Leigh Creek Energy Limited

Independent Expert's Report and Financial Services Guide

15 August 2017

The Independent Directors
Leigh Creek Energy Limited
Level 11, 19 Grenfell Street
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15 August 2017

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Dear Directors

Introduction

Leigh Creek Energy Limited ("LCK" or the "Company") is an Australian public company listed on the Australian Securities Exchange ("ASX"). The Company is an emerging energy company focussed on developing its Leigh Creek Energy Project ("LCEP") in northern South Australia. As at 10 August 2017, LCK had a market capitalisation of approximately A$44.87 million.

The LCEP plans to produce synthesis gas, known as syngas (a fuel gas mixture comprising methane, carbon monoxide and hydrogen) using the in-situ gasification ("ISG") process to access deep coal resources in the existing Leigh Creek coalfield. Open-cut mining has been stopped in this coalfield, however, the characteristics of this field, existing infrastructure and potential benefits to customers present LCEP as ideal for the ISG process. LCK is currently in the planning and exploration stage, with the pre-commercial demonstration plant ("PCD") being planned to be completed in 2017. Commercial production is planned to commence in 2020-21.

China New Energy Group Limited ("CNE") is a Hong Kong based company owned by Shanxi Meijin Energy Co., Ltd. Shanxi Meijin Energy Co., Ltd has large asset holdings in China, including steel mills, gas fired power stations and coking coal and PCI mines.

On 30 March 2017, the Company announced a $21.85 million capital raising[1] by way of a private placement of 150 million new fully paid shares. We understand that CNE has signed a subscription agreement to purchase 136.3 million shares in three tranches at an average issue price of $0.147 per share, raising $20.0 million ("Placement" or "CNE Placement"). By way of this Placement, CNE has agreed to support LCK as a cornerstone or anchor investor, given that CNE possesses a thorough understanding of LCK's business and market standing. The balance of the Placement (13.7m shares at A$0.135 per share) was undertaken via other sophisticated and professional investors to raise a total of A$1.8 million.

[1] Before associated transaction costs.

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Tranches 1 and 2 of the CNE Placement[2] have already been completed and approved by LCK's shareholders, thereby granting CNE a right to a seat on the Board of Directors and c. 15.9% of current voting power. Tranche 3 involved the issue of an additional 83.5 million shares at an issue price of A$0.15 per share, raising approximately A$12.5 million before costs.

However, on 11 August 2017, with a view to avoid a delay in the development of the LCEP due to funding constraints, the Company announced an amendment to Tranche 3 of the CNE Placement, whereby the original Tranche 3 would be split into two parts i.e. Tranche 3 and Tranche 4. The revised Tranche 3 involves the Company raising $2.25 million by issuing c. 17 million shares to CNE, taking CNE's shareholding in the Company to 19.98%. Subsequently, the Company proposes to issue c. 66.5 million shares to CNE through Tranche 4, raising $9.98 million and taking CNE's shareholding in the Company to 32.78%. Both Tranche 3 and Tranche 4 are proposed to be undertaken at an issue price of $0.15 per share. Further, both tranches form part of the capital raising announced on 30 March 2017, and do not represent an additional capital raising.

As at the date of this report, we understand that LCK is in the process of issuing shares to CNE via the revised Tranche 3 placement, which is expected to be completed before the end of August 2017. However, in order to issue the remaining Tranche 4 shares ("Tranche 4" or "Proposed Issue"), the Company requires shareholders' approval pursuant to item 7 of section 611 of the Corporation Act. If the issue of LCK Shares under Tranche 4 is approved by LCK shareholders, CNE will hold approximately 32.78% of the total LCK shares on issue[3].

The Independent Directors of LCK ("the Independent Directors") unanimously recommend that the shareholders of LCK not associated with CNE ("Non-Associated Shareholders") vote in favour of the Proposed Issue. Each Independent Director intends to vote in favour of the Proposed Issue.

Purpose of the report

The Independent Directors have engaged Grant Thornton Corporate Finance Pty Ltd ("Grant Thornton Corporate Finance") to prepare an independent expert's report stating whether, in its opinion, the Proposed Issue is fair and reasonable to the Non-Associated Shareholders for the purposes of Item 7 of Section 611 of the Corporations Act.

When preparing the independent expert's report, Grant Thornton Corporate Finance will have regard to the Australian Securities and Investments Commission ("ASIC") Regulatory Guide 111 *Contents of expert reports* ("RG 111") and Regulatory Guide 112 *Independence of experts* ("RG 112"). The independent expert's report will also include other information and disclosures as required by ASIC.

[2] Tranche 1 raised A$5.9m (c. 43.7 million shares issued at A$0.135 per share) on 4 April 2017. Tranche 2 raised A$3.4m (c. 22.8 million shares issued at A$0.15 per share) on 12 May 2017.
[3] Assuming no further shares are issued before the completion of Tranches 3 and 4.

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Summary of opinion

Grant Thornton Corporate Finance has concluded that the Proposed Issue is NOT FAIR BUT REASONABLE to the Non-Associated Shareholders.

In forming our opinion, Grant Thornton Corporate Finance has considered whether the Proposed Issue is fair and reasonable to the Non-Associated Shareholders and other quantitative and qualitative considerations.

Fairness Assessment

In accordance with RG 111, in forming our opinion in relation to the fairness of the Proposed Issue to the Non-Associated Shareholders, Grant Thornton Corporate Finance has compared the value per LCK Share before the Proposed Issue (on a control basis) to the assessed value per LCK Share after approval of the Proposed Issue (on a minority basis).

The following table summarises our valuation assessment:

Fairness assessment cents per share	*Section Reference*	Low	High
Fair market value of LCK before the Proposed Issue (on a control basis)	*6*	24.0	42.0
Fair market value of LCK after the Proposed Issue (on a minority basis)	*7*	15.0	27.0
Premium/ (discount)		**(9.0)**	**(15.0)**
Premium/ (discount) (%)		**-37.5%**	**-35.7%**
FAIRNESS ASSESSMENT		**NOT FAIR**	

Source: Grant Thornton Corporate Finance Calculations

Our assessment of the fair market value range per LCK Share on a minority basis after approval of the Proposed Issue is mostly lower than our assessment of the fair market value range per LCK Share before the Proposed Issue on a control basis. Accordingly, we have concluded that the Proposed Issue is **NOT FAIR** to the Non-Associated Shareholders.

The wide valuation range is mainly driven by the current status of development of the Company. LCK is on the cusp of several potential price-catalyst events like the completion of the PCD, which if successful will increase confidence levels in respect of future cash flows and operations.

LCK Shareholders should be aware that our assessment of the value per LCK Share does not reflect the price at which LCK Shares will trade if the Proposed Issue is approved. The price at which LCK Shares will ultimately trade depends on a range of factors, including the liquidity of LCK Shares, LCK's cash position, macro-economic conditions, gas prices in Australia and overseas, project development progress, electricity prices, regulatory and political environment and the underlying performance of LCK's business. It should be noted that our valuation assessment assumes no adverse changes to the current political sentiment towards, or regulatory framework concerning, UCG activities in South Australia.

Comparison with the trading prices

We note that our assessment of the fair market value of LCK before the Proposed Issue (i.e. in the absence of the CNE Placement) is between 20.0 - 30.0 cents per share on a minority basis (or between 24 cents and 42 cents after the application of a premium for control). This is materially

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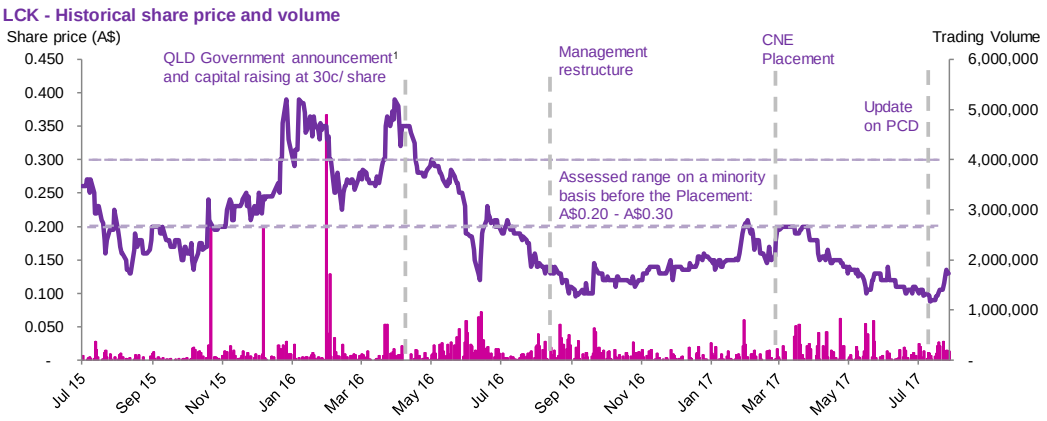
higher than the trading prices before the announcement of the CNE Placement as outlined in the graph below.



Note 1: On 18 April 2016, the QLD State Government announced a policy decision banning all ISG activities in the State on account of potential adverse environmental impacts.

Source: S&P Global, GTCF analysis

In our opinion this pricing differential is not unreasonable as it is mainly due to specific factors, disadvantageous circumstances or announcements that may not necessarily change the underlying fair market value of the business, but they may materially affect the trading prices due to the relatively low liquidity and volatility. These factors are outlined below.

Trading prices may reflect an element of financial distress

- The uncertainty in relation to the ability of LCK to secure a funding solution and be able to attain its planned milestones (in particular regarding the completion of the PCD) has likely impacted the terms of the CNE Placement and the trading prices before the announcement of the CNE Placement. Our valuation assessment of LCK does not incorporate any element of financial distress in accordance with the requirements of ASIC RG 111.

- Our valuation assessment before the Proposed Issue is based on the fair market value concept (willing but not anxious parties), however LCK can be described as an anxious party before the Proposed Issue given the specific circumstances of the Company, including the fact that LCK has been trying to secure a funding solution for the construction of the PCD for a long period of time. This has likely impacted investor sentiment, leading to a reduction in trading price below the issue price for the CNE Placement of 15 cents per share.

Management/ Internal factors

- The Company underwent a restructure of Management in 2016, wherein the new Management team faced challenging investor expectations set by the previous Management. Due to challenges in raising capital to meet capital expenditure requirements and other commitments, the Company's exploration activities faced delays, resulting in the PCD construction being delayed from 2016 to 2017.

- In addition, during 2017, the Company received repeated requests from prior executives to convene an extraordinary general meeting, with a view to organisational restructuring.

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Market/regulatory/ political factors

- In April 2016, the Queensland Government issued a ban on ISG activities on account of environmental concerns. This followed the shutdown/ administration of companies undertaking such activities in Queensland. Subsequently, in November 2016, a bill[4] was lodged in the South Australian Parliament by a Greens Party member calling for a similar ban in South Australia, wherein LCK was named as an entity engaging in operations that ought to be banned. Although the current South Australian Government has expressed support towards ISG activities, we believe investor perception may be influenced by such events.

- Post a reverse takeover of Marathon Resources in 2015, LCK was listed on the ASX in July 2015. Since then, most peer companies have displayed a positive share price performance, with Australian gas prices[5] also increasing during this period. Accordingly, the market in which the Company proposes to operate has not displayed conditions which should justify a steep reduction in value.

  With regard to the above, we note that our selected peer group comprises Australian exploration and production companies. These companies either use conventional production methods or employ a different technology than LCK and produce CSG, which is a more widely recognised form of unconventional gas production. Such companies are more likely to trade in line with global/ local benchmarks like gas prices. However, it should be noted that even companies which are still in the exploration phase have observed an increase in share price during this period. Accordingly, we believe that the market has not displayed price-adversarial factors.

- In addition, we understand that Management has made good progress on its milestones, with the PCD being on track to be launched in December 2017. Based on our understanding, Management expects that the next 6 months should unveil positive share price catalysts for the Company. The achievement of planned milestones may result in an increase in LCK's share price. This has already been observed when LCK's share price rose from 9-10 cents in July 2017 to 12-14 cents by mid-August 2017 upon an announcement by the Company that the fabrication of the PCD had commenced and that the PCD was on track to be completed and commissioned in the fourth quarter of 2017. If the completion of the PCD occurs in accordance with market expectations and the expected flaring of gas is successful, LCK's share price may rise further.

Based on the above analysis and comments, we are of the opinion that the market value of LCK reflected in the current trading prices is affected by investor speculation, news and political events, and trades at a discount to LCK's underlying fair market value. Our valuation assessment is also supported by the trading multiples of listed comparable companies discussed in section 6.6.

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[4] The *Petroleum and Geothermal Energy (Underground Coal Gasification) Bill 2016*. We note that this bill provided certain scientific documents to back up its claims, as well as references to the prohibition of UCG in other countries like Scotland, Wales, France and Germany.

[5] Gas prices in A$/ GJ recorded at the Adelaide, Brisbane and Sydney hubs, displayed in the Short Term Trading Market operated by the AEMO.

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Reasonableness Assessment

RG111 establishes that an offer is reasonable if it is fair. It might also be reasonable if, despite being not fair, there are sufficient reasons for the security holders to accept the offer in the absence of any superior proposal. In assessing the reasonableness of approving the Proposed Issue, we have considered the following advantages, disadvantages and other factors.

Advantages

Enhanced shareholder base

In our opinion, the Proposed Issue will alleviate the existing financing pressure and risk on LCK. After the implementation of the Proposed Issue, LCK will have access to an expanded shareholder base which may facilitate not only future capital raising and the expansion/funding of the existing investments (if required), but also provide strategic know-how given CNE's thorough understanding of LCK's business and existing investments in the sector.

Satisfies urgent need for capital required to progress towards milestones

If the Proposed Issue is not approved and an alternative funding transaction cannot be secured in the short term, LCK will not be able to continue its progress towards completion of the PCD. There may also be uncertainty about whether LCK will be able to raise additional funding when the current cash resources are exhausted. Given that LCK is an exploration company with little to no sources of revenue at this stage, the Company requires a steady source of funding in order to continue its pathway to production and satisfy its commitments.

