buy or Underperform rating.

Secondary recommendation - Market weight relative to the S&P/ASX 300 under a weighting range of 0-3, with intervals of 0.5 (7 point scale). 1.0 indicates a market weight position in the stock while a weight over 1.0 indicates an overweight position and the current level of analyst conviction.

Monitor – Describes stocks whose company fundamentals and/or financials are being monitored, or for which no financial projections or opinions on the investment merits of the company are provided.

It is permitted for the total expected returns to be temporarily outside the prescribed ranges due to extreme market volatility or other justifiable company or industry-specific reasons.

Free Float (float / current shares outstanding) *100 – This float figure is the number of shares that are available to the public and is calculated by subtracting the shares held by insiders and those deemed to be stagnant shareholders. Stagnant holders include ESOP's, ESOT's, QUEST's, employee benefit trusts, founding shareholder equity stake plus senior management equity stake, corporations not actively managing money, venture capital companies and shares held by Governments.

Terminal Value methodology - APP Securities' Discounted Cash Flow (DCF) valuation applies a terminal growth rate to the last forecast year's cash flow and discounts the amount using Weighted Average Cost of Capital (WACC). The Terminal Value is tested using ASX-listed company multiples. For resource companies there is no terminal value because cash flows are forecast to the end of mine life.

Meanings of APP Securities Credit Ratings

Buy – If the last traded price of the hybrid security is more than 3% below our valuation

Underperform – If the last traded price of the hybrid security is more than 3% above our valuation

Valuation Methodology

APP Securities' methodology for assigning stock and credit ratings may include the following: market capitalisation, maturity, growth/value, volatility and expected total return over the next 12 months. The price targets are based on several methodologies, which may include, but are not restricted to, analyses of market risk, growth rate, revenue stream, discounted cash flow (DCF), EBITDA, EPS, cash flow (CF), free cash flow (FCF), EV/EBITDA, P/E, PE/growth, P/CF, P/FCF, premium (discount)/average group EV/EBITDA, premium (discount)/average group P/E, sum of parts, net asset value, discounted dividend model (DDM), franking credits and return on equity (ROE) over the next 12 months. Listed credit securities analysis uses appropriate discount rates that reflect credit risk of both issuer and the underlying instrument.

© Copyright APP Securities Pty Ltd