CNE Placement enables LCK to meet net working capital requirement and construct Pre-Commercial Demonstration Plant in 2017

As at 30 June 2017, LCK had a cash balance of A$8.6 million, and proposes to raise c. A$12.5 million through Tranche 3 (c. $2.55 million) and Tranche 4 (c. $9.98 million) of the CNE Placement.

With the CNE Placement, LCK is expected to have enough funding to complete the PCD which is scheduled to be demonstrated for 30 - 60 days starting December 2017. If successful, the PCD will provide a proof of concept of syngas production using ISG technology, further information to plan the final design of the commercial facility and information required to obtain regulatory approval for the commercial project.

With the funding from the Proposed Issue, LCK will be able to develop the project through to flaring stage, thereby de-risking the Company's operations and likely increasing the gas price achievable in a gas sale. The funding will also assist in completion of Leigh Creek site environmental characterisation, completing a programme of work to support regulatory approvals and to cover working capital needs.

Best available financing opportunity

We believe that given the present circumstances and having regard to the extensive process undertaken by LCK to raise funding, the CNE Placement reflects the best available financing

opportunity for the Company to be able to progress towards gas production, on account of the following:

- While equity funding is considered more expensive than other alternatives, it presents the fastest and simplest way to secure capital. Further, it does not preclude the Company from using other options later on, when the project is more established, production has commenced and cash flows are more certain. The CNE Placement offers the full amount required to develop the project through to flaring stage and allows LCK to complete the project as close as possible to the original timetable. Other options may have offered a lower amount of funding or required more time to secure, thus causing further delays for the project.

- Over the last 12 months, LCK explored alternative funding options to equity, including debt, warrants, farm-outs, R&D factoring or JV partnerships. Management conducted a roadshow in late 2016 and had held discussions with a number of brokers and potential investors. Feedback indicated that to invest in a niche company like LCK with perceived technological and regulatory uncertainty, potential investors needed either proof of concept or the presence of a recognised anchor investor with the ability to support the Company in its ventures. In addition, we understand that the existing LCK investors are unlikely to provide further funding before the Company enters into contractual gas sale agreements or starts production. Management had previously approached existing shareholders for additional funding, which had proven unsuccessful.

- We note that if the Proposed Issue is not successful, LCK will be required to undertake an alternative capital raising to ensure the Company can progress towards ISG production. Given the Company has faced difficult market conditions in general, the capital raising will likely be undertaken at a material discount to the trading price of LCK Shares which has already reduced significantly in the last 24 months. Further, in the event that no alternative funding arrangement is secured in the short-term, the Company will not be able to progress towards completion of the PCD.

Valuation assessment of LCK on a full control basis

Our valuation assessment of LCK before the Proposed Issue is on a 100% basis and incorporates the application of a full premium for control in accordance with the requirements of RG111.

However, we note that following the approval of the Proposed Issue, CNE will increase its shareholding from approximately 19.98% to approximately 32.78% of the total LCK shares on issue. This represents a significant interest, although CNE will not have full control of the Company. In addition, CNE indicated that it has no current intention to appoint additional nominees on the Board of LCK or change the strategic direction of the Company, employment level or management team.

Disadvantages

The Proposed Issue is not fair

The Proposed Issue is not fair as set out above.

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Dilution of stake of Non-Associated Shareholders and significant influence over the Company

CNE's shareholding in LCK has the potential to increase from 19.98% up to 32.78% upon completion of Tranche 4 of the CNE placement. Further, upon completion of Tranche 2 of the CNE Placement, CNE has received the right to a seat on the Board of Directors. As a result, the stake of the Non-Associated Shareholders will be diluted and they will have a reduced ability to influence the operating, financing and strategic decisions of LCK.

Whilst CNE will not acquire a full controlling interest in LCK, CNE will have the ability to significantly increase its influence over the affairs of the Company as the single largest shareholder of LCK after the implementation of Tranche 4 of the CNE Placement. CNE will also have the capacity to block any potential takeover bid of LCK.

Other factors

Shareholder approval already obtained for Tranches 1 and 2 of the CNE Placement

We note that the Non-Associated Shareholders ratified the capital raising of Tranches 1 and 2 of the CNE Placement on 21 July 2017, pursuant to Listing Rule 7.1.

Limited prospect of a superior proposal

If the Proposed Issue is not approved, LCK Management will seek further investment opportunities and it may require additional capital raising to fund the capital requirements of LCK. However, future capital raises would be required within the next few months to achieve timely construction of the PCD. This would give the Company a short window of opportunity to pursue a corporate transaction or seek alternative funding. We understand that LCK is not aware of any alternatives which may arise in a timely manner. Given LCK's experience last year, the availability of alternative funding is scarce at this stage of the Leigh Creek Energy Project.

Directors' recommendations and intentions

As set out in the Notice of Meeting and Explanatory Memorandum, as at the date of this Report, the Independent Directors of LCK have recommended that LCK Shareholders vote in favour of the CNE Placement subject to the independent expert concluding and not changing its conclusion that the Proposed Issue is fair and reasonable or not fair but reasonable to LCK Shareholders.

Reasonableness conclusion

Based on the qualitative factors identified above, it is our opinion that the Proposed Issue is **REASONABLE** to the Non-Associated Shareholders.

Overall conclusion

After considering the abovementioned quantitative and qualitative factors, Grant Thornton Corporate Finance has concluded that the Proposed Issue is **NOT FAIR BUT REASONABLE** to the Non-Associated Shareholders.

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Other matters

Grant Thornton Corporate Finance has prepared a Financial Services Guide in accordance with the Corporations Act. The Financial Services Guide is set out in the following section.

The decision of whether or not to accept the Proposed Issue is a matter for each LCK Shareholder to decide based on their own views of value of LCK and expectations about future market conditions, LCK's performance, risk profile and investment strategy. If LCK Shareholders are in doubt about the action they should take in relation to the Proposed Issue, they should seek their own professional advice.

Yours faithfully
GRANT THORNTON CORPORATE FINANCE PTY LTD

ANDREA DE CIAN
Director

HARLEY MITCHELL
Director

1 September 2017

Financial Services Guide

1 Grant Thornton Corporate Finance Pty Ltd

Grant Thornton Corporate Finance carries on a business, and has a registered office, at Level 17, 383 Kent Street, Sydney NSW 2000. Grant Thornton Corporate Finance holds Australian Financial Services Licence No 247140 authorising it to provide financial product advice in relation to securities and superannuation funds to wholesale and retail clients.

Grant Thornton Corporate Finance has been engaged by LCK to provide general financial product advice in the form of an independent expert's report in relation to the Proposed Issue. This report is included in LCK's Notice of Meeting and Explanatory Memorandum.

2 Financial Services Guide

This Financial Services Guide ("FSG") has been prepared in accordance with the Corporations Act, 2001 and provides important information to help retail clients make a decision as to their use of general financial product advice in a report, the services we offer, information about us, our dispute resolution process and how we are remunerated.

3 General financial product advice

In our report we provide general financial product advice. The advice in a report does not take into account your personal objectives, financial situation or needs.

Grant Thornton Corporate Finance does not accept instructions from retail clients. Grant Thornton Corporate Finance provides no financial services directly to retail clients and receives no remuneration from retail clients for financial services. Grant Thornton Corporate Finance does not provide any personal retail financial product advice directly to retail investors nor does it provide market-related advice directly to retail investors.

4 Remuneration

When providing the Report, Grant Thornton Corporate Finance's client is the Company. Grant Thornton Corporate Finance receives its remuneration from the Company. In respect of the Report, Grant Thornton Corporate Finance will receive from LCK a fee which is based on commercial rate plus reimbursement of out-of-pocket expenses for the preparation of the report. Our directors and employees providing financial services receive an annual salary, a performance bonus or profit share depending on their level of seniority.

Except for the fees referred to above, no related body corporate of Grant Thornton Corporate Finance, or any of the directors or employees of Grant Thornton Corporate Finance or any of those related bodies or any associate receives any other remuneration or other benefit attributable to the preparation of and provision of this report.

5 Independence

Grant Thornton Corporate Finance is required to be independent of LCK in order to provide this report. The guidelines for independence in the preparation of independent expert's reports are set out in RG 112 *Independence of expert* issued by ASIC. The following information in relation to the independence of Grant Thornton Corporate Finance is stated below.

"Grant Thornton Corporate Finance and its related entities do not have at the date of this report, and have not had within the previous two years, any shareholding in or other relationship with LCK *(and associated entities) that could reasonably be regarded as capable of affecting its ability to provide an unbiased opinion in relation the Proposed Issue.*

Grant Thornton Corporate Finance has no involvement with, or interest in the outcome of the transaction, other than the preparation of this report.

Grant Thornton Corporate Finance will receive a fee based on commercial rates for the preparation of this report. This fee is not contingent on the outcome of the transaction. Grant Thornton Corporate Finance's out of pocket expenses in relation to the preparation of the report will be reimbursed. Grant Thornton Corporate Finance will receive no other benefit for the preparation of this report.

Grant Thornton Corporate Finance considers itself to be independent in terms of RG 112 "Independence of expert" issued by the ASIC."

We note that Grant Thornton Australia Limited is the auditor of LCK. The audit services provided by Grant Thornton Australia Limited are strictly for compliance purposes and we have strict internal protocols in relation to audit independence. In addition, this Report was provided outside of the audit procedures. In our opinion, Grant Thornton Corporate Finance is independent of LCK and its Directors and all other relevant parties of the CNE Placement.

6 Complaints process

Grant Thornton Corporate Finance has an internal complaint handling mechanism and is a member of the Financial Ombudsman Service (membership no. 11800). All complaints must be in writing and addressed to the Chief Executive Officer at Grant Thornton Corporate Finance. We will endeavour to resolve all complaints within 30 days of receiving the complaint. If the complaint has not been satisfactorily dealt with, the complaint can be referred to the Financial Ombudsman Service who can be contacted at:

Financial Ombudsman Service Limited
GPO Box 3
Melbourne, VIC 3001
Telephone: 1800 367 287

Grant Thornton Corporate Finance is only responsible for this report and FSG. Complaints or questions about the General Meeting should not be directed to Grant Thornton Corporate Finance. Grant Thornton Corporate Finance will not respond in any way that might involve any provision of financial product advice to any retail investor.

7 Compensation arrangements

Grant Thornton Corporate Finance has professional indemnity insurance cover under its professional indemnity insurance policy. This policy meets the compensation arrangement requirements of section 912B of the Corporations Act, 2001.

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1 Outline of the CNE Placement

1.1 Introduction

On 30 March 2017, Leigh Creek Energy ("LCK" or "the Company") announced the securing of a $21.85 million capital raising[6] by way of a private placement of 150 million new fully paid shares. CNE has signed a subscription agreement to purchase 136.3 million shares in three tranches at an average issue price of $0.147 per share, while 13.7m shares will be issued at A$0.135 per share to other sophisticated and professional investors.

Tranches 1 and 2 of the CNE Placement have already been completed. Tranche 1 involved the issue of 43,685,181 shares at A$0.135 per share raising A$5.9m on 4 April 2017. This was followed by 22,788,429 shares being issued at A$0.15 per share raising A$3.4m on 12 May 2017. While the issue of these tranches are covered by the 15% limit in Listing Rule 7.1 and the 10% limit in Listing Rule 7.1 A, shareholders approved these issues at an Extraordinary General Meeting ("EGM") held on 21 July 2017. With the completion of the second tranche CNE has received a right to a seat on the Board of Directors and holds 15.88% of the outstanding share capital of the Company.

Tranche 3 originally involved the issue of 83,544,905 shares at an issue price of A$0.15 per share, raising approximately A$12.5 million (before costs). However, the Company announced on 11 August 2017 that the arrangement for raising funds through Tranche 3 of the CNE Placement was being amended in order to ensure available cash balance and avoid delays in the development of the PCD. As per the revised arrangement, the original Tranche 3 has been split into two parts i.e. Tranche 3 and Tranche 4.

The revised Tranche 3 involves the issue of 17,000,000 shares to CNE at an issue price of $0.15 per share, raising $2.55 million. These shares are proposed to be issued subsequent to CNE depositing the funds by 15 August 2017, and will have the effect of increasing CNE's shareholding in the Company to 19.98%. We understand that the revised Tranche 3 is covered by the 10% limit in ASX Listing Rule 7.1A.

The proposed Tranche 4 will take place subsequent to approval by the Non-Associated Shareholders, and will involve the issue of 66,544,905 LCK shares to CNE at an issue price of $0.15 per share, raising $9.98 million. Upon completion, CNE will hold 32.78% of LCK's outstanding share capital.

1.2 Effects of the CNE Placement

If Tranche 4 of the CNE Placement is approved by the Non-Associated Shareholders:

- CNE will be issued an additional 66.5 million ordinary shares.
- CNE will hold approximately 32.78% of the total LCK shares on issue.

The Company intends to use the funds for:

- Programme of work to support regulatory approvals for ISG demonstration at the Leigh Creek site;
- Final design, fabrication, and commissioning of above ground ISG demonstration plant at the Leigh Creek site; and

[6] Before costs.

- Working capital.

LCK's commercial success depends on developing the Leigh Creek Energy Project to maturity. The PCD is critical in that it demonstrates that syngas can be produced in accordance with regulations and reasonable community expectations. The achievement of timing, operational and environmental objectives for the PCD is crucial to the long-term future of LCK. If funding for the completion of the PCD is not secured through the Placement, LCK will need to slow down the development of the PCD, and therefore the Leigh Creek Energy Project, until an alternative funding package is secured. Refer to the Explanatory Memorandum for more details.

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2 Purpose and scope of the report

2.1 Purpose

Item 7 of Section 611 of the Corporations Act

Section 606 of the Corporations Act prohibits the acquisition of a relevant interest in the issued voting shares of a company if the acquisition results in the person's voting power in the company increasing from either below 20% to more than 20%, or from a starting point between 20% and 90%, without making an offer to all shareholders of the company.

Item 7 of Section 611 of the Corporations Act allows the shareholders not associated with the acquiring company (i.e. the Non-Associated Shareholders) to waive this prohibition by passing a resolution at a general meeting. Regulatory Guide 74 "Acquisitions agreed to by shareholders" ("RG 74") and RG 111 issued by ASIC set out the view of ASIC on the operation of Item 7 of Section 611 of the Corporations Act.

RG 74 requires that shareholders approving a resolution pursuant to Section 623 of the Corporations Act (the predecessor to Item 7 of Section 611 of the Corporations Act) be provided with a comprehensive analysis of the proposal, including whether or not the proposal is fair and reasonable to the Non-Associated Shareholders. The Directors may satisfy their obligations to provide such an analysis by either:

- Commissioning an independent expert's report; or
- Undertaking a detailed examination of the proposal themselves and preparing a report for the Non-Associated Shareholders.

If the Proposed Issue is approved, CNE will increase its current shareholding interest in the Company from 19.98%% to 32.78% (assuming CNE does not acquire any additional interest in LCK prior to the Proposed Issue and no other new LCK Shares are issued). Accordingly, the Independent Directors have engaged Grant Thornton Corporate Finance to prepare an independent expert's report stating whether, in its opinion, the Proposed Exercises are fair and reasonable to the Non-Associated Shareholders for the purposes of Item 7 of Section 611 of the Corporations Act.

2.2 Basis of assessment

In preparing our report, Grant Thornton Corporate Finance has had regard to the Regulatory Guides issued by ASIC, particularly RG 111, which states that an issue of shares requiring approval under Item 7 of Section 611 of the Corporations Act should be analysed as if it were a takeover bid. Accordingly, we have assessed the Proposed Issue with reference to Section 640 of the Corporations Act.

RG 111 states that:

- An offer is considered fair if the value of the offer price or consideration is equal to or greater than the value of the securities that are the subject of the offer. The comparison should be made assuming 100% ownership of the target company irrespective of whether the consideration offered is scrip or cash and without consideration of the percentage holding of the offeror or its associates in the target company.

- An offer is considered reasonable if it is fair. If the offer is not fair it may still be reasonable after considering other significant factors which justify the acceptance of the offer in the absence of a higher bid. ASIC has identified the following factors which an expert might consider when determining whether an offer is reasonable:
    - The offeror's pre-existing entitlement, if any, in the shares of the target company.
    - Other significant shareholding blocks in the target company.
    - The liquidity of the market in the target company's securities.
    - Taxation losses, cash flow or other benefits through achieving 100% ownership of the target company.
    - Any special value of the target company to the offeror, such as particular technology and the potential to write off outstanding loans from the target company.
    - The likely market price if the offer is unsuccessful.
    - The value to an alternative offeror and likelihood of an alternative offer being made.

Grant Thornton Corporate Finance has determined whether the Proposed Issue is fair to the Non-Associated Shareholders by comparing the fair market value of LCK Shares before the Proposed Issue on a 100% control basis with the fair market value of LCK Shares after approval of the Proposed Issue on a minority basis.

In considering whether the Proposed Issue is reasonable to the Non-Associated Shareholders, we have considered a number of factors, including:

- Whether the Proposed Issue is fair.
- The implications to LCK and the Non-Associated Shareholders if the Proposed Issue is not approved.
- Other likely advantages and disadvantages associated with the Proposed Issue as required by RG111.
- Other costs and risks associated with the Proposed Issue that could potentially affect the Non-Associated Shareholders of LCK.

2.3 Independence

Prior to accepting this engagement, Grant Thornton Corporate Finance (a 100% subsidiary of Grant Thornton Australia Limited) considered its independence with respect to the Proposed Issue with reference to RG 112 issued by ASIC.

Grant Thornton Corporate Finance has no involvement with, or interest in, the outcome of the approval of the Proposed Issue other than that of an independent expert. Grant Thornton Corporate Finance is entitled to receive a fee based on commercial rates and including reimbursement of out-of-pocket expenses for the preparation of this report.

Except for these fees, Grant Thornton Corporate Finance will not be entitled to any other pecuniary or other benefit, whether direct or indirect, in connection with the issuing of this report. The payment of this fee is in no way contingent upon the success or failure of the Proposed Issue.

We note that Grant Thornton Australia Limited is the auditor of LCK. The audit services provided by Grant Thornton Australia Limited are strictly for compliance purposes and we have strict internal protocols in relation to audit independence.

In our opinion, Grant Thornton Corporate Finance is independent of LCK and its Directors and all other relevant parties of the CNE Placement.

2.4 Consent and other matters

Our report is to be read in conjunction with the Notice of Extraordinary General Meeting and Explanatory Memorandum dated on or around 28 September 2017 in which this report is included, and is prepared for the exclusive purpose of assisting the Non-Associated Shareholders in their consideration of the Proposed Exercises. This report should not be used for any other purpose.

Grant Thornton Corporate Finance consents to the issue of this report in its form and context and consents to its inclusion in the Notice of Extraordinary General Meeting and Explanatory Memorandum.

This report constitutes general financial product advice only and in undertaking our assessment, we have considered the likely impact of the Proposed Issue to the Non-Associated Shareholders as a whole. We have not considered the potential impact of the Proposed Issue on individual Non-Associated Shareholders. Individual shareholders have different financial circumstances and it is neither practicable nor possible to consider the implications of the Proposed Issue on individual shareholders.

The decision of whether or not to approve the Proposed Issue is a matter for each Non-Associated Shareholder based on their own views of value of LCK and expectations about future market conditions, LCK's performance, risk profile and investment strategy. If the Non-Associated Shareholders are in doubt about the action they should take in relation to the Proposed Issue, they should seek their own professional advice.

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3 Profile of the industry

LCK is an ASX listed company which is developing an ISG project at Leigh Creek, South Australia. The Company plans to produce gas using the ISG technology, also called underground coal gasification ("UCG"), with a view to either supply pipeline quality natural gas, generation of electricity to industrial users in South Australia or by producing ammonium nitrate products.

Accordingly, we have analysed the historical and forecast performance of gas production and demand, in particular unconventional gas production, particularly in Australia. We have further analysed historical and forecast gas pricing as well as the political and regulatory environment relevant to the LCEP.

3.1 Trends in the gas industry

3.1.1 Supply

The markets for both gas and electricity in Australia are currently severely supply constrained. This is due to the following factors:

- *Closure of coal power stations* – a number of coal mines and coal fired power stations have been closed, including the Hazelwood power station in Victoria in March 2017, Port Augusta power station in May 2016 and the supplying Leigh Creek coal mine in South Australia in November 2015. This has put increased pressure on large electricity users in South Australia to secure base load power without the risk of disruption and at a reasonable price. Gas use is highest in South Australia, where it accounts for 32 per cent of primary energy consumption (compared to Queensland and Victoria with 20 per cent and NSW with 10 per cent respectively).[7] Reliance on gas has increased since the closure of the state's coal fired plants.

- *Increased demand due to LNG export terminals* – In 2016, eastern Australia produced 1,660 PJ of gas, of which around 58 per cent was exported from Queensland as LNG.[8] Total annual gas consumption is forecast to increase due to continued growth of LNG exports from Australia to the Asia-Pacific region. Australia is forecast to become the world's second largest or even largest LNG exporter and the major supplier for East Asian gas markets.[9] Currently committed LNG projects in Queensland include the Origin / ConocoPhillips Australia-Pacific LNG project, BG Group's Queensland Curtis Island LNG project and the Santos/Petronas Gladstone LNG ("GLNG") project.[10]

- *Use of renewable energy* – South Australia produces the largest share of renewable energy (i.e. wind and solar energy) across Australia.[11] However, these sources of energy are not as reliable as gas because of the intermittent availability of energy from these sources and related disruptions in supply. With a view to avoid disruptions to normal power supply, gas is still relied upon for electricity production. Currently, South Australia is dependent on the interconnector with Victoria when availability of power is low.

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[7] Office of the Chief Economist, Department of Industry, Innovation and Science (Australian Government), *Australian energy statistics 2016*, table C, available at https://industry.gov.au/Office-of-the-Chief- Economist/Publications/Pages/Australian-energy-statistics.aspx. Quoted in Australian Energy Regulator *"State of the Energy Market May 2017",* published by the Australian Competition and Consumer Commission 2017 ("AER May 2017").
[8] AER May 2017
[9] Australian Energy Market Operator (AEMO) *"National Gas Forecasting Report for Eastern and South-Eastern Australia",* published December 2016 ("AEMO December 2016").
[10] Other LNG export projects are operated in Western Australia's North West Shelf and in Darwin. AER May 2017
[11] 50 per cent of South Australia's electricity in 2016 was generated from wind and solar. AER May 2017.

- *Climate change policy commitments* - Australia has committed to reduce its carbon emissions by 26 to 28 per cent below 2005 levels by 2030,[12] achieving annual emissions of 132 Mt/CO_2e by 2030.[13] In order to achieve this, gas powered generation is forecast to play a key role in balancing the output from intermittent renewable energy sources as part of the transformation towards a low carbon future, in the absence of alternatives such as large-scale storage and demand management.

3.1.2 Demand

In addition to the demand driven by LNG exports discussed above, the following sectors require gas for various purposes across Australia:

- *Industrial use* – this is the largest sector (c. 46 per cent of domestic gas sales), with demand for activities such as aluminium refining, mineral smelting, fertiliser production, steel production, glass manufacturing, pulp and paper manufacturing, cement manufacture, power generation for mining and manufacture of chemicals and other products.[14] AEMO forecasts that the industrial gas consumption will continue to decline over the next two decades.[15]

- *Power generation* – c. 21 per cent of domestic gas sales are used to fuel intermediate and peaking electricity generators. Overall domestic gas demand has levelled since 2014 and demand for gas powered generation ("GPG") has reduced significantly, since the repeal of carbon pricing made GPG less competitive relative to coal fired generation.[16] Furthermore, competition for gas supplies from Queensland's LNG industry has escalated gas fuel costs, making it less economical to run gas powered plants. Therefore the share of gas powered generation in the electricity mix has fallen across Australia.[17] GPG is projected to decrease in the short term with the increase in renewable energy use. However, medium- to long-term GPG is expected to increase as a result of forecast retirements of coal-fired generation and growth in intermittent generation from renewable sources.[18]

- *Residential and commercial use* – demand by residential or commercial users makes up around 33% of domestic gas sales and is mainly used for heating and cooking.[19] Residential and commercial demand is strongly influenced by population growth and demographic, as well as variations in climate. AEMO forecasts flat or slightly reduced residential and commercial gas consumption over the next 20 years.[20]

3.1.3 Pricing

Most gas sales in eastern Australia are struck under confidential bilateral contracts. These traditionally long-term arrangements have become shorter-term contracts more recently to review provisions. Public information about wholesale gas prices is opaque, therefore no transparent and accurate wholesale gas prices are available across Australia. There is also a short-term trading market ("STTM") for gas in eastern Australia, with prices reflecting short-term fluctuations in supply and demand. Market participants generally consider these prices as a less useful guide to prices that would be struck in bilateral contract

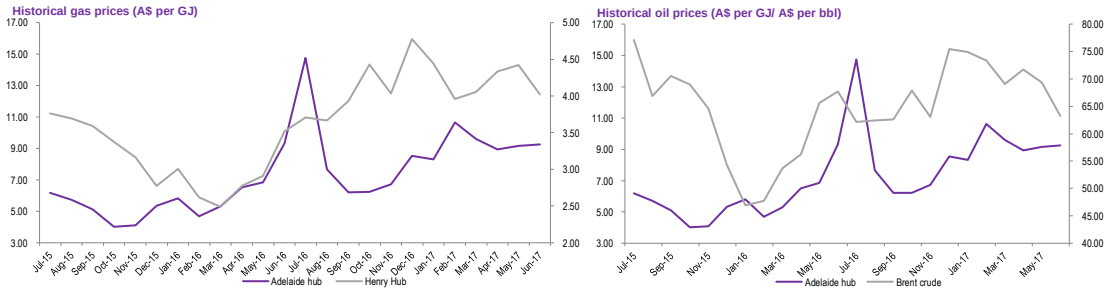
[12] As per 21st Conference of Parties (Paris 2015) emissions abatement commitments, quoted in AER May 2017.
[13] AEMO December 2016
[14] AER May 2017.
[15] Based on surveys of large gas and electricity using businesses, AEMO forecasts that industrial gas consumption will decline by nearly 30 PJ by 2036 due to rising gas prices and uncertainty in supply and generally challenging business conditions. AEMO December 2016.
[16] AER May 2017.
[17] On average from 12 per cent in 2012 to 8 per cent in 2016 across Australia. In South Australia, GPG fell from 52 per cent of the generation mix in 2013 to 39 per cent in 2015. It rebounded to 43 per cent in 2016 following the closure of the state's las coal fired generation plant. AER May 2017.
[18] AEMO December 2016.
[19] AER May 2017.
[20] AEMO December 2016.

negotiations.[21] The Victorian wholesale gas market and the gas supply hubs in Wallumbilla (Queensland) and Moomba (SA) are also used to manage system imbalances. Trade in these markets is relatively thin and also reflects short-term prices to balance supply and demand.

Nevertheless, there has been a clear trend of rising prices with new contracts.[22] Gas prices in eastern and southern Australia were traditionally low, reflecting the efficiencies of gas production as a by-product of oil production. Through the development of Queensland's LNG industry, eastern Australian gas markets have been linked to international markets and domestic prices have aligned more closely with international oil and gas prices. As a result, gas prices have increased, with prices often at $9-12 per GJ across most spot markets.[23]

We note the following trends in gas pricing:

- *LNG exports* - since LNG exports began international oil and gas prices have fallen, caused by excess supply in the international market for LNG. The global oversupply makes it difficult for the LNG projects in Queensland to sell above their contracted capacities. When the LNG export facilities were contracted, the oil price was at around US$100/bbl. By the time LNG exports commenced from Queensland in 2015, oil prices had halved to around US$50/bbl and have since remained near this level, lowering the initial expected returns on investment. For the next 10 years, LNG spot prices are forecast to remain below the assumed long-run average production cost of Queensland's LNG exports. At the same time, Australian gas prices have increased from historical levels of $3/GJ - $4/GJ to currently around $9/GJ - $10/GJ through the exposure to international gas prices with rising LNG exports. Set out below are the movements of gas prices at the Adelaide hub of the STTM in conjunction with crude oil prices and natural gas prices.



Source: S&P Global

- *Oil price* – historically, domestic gas prices in eastern Australia were driven by local factors. Through the export of LNG, contracts have been agreed under oil-linked pricing arrangement so that gas prices are now correlated with the global oil price. Low international oil prices have lowered expected returns from gas reserves, which may in turn reduce commercial incentives for investment, including the level of exploration. However, production costs are rising as more economical gas reserves are depleted and more uneconomical or unconventional resources are used.

- *Conventional gas production* – gas prices are driven by the slow but continual decline of production from discovered conventional resources. The closure of Hazelwood power station is expected to be

[21] AER May 2017.
[22] The ACCC observed average contract prices across basins of around $4-5 per GJ, based on March 2015 invoices. Some of those legacy contracts have since ended, and prices are now being struck at significantly higher prices for the limited supplies of gas entering the market. AER May 2017.
[23] AER also notes Wallumbilla prices reaching a new high of $16.50 per GJ in February 2017 and some gas contract prices for AGL being quoted at $20 per GJ. AER May 2017.

replaced with generation from a combination of black coal-fired power generation and gas powered generation, resulting in higher demand for GPG and potentially driving up prices.

- *Technological advances* – prices are also driven by changes in the cost of extraction from unconventional sources to meet rising demand. The higher cost of extraction is forecast to be partly offset by improvements of relevant technology.

AEMO projects that the wholesale cost of gas in Australia will increase significantly over the next two decades. This is mainly driven by supply constraints in the domestic market with new gas contracts increasingly being supplied with gas from higher-cost sources, rather than by international factors. [24]

3.2 Unconventional gas industry

Success in developing unconventional oil and gas in North America is stimulating international investment to unlock enormous potential to develop unconventional gas resources. The main forms of gas produced in Australia are conventional gas (found in underground reservoirs) and coal seam gas ("CSG"), which is extracted from coal beds. Unconventional gas commonly includes shale gas (found in rocks) and tight gas (found in low-porosity sandstone and carbonate reservoirs). With advancements in extraction techniques commercial prospects to produce unconventional gas have improved.[25]

Currently there is no commercial production of shale and tight gas in Australia, all unconventional gas produced is CSG. Queensland and NSW are the only states with commercial production of CSG, although exploration has occurred in other states. Unconventional gas has been mined in Queensland since 1996, and in NSW since 2001.[26] In 2015, unconventional gas accounted for c. 40 per cent of Eastern Australian gas production.[27] This production is expected to continue to grow to support domestic consumption and LNG exports from the East Coast.

Furthermore, there are significant potential volumes of shale and tight gas, with the largest basins located in Western Australia, the Northern Territory and in the Cooper Basin, which straddles Queensland and South Australia. Exploration for unconventional gas mining is currently under way in Queensland, South Australia, Western Australia and the Northern Territory. Australia's main CSG projects are located in Queensland and New South Wales ("NSW"). However, NSW government regulations in response to community concerns about health and environmental impacts have delayed a number of CSG projects. CSG exploration is tightly regulated in NSW and a number of licenses have not (yet) been renewed, raising questions about the future of CSG in NSW.

In Queensland, several companies are exploring for shale gas, tight gas and shallow/ deep CSG in the Cooper Basin. This basin has been assessed as containing some of the largest potential unconventional oil and gas resources in Australia. In South Australia, coal deposits in the Arckaringa basin, Otway basin and Warburton basin are also being explored for CSG or possible coal gasification projects.

[24] AEMO's modelling forecasts an increase by 48% by 2036. AEMO December 2016.
[25] AER May 2017.
[26] The Senate: *"Select Committee on Unconventional Gas Mining – Interim Report"*, Commonwealth of Australia, May 2016.
[27] Australian Government: Department of Industry, Innovation and Science.
https://industry.gov.au/resource/UpstreamPetroleum/Pages/UnconventionalGas.aspx

3.2.1 Key drivers behind unconventional gas exploration

The key drivers affecting gas exploration and development, in particular unconventional gas, include:

- *Political and regulatory factors* – exploration activities, in particular using unconventional methods, are considered high risk undertakings as there is a considerable amount of uncertainty surrounding the commercial viability of such projects. Tenements located in jurisdictions with well-defined regulatory processes and a stable political environment, such as South Australia, may be more attractive to explorers and producers as they are less risky than unregulated and politically unstable countries.

- *Restrictions on exploration and new unconventional gas supply in most states* – regulatory restrictions are hampering investment in exploration and development of new gas projects, particularly in New South Wales and Victoria (see section 3.3.3 below for more detail). Certain unconventional exploration methods have been banned by these states. South Australia, on the contrary, has a clear legislation framework for the exploration and development of unconventional resources in place.

- *Funding requirements* – given the inherent riskiness of the gas industry, the availability and cost of capital to fund projects can significantly impact on the level of exploration and development activities being undertaken.

- *Available technologies* – exploration and production levels will also depend on the availability of technologies to access the resources. The commercial prospects of unconventional gas production have improved with the availability of new exploration technology. We note that UCG has been used for commercial production of gas only in South Africa and Uzbekistan. Accordingly, we understand that there is scope for upgrade in the technology.

3.3 Overview of ISG technology

The ISG process converts coal to synthesis gas underground with the injection of air, oxygen and steam, without burning the coal. The process takes place underground, generally 370m below the ground, and is controlled via the injection of air or oxygen into the coal seam. Two wells are drilled on either side of an underground coal seam, with one being used to inject air, oxygen or steam into the coal seam, the second one to collect the syngas and to transport it to the surface. Syngas is typically comprised of varying amounts of hydrogen, carbon monoxide, methane and other gaseous compounds. Once brought to the surface, syngas is separated and processed and can be used in a number of ways:

- as feedstock for power stations (syngas produced from ISG can be used to fuel a standard open cycle or combined cycle gas turbine);

- for sale to gas customers (after separation of methane from syngas);

- as ammonium nitrate (for the production of fertiliser and explosives); or

- in conversion to liquid fuels.

The plant and equipment used in the ISG process is similar to that used by the oilfield/ chemical industry in the process and surface facilities.

ISG allows the energy extraction from large coal resources that are not economically or technically recoverable by conventional mining techniques. At the same time hazards associated with conventional mining techniques and source disruptions are minimised. This results in a lower environmental impact and lower production costs.

3.3.1 Experience of ISG technology

The process of coal gasification has been used for over 100 years so that vast body of knowledge from global experience is available. Globally, syngas has been produced on a commercial scale only in South Africa and Uzbekistan (where it has been produced for 60 years) as fuel for gas-fired power stations.

However, experience in commercial and profitable application of ISG projects, in particular in Australia, is very limited. ISG technology has been used in Queensland by a number of companies, i.e. Linc Energy, Carbon Energy and Cougar Energy, which attempted to explore the benefits of the technology and commercialise the same. However, environmental concerns prevented the fruition of these efforts, resulting in the April 2016 ban by the Queensland State Government. As a result Linc Energy entered voluntary administration and was faced with legal action from the Queensland Government, alleging that the soil around the Hopeland area of Queensland has been contaminated with carbon monoxide, hydrogen and hydrogen sulphide as a result of underground coal gasification.[28] Cougar Energy's ISG trial was shut down in 2010 after benzene was detected in nearby water bores, while Carbon Energy was decommissioning and rehabilitating its site. A brief description of these companies is provided in Appendix C.

These trial projects have demonstrated the successful application of the ISG technology but these are yet to be adopted on a commercial scale in western economies.

3.3.2 Key factors to be considered

Notwithstanding the regulatory/ political environment, some of the factors to be considered before the selection of ISG technology over conventional gas production or CSG are:

- While ISG extraction techniques help minimise the environmental footprint, incorrect selection of the gasification site or process control can lead to environmental risks on account of the by-products of this process, viz. carbon monoxide and hydrogen sulphide.

- A number of early-stage ISG pilot tests in the US and Australia have indicated that ISG carried out at shallow depths can pose a risk to groundwater leading to negative publicity.

- Increase in production can be achieved relatively easily, by increasing the rate of conversion rate of coal. The numbers of wells that can be inserted are also flexible and newer wells can be established without substantial capital costs.

The potential benefits proposed for LCK from the use of ISG technology are set out below:

- Low capital and operating costs

  - Lower capital costs due to lack of surface gasification facilities.

[28] Senate May 2016.

  - No transport of coal at the surface, thereby eliminating the need for emission control equipment and cost of railways, coal shipping and stockpiling.

  - The cost of producing ISG gas is lower than surface coal gasification and other non-conventional gas developments.

- Small physical footprint and efficient production of gas, as against conventional coal and natural gas production techniques. This is a result of elimination of wastes associated with moving waste rock as well as usable product from the ground to the surface.

- Energy is extracted from coal that otherwise is too deep or uneconomic to mine.

- LCK has a gas storage permit over the current production licence to minimise the carbon footprint, thereby enabling it to store the output without having to transmit it immediately.

3.3.3 Political and regulatory environment

Recent developments in the regulatory environment across Australian states regarding unconventional gas production, are set out below:[29]

- *Queensland* – the Queensland Government is supportive of unconventional oil and gas development and has made available land access to explore and develop gas, conditional on the gas being for domestic sale only. In April 2017, it indicated its intent to expand the amount of land earmarked for domestic gas. CSG is allowed in Queensland, whereas in April 2016 the Queensland Government announced a ban on all ISG activities, on the grounds that the potential environmental impacts and risks of future commercial-scale ISG operations outweigh the benefits of the same.

- *NSW* – The NSW Government in July 2015 launched a new strategic framework to determine appropriate areas in which to develop and extract gas, accounting for economic benefits and evidence of exploration and mining effects on the environment and communities. As a result, certain areas of urban and agricultural land are now off-limits to unconventional gas activities. A Bill to ban CSG production in northern NSW, and to place a moratorium on all exploration across the state, was narrowly defeated in the NSW Parliament in August 2015. Two codes of practice applying to hydraulic fracturing and CSG well integrity were released by the NSW Government in 2012 to strengthen the controls applying to gas exploration and production. These establish conditions and best practice for activities such as hydraulic fracturing, the use of chemicals in fracturing fluids, and CSG well design, construction, monitoring and maintenance. This is to ensure that these activities are carried out safely, without risk to health and without detriment to the environment.

- *Victoria* – concerns about environmental impacts also led the Victorian Government to place a moratorium on CSG extraction and fracking. The moratorium affects 10 mineral exploration licences that cover CSG, 11 petroleum exploration permits that cover tight and shale gas, and three retention leases that cover tight and shale gas. The Victorian Parliament in March 2017 permanently banned fracking and extended the moratorium on onshore exploration until 2020. However, offshore gas exploration and development will continue as well as other activities like gas storage or carbon storage research.

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[29] AER May 2017; NSW Government: Department of Planning & Environment – Resources & Energy *"The facts on coal seam gas"*, http://www.resourcesandenergy.nsw.gov.au/landholders-and-community/coal-seam-gas/the-facts. The Senate: *"Select Committee on Unconventional Gas Mining – Interim Report"*, Commonwealth of Australia, May 2016.

- *Northern Territory* – the Northern Territory Government placed a moratorium on hydraulic fracking after its election win in August 2016, but subsequently launched an inquiry into the technology. The moratorium includes exploration based on fracking, although other exploration activities remain allowed. The inquiry into hydraulic fracturing looks set to recommend significant changes to regulatory and legislative frameworks before the development of unconventional onshore gas resources is allowed to go ahead. The report states a range of risks to water, land, air, public health and indigenous interests, as well as potential economic benefits.

- *Tasmania* – the Tasmanian Government put a moratorium on the use of fracking until 2020, although other exploration activities for unconventional gas resources are allowed.

- *Western Australia* – In its 2016 election campaign the WA Labour party stated a number of commitments to control unconventional gas activities, including a ban on fracking in the South West if elected. Recent statements of the new Labour government have fed the growing uncertainty around the legislation of the bans and moratorium in WA. The state has a domestic gas reservation policy that requires 15 per cent of gas production to be set aside for local consumption. This, along with the size of its energy industry may have sheltered it from the same problems encountered in the eastern Australian market. However, there is a risk that the Labour government will introduce a moratorium or ban on certain unconventional gas exploration activities.

- *South Australia* - South Australia was the first state in Australia to launch a comprehensive plan for the development of its unconventional gas projects. Petroleum exploration and development activities in South Australia are administered by the Department of Premier and Cabinet under the South Australian Petroleum and Geothermal Energy Act 2000 (PGE Act, onshore), the Commonwealth Offshore Petroleum and Greenhouse Gas Storage Act 2006 (offshore) and the South Australian Petroleum (Submerged Lands) Act 1982 (offshore).

The discussion above shows that policies regarding and attitudes towards unconventional gas development vary greatly across Australia. Regarding the use of ISG technology, perceived environmental risks associated with ISG have led to some Australian states restricting the use of this technology. South Australia, on the contrary, has developed clear legal and regulatory frameworks to guide ISG operations. ISG is a defined act within the Petroleum and Geothermal Energy Act of South Australia. Overall, South Australia is well regarded as a jurisdiction for mining and petroleum, offering legal and regulatory certainty for exploration and production companies. In March 2017, the SA Government announced against the national trend new measures to incentivise the exploration for gas. The scheme includes a 10 per cent royalty rate to land owners whose property overlies a petroleum field bought into production.

4 Profile of LCK

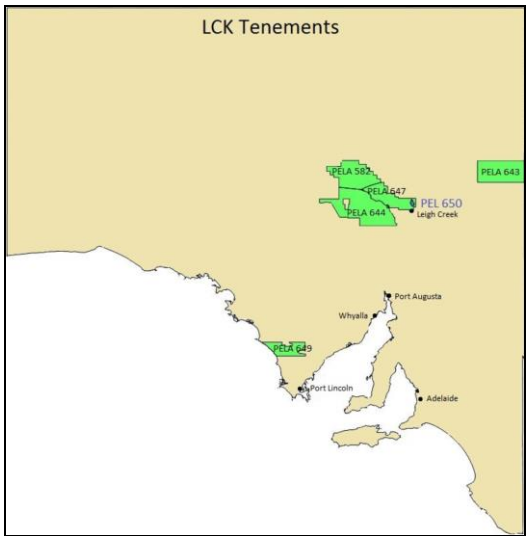
4.1 Overview

LCK is an emerging energy company listed on the ASX with a market capitalisation of approximately A$33.2 million as at 24 July 2017. LCK's primary focus is on the development of the LCEP in South Australia, using the ISG technology.

The Company's tenements along with the location of the LCEP in South Australia are set out below:

Tenement	Location
Petroleum Exploration Licence (PEL) 650	Leigh Creek
Petroleum Exploration Licence Application (PELA) 582	Finniss Springs
PELA 643	Callabonna
PELA 644	Roxby Downs
PELA 647	Leigh Creek
PELA 649	Oakdale
Gas Storage Exploration Licence (GSEL) 662	Leigh Creek
Mineral Exploration Licence 5596	Leigh Creek
Mineral Exploration Licence 5597	Leigh Creek

Source: LCK Annual report 2016



Source: LCK website

4.2 Leigh Creek Energy Project

The LCEP is located approximately 550km north of Adelaide. Leigh Creek is an existing mine, where coal was produced for 60 years. When in operation, coal was supplied to the Port Augusta power station, located approximately 250km away.

The LCEP has been granted a gas storage exploration license in April 2016. It has been deemed as the ideal project location for the use of ISG technology, due to site characteristics such as

- a closed basin of a defined size;
- a thick, impervious seal rock;

- no aquifers anywhere near the expected operational site;
- low permeability in the coal seam and surrounding rocks;
- thick coal seams of suitable quality for ISG;
- minimal fractures in the rock.

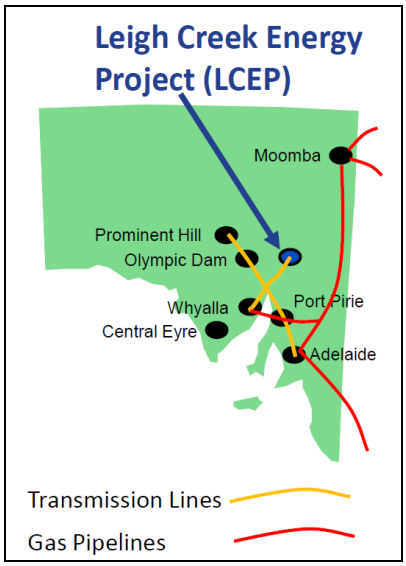
Due to the site characteristics, the environmental risk is perceived as low. Furthermore, surrounding infrastructure is available from previous coal mining operations.

4.2.1 Surrounding infrastructure and major energy consumers

Due to its previous use for coal production, the Leigh Creek site offers existing infrastructure, such as a self-contained groundwater system, power transmission lines, sealed road, airport, rail and water infrastructure. Furthermore, the nearest major gas pipeline is approximately 125km away and the Moomba-Adelaide Pipeline around 230km. The township of Leigh Creek offers additional services to the community.

LCEP is located in close proximity to a number of major consumers in the energy and resources sector, including miners at Olympic Dam (producing copper and uranium), Prominent Hill (copper), Carrapateena (copper), Whyalla (steel and hydromet), Port Pirie (lead) and Central Eyre (iron ore). Management estimates that these miners would require total electricity ranging from 500 MW to 900 MW. In addition, demand for electricity & gas is also strong in the metropolitan Adelaide region.

The map below illustrates the location of LCEP in relation to these major energy consumers, along with the existing transmission lines and gas pipelines:



Source: LCK Investor Presentation March 2017

4.2.2 Current status of the LCEP & timeline

In 2016, LCK completed a scoping study and a pre-feasibility study. The Company has acquired new 2D seismic equipment to aid specific site selection and also substantially completed the site characterisation in 2016. Site operations commenced in June 2016 with three drill holes to collect further data for

environmental surveys of rock and water, data for groundwater, rock and geotechnical analysis and collecting samples for detailed gasification analysis.

The Company is now working toward the launch of the PCD, which is scheduled for December 2017. For the PCD, approval of initial gas demonstration is needed as well as the construction and installation of a well pair and a single gasifier, including associated infrastructure. The PCD plant is proposed to operate for 30 to 60 days, including 30 days of 'full capacity' gasification. Following the successful operation of the PCD plant and production of syngas, LCK will be able to use the data obtained to

- Apply for government approval for the commercial project phase (with an expected program of 12 months or more duration);
- Develop safety and environmental controls;
- Optimise the plant design; and
- Estimate operating costs.

Further, the PCD will show the community and government that ISG can operate safely and with minimal impact to the environment.

Post demonstration of the PCD, in 2018, LCK plans to secure funding and construct commercial facilities, i.e. a power station, gas clean up facilities and associated infrastructure at LCEP as well as a connecting pipeline to the domestic pipeline system. Part of the gas produced with the ISG technology will be used to create electricity on site for use within the project.

The commercial production of electricity and syngas is planned for 2020-21, with an estimated production of 105 PJ of gas each year over 25 to 35 years.

4.2.3 Commercial production options

The LCEP offers a number of commercial opportunities:

- Supply of pipeline quality methane (natural gas) into the existing east coast pipeline network;
- Generation of electricity to industrial users in South Australia;
- Production of Ammonium Nitrate and/or Urea. The bulk of the world's fertiliser and explosive products, by volume, is based on ammonium nitrate and these products are currently imported into South Australia, resulting in high prices for end users like farmers, mines and quarries.

Once the PCD has been completed, the Company will have better data available in order to decide which commercial production option will be pursued and what the related capex requirements will be.

4.2.4 Offtake agreements and working partnerships

At this stage of the project, no offtake agreements have been signed by LCK. While potential customers have expressed interest, there is a consensus to wait for the gas resources to flare before entering into any binding agreement.

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In the interim, the Company has established the following working partnerships:

- In August 2015, Leigh Creek signed a Heads of Agreement with AET Investments Unit Trust to jointly develop an ammonium nitrate plant to produce nitrogen based fertilisers for farmers in South Australia, wherein the raw materials for the facility would be provided from the LCEP while the technology and know-how would be provided by AET.

- In December 2015, LCK and APT Pipelines Limited, a subsidiary of APA Group, signed a Heads of Agreement, allowing the development of conceptual plans for the interconnection of the LCEP with the East Coast gas markets.

- In April 2016, LCK and Shanghai Electric Power Generation Group signed a Heads of Agreement to form a Joint Venture to build, own and operate a 300MW to 600MW gas-fired power station at Leigh Creek.

- In August 2016, LCK commissioned ElectraNet to provide advice around high voltage electricity transmission, route options, and advice around connection to the grid and participation with the National Electricity Market.

- At the same time, LCK also commissioned CQ Partners to undertake an analysis of historical electricity market data and forecasts so that LCK can best determine the initial viability of power peaking assets.

- In addition, LCK is in discussions with Archer Exploration Limited, an ASX-listed company pursuing development options for its magnesite deposit located 20 kilometres from the LCEP, for potential synergies between their projects. These include the sale of energy to Archer Exploration Limited, the sharing of infrastructure and other associated synergistic benefits.

Further, we understand that Management is in discussions with several iron ore and copper mining companies located in adjoining areas to Leigh Creek. These are potential customers who stand to benefit from the use of syngas, and Management has received interest from several of these to offer gas once proof of concept has been achieved.

4.3 Resources estimate

LCK commenced appraisal drillings on known coal deposits in November 2015. As a result, inferred coal resources of 377 million tonnes (Mt) were reported in accordance with JORC Code (2012)[30]. In January 2016, 2C gas resources of 2,963.9 PJ were reported in accordance with SPE-PRMS[31]. This resource estimate was independently assessed and certified by MHA Petroleum Consultants LLC (MHA).

[30]The JORC (the "Joint Ore Reserves Committee") Code is a standard used for the public disclosure of Mineral Resource as defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore.
[31] SPE is the Society of Petroleum Engineers and PRMS is the Petroleum Resources Management System, i.e. the internationally recognised standard for reporting oil and gas resources and reserves.

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The estimated resource base of the LCEP is:

Category of Resources	1C	2C	3C
Syngas resource (PJ)	2,748	2,964	3,303

Source: LCK Annual report 2016

The Company expects to upgrade the 2C contingent resources to 2P reserves once gas demonstration has been completed in 2017. Management estimates a natural gas equivalent of approximately 2,500 PJ of 2P reserves.

4.4 Financial information

4.4.1 Financial Performance

The audited statements of profit or loss of LCK for the financial years ended 30 June 2015 ("FY15") and FY16 and unaudited statement of profit or loss for FY17 are set out in the table below:

Consolidated statements of profit or loss and other comprehensive income A$'000s	30-Jun-15 Audited	30-Jun-16 Audited	30-Jun-17 Reviewed
Revenues			
Grants	-	-	20,000
Fair value adjustments	-	-	10,875
Gain on Disposal of Shares	78,384	-	-
Gain on Disposal of Fixed Assets	-	20,930	22,856
Interest income	2,319	18,283	54,011
Total revenue	**80,703**	**39,213**	**107,742**
Expenses			
Employee Benefit Expense	(480,821)	(3,128,846)	(3,171,452)
Occupancy Expense	(66,394)	(227,069)	(449,661)
Consulting/legal Expenses	(160,014)	(192,088)	(424,631)
Travel Expenses	(119,223)	(355,958)	(346,772)
Other Expenses	(85,175)	(1,463,461)	(1,360,630)
Depreciation	(35,547)	(35,664)	(35,251)
Interest Paid	(5,632)	(2,375)	(78,105)
Transaction Cost	(16,726,044)	-	-
Earnings before Taxes	**(17,598,147)**	**(5,366,248)**	**(5,758,760)**
Taxes and Other Expenses	-	-	-
Net Income (Loss)	**(17,598,147)**	**(5,366,248)**	**(5,758,760)**

Source: Audited financials, S&P Global and GTCF calculations

We note the following in relation to the above consolidated statement of financial performance:

- The Company does not earn any operating revenue, as it has not yet achieved production stage. Revenues recognised in the financial statements comprise of R&D incentives, mark-to-market adjustments and other non-operating income. LCK has received grants from a South Australian industry body as part of a scheme to co-fund new hires of geologists in South Australia. In addition, the Company had a revaluation gain on investments disposed of in January 2017.

- LCK has incurred losses from FY15 to FY17 primarily due to administrative and employee benefits expenses as it continues to invest in exploration and development activities. Exploration expenses are not reflected in the statement of profit or loss, but are capitalised and are reflected in the statement of financial position.

- The one-off transaction costs in 2015 pertain to the reverse acquisition of Marathon Resources Ltd by ARP TriEnergy Pty Ltd. Subsequently, the Company changed its name to LCK.

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4.4.2 Financial Position

The statements of financial position of LCK as at 30 June 2015, 30 June 2016 and 30 June 2017 are set out in the table below:

Consolidated statements of financial position A$'000s	30-Jun-15 Audited	30-Jun-16 Audited	30-Jun-17 Reviewed
Current Assets			
Cash and Cash Equivalents	1,484,627	8,659,369	8,757,787
Other Financial Assets	18,680	16,031	-
Trade and Other Receivables	101,618	338,464	2,358,752
Total Current Assets	**1,604,925**	**9,013,864**	**11,116,539**
Exploration and Evaluation Expenditure	710,667	2,450,480	5,985,725
Property, Plant and Equipment	78,570	112,940	220,720
Total Assets	**2,394,162**	**11,577,284**	**17,322,984**
Current Liabilities			
Employee Entitlements	(20,803)	(124,519)	(298,499)
Short-term Loans	(125,438)	-	(1,540,049)
Trade and Other Payables	(358,270)	(665,711)	(1,656,968)
Total Liabilities	**(504,511)**	**(790,230)**	**(3,495,516)**
Net Assets	**1,889,651**	**10,787,054**	**13,827,468**
Shareholders' Equity			
Common Stock - Par Value	19,493,353	32,361,720	41,100,034
Retained Profits/(Accumulated Losses)	(17,603,702)	(22,969,950)	(28,728,710)
Reserves	-	1,395,284	1,456,144
Total Equity	**1,889,651**	**10,787,054**	**13,827,468**

Source: Audited financials, S&P Global and GTCF calculations

We note the following in relation to the statements of financial position:

- The cash balance of the Company improved in 2017 as a result of receiving Tranche 1 and 2 of the CNE Placement (c. A$3.4m before costs) and a drawdown of the R&D working capital facility, offset by incurring exploration expenditure of c. A$6.4 million. LCK has a working capital facility with the Commonwealth Bank of Australia, which allows the Company to bring forward access to refundable tax offsets.

- The net working capital of the Company relates to the R&D tax incentive receivable, and creditors for purchase orders relating to design/ engineering works.

- The Company has applied for R&D tax incentives through AusIndustry (a division of the Department of Industry, Innovation and Science) in relation to research expenditure incurred for LCEP. The tax incentive is provided as a refundable tax credit and is reduced from the Exploration and Evaluation Expenditure capitalised.

- The Company incurred c. A$5.95 million of exploration and evaluation costs for the LCEP, plus A$0.5 million being incurred for commercial studies relating to the same. Management expects the Exploration and Evaluation Expenditure to increase significantly leading up to the launch of the PCD in late 2017.

- Equity increased as a result of issue of shares under Tranches 1 and 2 of the CNE Placement, partly offset by higher accumulated losses.

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4.5 Share capital structure

As at 28 July 2017[32], LCK's capital structure is as follows:

- c. 332.4 million fully-paid ordinary shares ("LCK Shares").
- c. 42.4 million options, including listed options and unlisted employee share options ("ESOP").

4.5.1 Ordinary shares

The top ten shareholders of LCK as at 28 July 2017 are set out below:

LCK - List of shareholders Shareholder name	Number of shares ('000s)	% shareholding
Allied Resource Partners Pty Ltd	104,767.2	31.5%
China New Energy Group Limited	52,788.4	15.9%
CITIC AUSTRALIA PTY LTD	17,242.9	5.2%
HSBC Custody Nominees (Australia) Limited	8,166.6	2.5%
One Design & Skiff Sails Pty Ltd	5,167.1	1.6%
J P Morgan Nominees Australia Limited	4,164.1	1.3%
HSBC Custody Nominees (Australia) Limited - A/C 2	4,148.1	1.2%
Mr Nicholas James Redpath	2,529.0	0.8%
AET SFS Pty Ltd	2,222.2	0.7%
Holegata Pty Ltd	1,959.6	0.6%
Other shareholders	129,212.7	38.9%
Total shares outstanding	**332,368.1**	**100.0%**

Source: S&P Global

A discussion on LCK's Share trading profile is set out in Section 6.3.

4.5.2 Employee share option plan

LCK provides share-based payments to their employees. LCK has 42.4 million options on issue, which includes 17.7 million options traded on the ASX. These options were issued as part of the capital raising announced on 28 April 2016. The outstanding options are set out below:

Outstanding options over shares of the Company	Number of options ('000s)
ESOP	24,745.0
Listed options	17,687.5
Total options over shares	**42,432.5**

Source: Management

[32] The capital structure of LCK in Section 4.5.1 above is after completion of Tranches 1 and 2, but before Tranches 3 and 4.

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5 Valuation methodologies

5.1 Introduction

As part of assessing whether or not the Proposed Issue is fair to the Non-Associated Shareholders, Grant Thornton Corporate Finance has compared the fair market value of LCK Shares before the Proposed Issue on a control basis to the fair market value of LCK Shares after the Proposed Issue on a minority basis.

In each case, Grant Thornton Corporate Finance has assessed the value using the concept of fair market value. Fair market value is commonly defined as:

"the price that would be negotiated in an open and unrestricted market between a knowledgeable, willing but not anxious buyer and a knowledgeable, willing but not anxious seller acting at arm's length."

Fair market value excludes any special value. Special value is the value that may accrue to a particular purchaser. In a competitive bidding situation, potential purchasers may be prepared to pay part, or all, of the special value that they expect to realise from the acquisition to the seller.

We note that RG111 requires the fairness assessment to be made assuming 100% ownership of the target company and irrespective of whether the consideration offered is script or cash and without consideration of the percentage holding of the offeror or its associates in the target company.

5.2 Valuation methodologies

RG 111 outlines the appropriate methodologies that a valuer should generally consider when valuing assets or securities for the purposes of, amongst other things, approval of an issue of shares using item 7 of s611 of the Corporations Act, share buy-backs, selective capital reductions, schemes of arrangement, takeovers and prospectuses. These include:

- Discounted cash flow ("DCF") method and the estimated realisable value of any surplus assets.
- Application of earnings multiples to the estimated future maintainable earnings ("FME") or cash flows of the entity, added to the estimated realisable value of any surplus assets.
- Amount available for distribution to security holders on an orderly realisation of assets ("NAV method").
- Quoted price for listed securities, when there is a liquid and active market ("Quoted Security Price Method").
- Any recent genuine offers received by the target for any business units or assets as a basis for valuation of those business units or assets.

Further details on these methodologies are set out in Appendix A to this report. Each of these methodologies is appropriate in certain circumstances.

RG111 does not prescribe any above methodologies as the method(s) that an expert should use in preparing their report. The decision as to which methodology to use lies with the expert based on the

expert's skill and judgement and after considering the unique circumstances of the entity or asset being valued. In general, an expert would have regard to valuation theory, the accepted and most common market practice in valuing the entity or asset in question and the availability of relevant information.

5.3 Selected valuation methods

Grant Thornton Corporate Finance has assessed the value of LCK based on historical capital raisings and the share market performance. We have selected these methodologies given that the company is operating as a niche player in an area which has limited peers and uncertain future cash flows. LCK is still in the planning and exploration stage and has not yet commenced production. Further, Management has not prepared a long-term forecast. The technology proposed to be used by the Company is also not yet commercially established and accordingly a DCF approach was not adopted.

Prior to reaching our valuation conclusion, we have considered the reasonableness of our valuation of LCK Shares having regard to the implied value per gigajoule of contingent resources ("2C resources").

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6 Valuation assessment of LCK before the Proposed Issue

6.1 Valuation summary

As discussed in Section 5.3, we have assessed the fair market value of LCK Shares on a control basis using the valuation implied from the historical capital raising undertaken by LCK and the Quoted Security Price Method. We have set out in the table below a summary of our assessed valuation range.

Valuation assessment before the Placement (fully diluted, control basis) cents per share	*Section Reference*	Low	High
GT assesed valuation range (on a minority basis)	*6.4*	20.0	30.0
Add: Control premium (%)	*6.5*	20.0%	40.0%
GT assesed valuation range		**24.0**	**42.0**

Source: GTCF calculations

We note that as at the date of this Report, the revised Tranche 3 of the CNE Placement has not been completed. Accordingly, our valuation assessment of LCK before the Proposed Issue considers the value per share of LCK after Tranches 1 and 2, but before Tranches 3 and 4 of the CNE Placement.

6.2 Valuation assessment based on historical capital raising

For the purpose of our valuation assessment, we have had regard to the capital raising announced on 28 April 2016 ("2016 Capital Raising"), since it is the most recent capital raising (prior to the announcement of the CNE Placement) that involves the sale of a material stake in the business. A summary of the capital raisings undertaken by Management since July 2015 is set out below:

Announcement date	Details of issue	Amount raised (A$ '000s)	Number of shares issued	Investor details	Share issue price (cents per share)	Erstwhile trading price (cents per share)	% of shares (post-issue)
28-Apr-16	Institutional placement	10,768	35,894,999	NA	30.0	35.0	13.5%

Source: ASX announcements

In relation to the 2016 Capital Raising, we note the following:

- The capital raising was subscribed by institutional investors and managed funds. These classes of investors typically have a high degree of financial literacy and have been observed to undertake due diligence of their potential targets before taking an investment decision.

- The consideration for the issue of the shares was cash, thereby satisfying working capital and long-term cash requirements of LCK.

- The shares issued in the 2016 Capital Raising represent c. 13.5% of the issued share capital of LCK (post-completion of the capital raising), which represents a material stake and it is not inconsistent with the Proposed Issue.

While the 2016 Capital Raising was conducted close to one year before the announcement of the CNE Placement, we are of the opinion that it is not unreasonable to adopt it for the purpose of our valuation after having analysed LCK's specific circumstances and the general trend in the market where the Company operates. Our analysis is outlined below.

LCK-specific factors

Between April 2016 and March 2017, LCK has observed a steep reduction in share price from c. 35 cents in April 2016 to c. 20 cents in March 2017. We believe that this is on account of disadvantageous circumstances or announcements released during this period which should not necessarily have an adverse impact on the underlying fair market value of the Company. These factors are:

- Since April 2016, the share price of LCK has been trending downwards, following the Queensland Government's policy decision of prohibiting all UCG activities, and the in situ gasification of oil shale (subsequently introduced into legislation). In late 2016, a bill was introduced in the South Australian Parliament by the Greens Party proposing to ban UCG in South Australia, similar to Queensland. We note that the South Australian State Government has been historically supporting the use of UCG technology and has publicly displayed its support for LCK's operations. In this regard, LCK and CNE's executives have also met with representatives of the South Australian State Government. Accordingly, while the above news and political events in other states may raise the question of continued regulatory support for the LCEP, South Australia has a legal framework in place which covers UCG. Nevertheless, these events appear to have adversely affected the trading prices of LCK.

- In 2016, the Company underwent a restructure in Management, wherein the erstwhile? executives stepped down and were replaced with new Management. We understand that during the ongoing attempt to raise capital at the time of the restructure, the new Management had to realign existing and potential investors with revised milestones for the Company, which included delays in the construction of the PCD. Additionally, during 2017, the old Management team sent notices to the Company requesting an Extraordinary General Meeting in order to restructure the new Management. Given the early stage nature of the LCK business, a change of Management is always a traumatic event and considered a major setback by the investors given it is usually associated with a lack of trust and credibility. Whilst the new Management Team has been working hard to re-establish a good standing of the Company with the investment community, it may take some time.

Market-based factors

In addition to the above, we have analysed the share price performance of our selected peer group between April 2016 and March 2017 and the oil and gas prices to consider whether or not the market in which the Company operates has suffered of any adverse re-pricing. Our analysis is set out below:

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Market appreciation since 28 April 2016 %	As at 30-Mar-17	Min	Max
Leigh Creek Energy	-42.9%	-72.9%	-2.9%
Tier 1: Exploration companies			
Carbon Minerals Limited	0.0%	-100.0%	11.1%
Icon Energy Limited	2.7%	-27.0%	8.1%
Comet Ridge Limited	108.3%	-16.7%	108.3%
Galilee Energy Limited	100.0%	-28.6%	121.4%
Blue Energy Limited	118.2%	0.0%	122.7%
Tier 2: Exploration and production companies			
Senex Energy Limited	27.8%	-16.7%	38.9%
Strike Energy Limited	-23.6%	-32.7%	9.1%
Armour Energy Limited	18.4%	-31.6%	38.2%
Cooper Energy Limited	54.0%	-20.0%	68.0%
Central Petroleum Limited	132.6%	2.3%	138.4%
Beach Energy Limited	18.2%	-23.4%	33.6%
Brent crude	9.9%	-10.8%	24.9%
Henry Hub Natural Gas	52.9%	-1.7%	95.7%
Average (Tier 1)	**65.8%**	**-34.5%**	**74.3%**
Median (Tier 1)	**100.0%**	**-27.0%**	**108.3%**
Average (overall)	**50.6%**	**-26.8%**	**63.4%**
Median (overall)	**27.8%**	**-23.4%**	**38.9%**

Source: S&P Global, GTCF calculations

As outlined above, during this period the Australian exploration companies in our peer group on average observed c. 66% increase in share price, while Australian exploration and production companies observed a c. 100% increase. Concurrently, global benchmarks like crude oil prices or natural gas prices also observed c. 10% and 53% increase, respectively. Finally, we note that the Short Term Trading Market operated by the Australian Energy Market Operator also saw increases in gas prices (in A$/ GJ) at all 3 hubs (i.e. Adelaide, Brisbane and Sydney) during this period.

The above analysis indicates that market conditions were generally favourable between April 2016 and March 2017.

Conclusion on the 2016 Capital Raising

Based on the above, notwithstanding the 2016 Capital Raising was undertaken almost one year before the announcement of the CNE Placement, we believe that it is not unreasonable to adopt it for the purpose of our valuation assessment.

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6.3 Quoted price of securities

In our assessment of the fair market value of LCK Shares, we have also had regard to the trading prices of the listed securities on the ASX before the announcement of the CNE Placement on 30 March 2017.

The adopted value of LCK based on the trading prices is an exercise of professional judgement that takes into consideration the depth of the market for the listed securities, volatility of the market price, and whether or not the market value is likely to represent the underlying value of LCK. The following sections detail the analysis undertaken in selecting the share price range.

6.3.1 Liquidity analysis

In accordance with the requirements of RG111, we have analysed the liquidity of LCK Shares by considering the monthly trading volume of LCK Shares since October 2015 as a percentage of the shares outstanding and free float[33] as outlined in the table below:

Month end	Volume traded ('000)	Monthly VWAP ($)	Total value of shares traded ($'000)	Volume traded as % of All Shares	Volume traded as % of Free Float
Oct 2015	1,575	0.1597	251	0.7%	1.4%
Nov 2015	4,715	0.2039	961	2.0%	4.1%
Dec 2015	3,999	0.2287	915	1.7%	3.5%
Jan 2016	2,262	0.3263	738	1.0%	2.0%
Feb 2016	9,368	0.2762	2,587	4.1%	8.2%
Mar 2016	1,468	0.2687	394	0.6%	1.3%
Apr 2016	3,155	0.3415	1,077	1.4%	2.8%
May 2016	3,017	0.2846	859	1.3%	2.6%
Jun 2016	7,195	0.1983	1,427	2.7%	5.5%
Jul 2016	2,406	0.2045	492	0.9%	1.8%
Aug 2016	3,470	0.1494	519	1.3%	2.6%
Sep 2016	4,632	0.1113	515	1.7%	3.5%
Oct 2016	3,095	0.1254	388	1.2%	2.4%
Nov 2016	2,198	0.1250	275	0.8%	1.7%
Dec 2016	1,100	0.1396	154	0.4%	0.8%
Jan 2017	1,940	0.1470	285	0.7%	1.5%
Feb 2017	2,515	0.1895	477	0.9%	1.9%
Mar 2017	2,590	0.1878	487	1.0%	2.0%
Min				**0.41%**	**0.84%**
Max				**4.06%**	**8.21%**
Average				**1.36%**	**2.75%**
Median				**1.07%**	**2.17%**

Source: S&P Global and GTCF calculations

With regard to the above analysis, we note that:

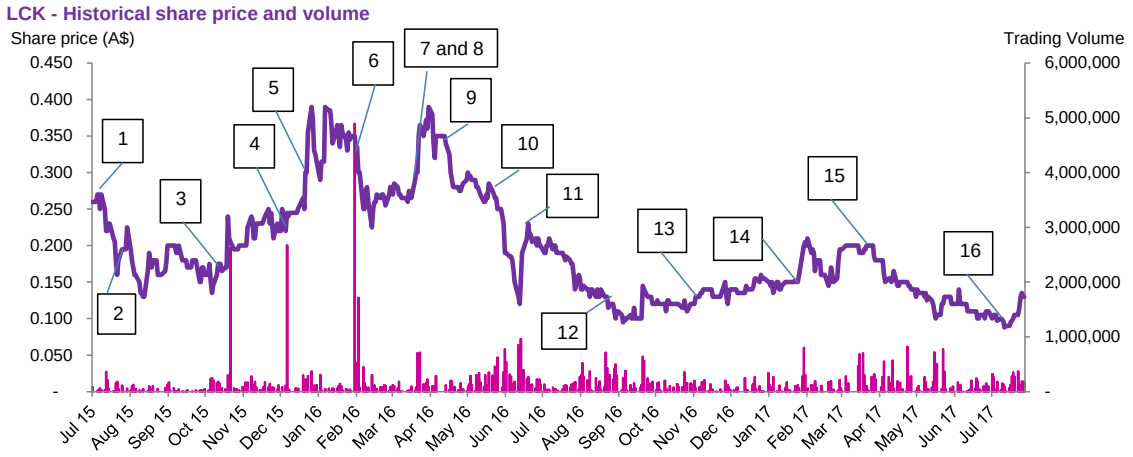
- In the absence of a takeover or alternate transactions, the trading prices represent the value at which minority shareholders could realise their portfolio investment.
- From October 2015 to March 2017, c. 50% of the free float shares were traded with an average monthly volume of c. 2.75%.
- The LCK share is covered by one investment analyst who provides analysis and updates to the market.
- LCK complies with the full disclosure regime required by the ASX. As a result, the market is fully informed about the performance of LCK.

[33] Free float Shares excludes those owned by Company employees, individual insiders, related parties and other strategic investors (i.e. OCP Funds)

- The level of free float of LCK Shares as at 30 March 2017 was approximately 50%. As outlined in the table above, in our opinion there is limited liquidity. However, we note that it is not uncommon for exploration companies to demonstrate low levels of liquidity until resource targets become sufficiently defined, or until production/ proof of concept is established. In addition, there are limited alternative valuation methodologies that can be reasonably adopted for the valuation of LCK. Accordingly, we have relied on the trading prices for the purpose of our valuation assessment.

6.3.2 Valuation assessment of LCK based on trading prices

Our analysis of the daily movements in LCK's share price and volumes over last two years is set out below:



Source: S&P Global, LCK's ASX announcements and GTCF analysis

In relation to the share price graph above, we note the following:

Event	Date	Comments
1	03-Jul-15	The company was relisted after completing the acquisition of the Leigh Creek Energy project, with a change of name and activities
2	07-Aug-15	The company signed a Heads of Agreement for the development of a chemical and fertiliser production facility.
3	28-Oct-15	LCK announced that it had located significant historical drilling data relating to coal quality, geophysical and coal samples, thus providing an advantage with regard to gasification testing.
4	15-Dec-15	LCK signed a Heads of Agreement with APA Group, for the development of conceptual plans to connect the Leigh Creek Energy Project with the east coast gas markets.
5	08-Jan-16	The company announced that it had received an independent assessment of its gas resources in accordance with PRMS.
6	16-Feb-16	LCK completed the sale of c. 6.3 million treasury shares, raising $1.63 million (before associated costs). These shares were owned by LCK as a result of the acquisition of ARP TriEnergy Pty Ltd and subsequent re-listing of the company in July 2015.
7	06-Apr-16	LCK signed a Heads of Agreement with Shanghai Electric Power Generation Group to establish a JV for building, owning and operating a gas-fired power station in South Australia.
8	14-Apr-16	The company was granted a gas storage exploration licence for an initial period of 5 years.
9	28-Apr-16	LCK raised $10.77 mn by way of a private placement of shares to sophisticated and professional investors, at $0.30 per share.
10	07-Jun-16	Issue of options and shares pursuant to prospectus dated 9 May 2016.
11	05-Jul-16	The company commenced drilling operations at Leigh Creek.
12	06-Sep-16	The company underwent an internal restructure, with the erstwhile Managing Director stepping down.
13	09-Nov-16	The company released a plan to work towards the Pre-Commercial Demonstration project, including details of the site and facilities, indicative timelines and and update on market conditions.
14	30-Jan-17	LCK completed a scoping study for the Leigh Creek Energy Project and commenced a pre-feasibility study for the same. The scoping study concluded that an argument for both syngas-fired electricity generation and natural gas are supportable both technically and financially.
15	30-Mar-17	The Company announced a three-stage placement of shares with its cornerstone investor, China New Energy Ltd, at $0.146 per share, thereby raising $21.85 million.
16	28-Jul-17	LCK announced that it had amended the terms of the CNE Placement, with the original Tranche 3 to be conducted in two parts i.e. Tranche 3 and Tranche 4. The Company also announced that it was on track to commission the PCD by December 2017.

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Source: LCK's ASX announcements and GTCF analysis

Set out below is a summary of the VWAP of LCK Shares before the announcement of the CNE Placement:

VWAP	Low	High	VWAP
Prior to 30 Mar 2017			
10 day	0.190	0.200	0.198
1 month	0.145	0.200	0.178
2 month	0.145	0.250	0.183
3 month	0.135	0.250	0.173
4 month	0.120	0.250	0.167
5 month	0.110	0.250	0.157
6 month	0.100	0.250	0.149
9 month	0.095	0.250	0.148
12 month	0.095	0.395	0.186
24 month	0.095	0.420	0.212

Source: S&P Global and GTCF calculations

Based on the above, we have selected a VWAP of 20 cents for the purpose of our valuation assessment based on the trading prices.

6.4 Conclusion on the selected valuation range

Based on the analysis undertaken in section 6.2 and 6.3, we have selected value range between A$0.20 and A$0.30 (on a minority basis) as representative of the fair market value of the Company on a minority basis. In the graph below, we have presented our selected range in comparison with the historical trading prices. Our valuation assessment is materially higher than the current trading prices as we have relied more on longer term value observations rather than short term reactions of the trading prices to news and speculations in the market place.

Source: S&P Global

6.5 Premium for control

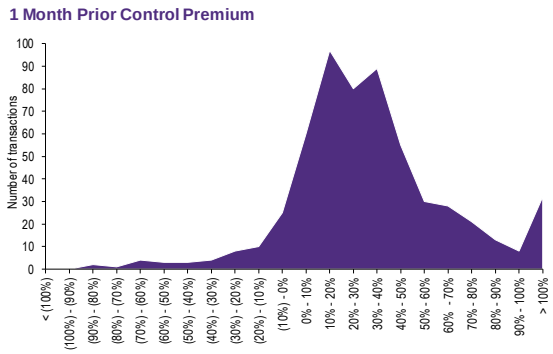
We note that share market trading prices or share issue prices for a minority stake do not reflect the market value for control of a company as they are for portfolio holdings. A control value is typically higher than the equivalent value for a minority stake in a company as a premium for control is applicable. A controlling shareholding would give rise to benefits typically absent in a minority shareholding such as:

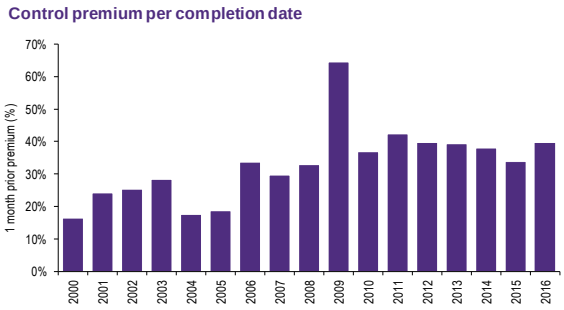
- The ability to make or materially influence strategic decisions.

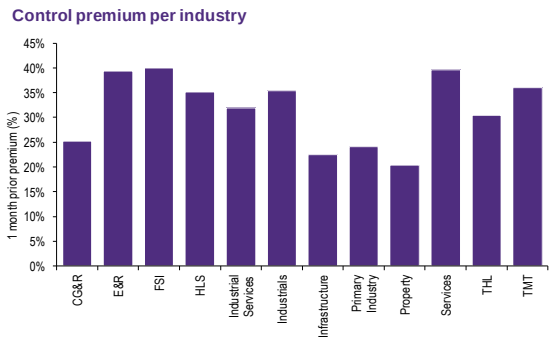
- The ability to make dividend payment decisions.
- The ability to realise synergistic benefits.
- Access to cash flows.
- Access to tax benefits.
- Control of the board of directors of the company.

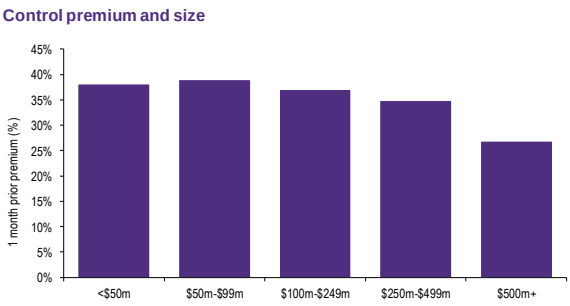
Evidence from studies indicates that premiums for control on successful takeovers have frequently been in the range of 20% to 40% in Australia and that the premiums vary significantly for each transaction.

In addition, the following charts illustrate the premiums paid on transactions between January 2000 and 30 June 2016.









	Control premium
Average	34.25%
Median	29.31%

Source: GTCF analysis

Given the distribution of the control premiums in our study, we have applied in our valuation assessment a control premium ranging from 20% to 40%.

6.6 Cross-check: Implied resource multiple of listed comparable companies

We have considered the reasonableness of our valuation assessment by comparing the resource multiples implied in our valuation assessment of LCK with the resource multiples of listed comparable companies in the Australian gas industry.

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Typically, this method only provides a high-level indication of the market value as the resource multiple may vary significantly between the different listed comparable companies due to size and quality of the deposit, availability of infrastructure, cost structure, achievement of production, securing of customer contracts, regulatory environment in the area of operation and level of development. In our selection of comparable companies, we have had regard to the following factors:

- ASX listed companies focused on unconventional gas or having a material proportion of their operations and reserves/ resources in unconventional gas.
- Status of development of the project (i.e. exploration v/s production phase).
- Location of deposits.
- Size of the company, including market capitalisation.
- Customers secured by the company.
- Existence of certified contingent resources.

Our valuation assessment on a minority basis between 20.0 – 30.0 cents per share implies a resource multiple as outlined below:

Valuation assessment before the CNE Placement Implied resource multiple	*Section Reference*	Low	High
Value per LCK Share before the Placement (on a minority basis)	*6.2*	20.0	30.0
Diluted LCK shares before the Placement ('000s)	*4.5*	332,368	332,368
Implied Enterprise value ($ million)		**66.47**	**99.71**
Adjusted 2C resources (PJ)		1,500.0	1,500.0
Implied resource multiple ($/ GJ)		**$ 0.044**	**$ 0.066**

Source: S&P Global

Although LCK has estimated total 2C resources of 2,964 PJ, we note the following:

- In the process of generating syngas, 1 GJ of syngas generated approximates 0.8 GJ of natural gas.
- LCK's existing resource base is very large and it will support production for many years to come (potentially in excess of 30 years). However, it is unlikely that a potential purchaser will attribute any value to the resources to be recovered after more than 20 years.
- The amount of 2C resources that will ultimately convert into marketable 2P reserves and be extracted will be materially lower than the current level of resources.

Accordingly, in our cross check, we have referred to an adjusted 2C resources of circa 1,500 PJ. We note that this is a conservative estimate of the potential conversion of contingent resources to probable resources, and does not reflect Management's view on the same.

Set out below are the resource multiples of the comparable companies that are engaged in unconventional gas exploration and production in Australia. Refer to Appendix B for further details on the comparable companies.

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Company	Country	Share price cents per share 30/03/2017	Market Capitalisation AUD Million	EV Local currency $million	Gross resources 2C PJ	Resource Multiple A$ / GJ	Resources attributable to unconventional
Tier 1: Exploration companies							
Carbon Minerals Limited	Australia	9.00	1.7	1.64	244.0	0.007x	100% CSG
Icon Energy Limited	Australia	3.80	22.7	22.1	1,666.3	0.014x	100.0%
Comet Ridge Limited	Australia	12.50	71.9	69	541.0	0.133x	57.8%
Galilee Energy Limited	Australia	14.00	21.3	21.1	2,508.0	0.008x	100.0%
Blue Energy Limited	Australia	4.80	54.8	51	984.0	0.056x	100.0%
Tier 2: E&P companies (including companies having an interest in producing assets)							
Senex Energy Limited	Australia	34.50	497.6	415	1,210.0	0.343x	NA
Strike Energy Limited	Australia	8.40	81.0	78	164.7	0.471x	100% CSG
Armour Energy Limited	Australia	9.00	29.1	44	294.3	0.149x	NA
Cooper Energy Limited	Australia	38.50	254.1	164	374.0	0.438x	NA
Central Petroleum Limited	Australia	20.00	86.6	165	143.6	1.147x	0.0%
Beach Energy Limited	Australia	81.00	1,510.7	1,360	1,193.4	1.139x	44.6%
Average (Tier 1)						**0.044x**	
Median (Tier 1)						**0.014x**	
Low (Overall)						**0.007x**	
Average (Overall)						**0.355x**	
Median (Overall)						**0.149x**	
High (Overall)						**1.147x**	

Notes:
(1) EV based on latest available market capitalisation and quarterly cash flow as at 30 March 2017
(2) We have calculated the implied multiple for Tier 1 companies based on the market capitalisation, as these companies have significant net cash balances (resulting from divestments or capital raisings). This cash is intended to be expended towards exploration and development costs, which in turn will generate an increased enterprise value for the company. However, owing to significant net cash balances, these companies report a negative EV. Accordingly, we have adjusted the implied resource multiple for these companies.

Source: S&P Global, company presentations and websites, other publicly available information.

When considering the Enterprise Value ("EV") to resource multiples of the trading comparable companies, we note the following:

- The resource multiples listed above have been calculated based on the market price for minority or portfolio share holdings and do not include a premium for control.

- For the purpose of our valuation, owing to unavailability of sufficient information regarding resources attributable to each project, we have calculated the gross resources of each company i.e. we have not adjusted the resources based on their ownership interest in their respective JORC[34] defined projects.

- In our opinion, Icon Energy Limited ("Icon") and Galilee Energy Limited ("Galilee") are the most comparable companies to LCK as they have the most comparable levels of resources, have tax losses/ R&D refunds receivable, and have a strong cash balance.

- The average gross 2C resource multiple of Icon and Galilee is approximately A$0.011 per GJ of gas on a minority basis, while the average resource multiple of all the Tier 1 comparable companies is A$0.044 per GJ of gas on a minority basis. Our valuation assessment of LCK implies a resource multiple of between A$0.044 per GJ and A$0.066 per GJ of gas on a minority basis.

  We note that similar to LCK, both Icon and Galilee own 100% interest in only one tenement. However, neither Galilee nor Icon has yet set a timeline for commencement of production and are relatively in the early stages of exploration. Conversely, we understand that LCK is progressing well towards launch of

[34] The JORC (the "Joint Ore Reserves Committee") Code is a standard used for the public disclosure of Mineral Resource as defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore.

the PCD, which is expected to provide an impetus to the Company's prospects of capital raising and production planning.

- While Galilee is engaged in exploration, the company has suffered from delays in the same owing to a small team that is not only engaged on the company's Glenara gas basin, but also involved in evaluating other opportunities. Conversely, LCK is solely focussing on the LCEP and aims to start production by 2020-21.

  Icon holds interests in various tenements in the Cooper basin, Gippsland basin and Surat basin, QLD. However, Icon has certified 2C resources only for one of its tenements in the Nappamerri trough. Beach Energy Limited was the prior operator of this tenement (before selling its interests to Icon), and had indicated that they had reduced contingent resources associated with the Nappamerri Trough to nil, which reflected their opinion that the project is unlikely to be developed commercially in the medium term. Conversely, LCK has independently assessed and verified estimates of inferred coal (in accordance with the JORC Code) and contingent gas resources (in accordance with SPE-PRMS).

  Based on the above, we are of the opinion that our implied resource multiple in conjunction with other Australian exploration companies is not unreasonable.

- The Tier 2 companies selected are entities that either engage in production or have working interests in producing oil & gas assets. Some of these companies are significantly larger, more diversified and have overseas interests. They engage in both conventional and unconventional forms of gas exploration/ production, which are legal in their respective states of operation, similar to LCK. However, while LCK has only one operation in a single state (being the only Australian state supportive of its operations), larger peer companies have multiple operations spread across states which are supportive of unconventional gas production.

  Owing to these factors, the average resource multiple for Tier 2 companies is significantly higher, at A$0.61 per GJ. While these companies provide an indicative guidance, we have placed limited reliance on them for the purposes of our cross-check.

Based on the above, we believe that our fair market valuation assessment of LCK is not unreasonable.

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7 Valuation assessment of LCK after the Proposed Issue

7.1 Valuation summary

Set out below is a summary of our valuation assessment of LCK after approval of the Proposed Issue on a minority basis:

Valuation assessment after the Placement (fully diluted, minority basis) cents per share	*Section Reference*	Low	High
Implied valuation on minority basis	*7.2*	19.00	26.99
Quoted Security Price method	*7.3*	15.00	15.00
GT assessed valuation range		**15.0**	**27.0**

Source: GTCF calculations

7.2 Implied valuation on minority basis

We have assessed below the fair market value of LCK after the Proposed Issue based on the assumption that a total of c. 83.5 million shares are issued under Tranche 3 and Tranche 4.

Set out below is a summary of our valuation assessment of LCK after the Proposed Issue on a minority basis.

Implied valuation after the Placement on a minority basis	*Section Reference*	Low	High
Fair market value of LCK before the Placement (on a minority basis) (cps)	*6.1*	20.00	30.00
Number of shares on issue before Tranches 3 and 4 of the Placement ('000s)	*4.5*	332,368.05	332,368.05
Equity value of LCK on a minority basis before the Placement ($'000s)		**66,473.61**	**99,710.42**
Placement price		15.00	15.00
New LCK Shares to be issued in Tranches 3 and 4 of the Placement ('000s)	*7.2.1*	83,544.91	83,544.91
Adjusted equity value of LCK on a minority basis after the Placement ($'000s)		**79,005.35**	**112,242.15**
Number of shares on issue after the Placement ('000s)	*7.2.1*	415,912.96	415,912.96
GT assesed valuation after the Placement (minority basis) (cps)		**19.00**	**26.99**

Source: GTCF calculations

7.2.1 Outstanding share capital after the Placement

In accordance with the requirements of RG111, we have undertaken our valuation assessment of LCK on a 100% basis. Accordingly, we have assessed the valuation of LCK Shares on a fully diluted basis and adjusted the total number of outstanding shares (332,368,051) to include the dilution impact from the shares to be issued to CNE in Tranche 3 and Tranche 4 of the CNE Placement.

As mentioned in Section 4.5.2, the Company has listed and unlisted options on issue. Given that details of these options have been provided in the financial statements lodged with the ASX as well as the Company's timely announcements, we believe that the market is aware that additional shares may be issued in the future upon the exercise of these options. Accordingly, we have considered that the trading price of the Company incorporates the dilutive effect of further share issues, and have not included these options in our analysis.

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Consequently, we have considered the following capital structure in our assessment:

Pro-forma capital structure	*Section Reference*	Number of shares
Number of LCK Shares on issue before Tranches 3 and 4 of the Placement	*4.5.1*	332,368,051
New LCK Shares to be issued in Tranches 3 and 4 of the Placement	*1.1*	83,544,905
Total Shares on issue post the Placement		**415,912,956**
CNE ownership		***32.78%***

Source: Management

7.3 Quoted price of securities

In our assessment of the fair market value of LCK Shares, we have also had regard to the trading prices of the listed securities on the ASX from the announcement of the CNE Placement on 30 March 2017 up to the date of this Report.

We note the following in relation to the trading prices since 30 March 2017:

- The Placement was announced approximately 4-5 months prior to the date of this Report. In that period, the Company has not changed its operations, fundamentally altered its structure or investments, or faced any additional regulatory or technological backlash.

- The Company has communicated its updated goals to all stakeholders, and we understand that as at the date of this Report, the Company has commenced the construction of the PCD plant and is on track to commission the same in the fourth quarter of 2017.

Notwithstanding the above, we note that post the Placement, the share price of an LCK Share reduced from 20 cents per share as at 30 March 2017 to c. 9-10 cents per share in July 2017. However, upon an announcement by the Company on 28 July 2017 updating the market about the status of the PCD as well as the amendment in the CNE Placement, the market reacted positively. During the week before the date of this Report, the share price was trading between 12-14 cents per share, which is close to the issue price of the Proposed Issue.

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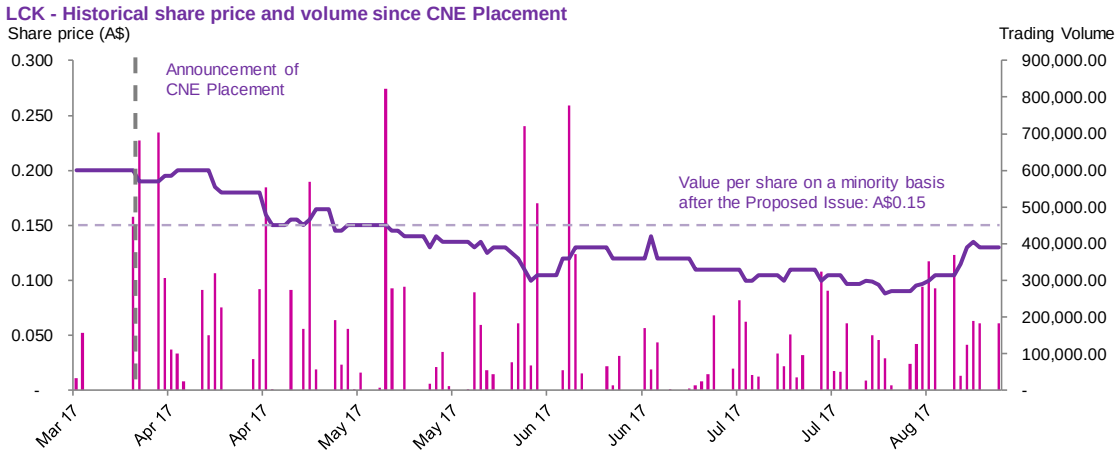
Set out below is a summary of the recent VWAP of LCK Shares after the announcement of the Proposed Issue:

VWAP	Low	High	VWAP
Prior to 12 Aug 2017			
5 day	0.100	0.140	0.119
10 day	0.090	0.140	0.107
1 month	0.088	0.140	0.105
2 months	0.088	0.140	0.107
3 months	0.088	0.145	0.113
4 months	0.088	0.195	0.127
Since 30 March 2017	0.088	0.220	0.142

Source: S&P Global and GTCF calculations

Based on the analysis above and the discussion in relation to the trading prices movements since the announcement of the Proposed Issue, we have relied upon a long-term VWAP of A$0.15 for the purpose of our valuation assessment, as shown below. We note that this is substantially in line with the trading prices in the week before the date of this Report.



Source: S&P Global

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8 Sources of information, disclaimer and consents

8.1 Sources of information

In preparing this report Grant Thornton Corporate Finance has used various sources of information, including:

- Draft Notice of Meeting and Explanatory Memorandum.
- Annual reports/ consolidated accounts of LCK for FY15, FY16, HY17 and draft FY17.
- FY18 budget pack and minutes of Board meeting.
- Concept studies for the production of syngas, synthetic natural gas, coal-fired power and ammonia.
- General security agreement and facility agreement between LCK and Commonwealth Bank of Australia.
- S&P Global.
- IBISWorld.
- Various industry and broker reports.
- Other publicly available information.
- Discussions with LCK Management.

8.2 Qualifications and independence

Grant Thornton Corporate Finance Pty Ltd holds Australian Financial Service Licence number 247140 under the Corporations Act and its authorised representatives are qualified to provide this report.

Grant Thornton Corporate Finance provides a full range of corporate finance services and has advised on numerous takeovers, corporate valuations, acquisitions, and restructures. Prior to accepting this engagement, Grant Thornton Corporate Finance considered its independence with respect to and all other parties involved in the Proposed Issue with reference to the ASIC Regulatory Guide 112 "Independence of expert" and APES 110 "Code of Ethics for Professional Accountants" issued by the Accounting Professional and Ethical Standard Board. We have concluded that there are no conflicts of interest with respect to LCK, its shareholders and all other parties involved in Proposed Exercise.

Grant Thornton Corporate Finance and its related entities do not have at the date of this report, and have not had within the previous two years, any shareholding in or other relationship with LCK or its associated entities that could reasonably be regarded as capable of affecting its ability to provide an unbiased opinion in relation to the Proposed Exercise.

Grant Thornton Corporate Finance has no involvement with, or interest in the outcome of the Proposed Exercise, other than the preparation of this report.

Grant Thornton Corporate Finance will receive a fee based on commercial rates for the preparation of this report. This fee is not contingent on the outcome of the Proposed Exercise. Grant Thornton Corporate Finance's out of pocket expenses in relation to the preparation of the report will be reimbursed. Grant Thornton Corporate Finance will receive no other benefit for the preparation of this report.

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8.3 Limitations and reliance on information

This report and opinion is based on economic, market and other conditions prevailing at the date of this report. Such conditions can change significantly over relatively short periods of time.

Grant Thornton Corporate Finance has prepared this report on the basis of financial and other information provided by LCK and publicly available information. Grant Thornton Corporate Finance has considered and relied upon this information. Grant Thornton Corporate Finance has no reason to believe that any information supplied was false or that any material information has been withheld. Grant Thornton Corporate Finance has evaluated the information provided by LCK through inquiry, analysis and review, and nothing has come to our attention to indicate the information provided was materially misstated or would not afford reasonable grounds upon which to base our report. Nothing in this report should be taken to imply that Grant Thornton Corporate Finance has audited any information supplied to us, or has in any way carried out an audit on the books of accounts or other records of LCK.

This report has been prepared to assist the Independent Directors in advising the Non-Associated Shareholders in relation to the Proposed Exercise. This report should not be used for any other purpose. In particular, it is not intended that this report should be used for any purpose other than as an expression of Grant Thornton Corporate Finance's opinion as to whether the Proposed Issue is fair and reasonable to the Non-Associated Shareholders.

LCK has indemnified Grant Thornton Corporate Finance, its affiliated companies and their respective officers and employees, who may be involved in or in any way associated with the performance of services contemplated by our engagement letter, against any and all losses, claims, damages and liabilities arising out of or related to the performance of those services whether by reason of their negligence or otherwise, excepting gross negligence and wilful misconduct, and which arise from reliance on information provided by LCK, which LCK knew or should have known to be false and/or reliance on information, which was material information LCK had in its possession and which LCK knew or should have known to be material and which did not provide to Grant Thornton Corporate Finance. LCK will reimburse any indemnified party for all expenses (including without limitation, legal expenses) on a full indemnity basis as they are incurred.

8.4 Consents

Grant Thornton Corporate Finance consents to the issuing of this report in the form and context in which it is included in the Notice of Meeting and Explanatory Memorandum to be sent to the Non-Associated Shareholders. Neither the whole nor part of this report nor any reference thereto may be included in or with or attached to any other document, resolution, letter or statement without the prior written consent of Grant Thornton Corporate Finance as to the form and content in which it appears.

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Appendix A – Valuation methodologies

Capitalisation of future maintainable earnings

The capitalisation of future maintainable earnings multiplied by appropriate earnings multiple is a suitable valuation method for businesses that are expected to trade profitably into the foreseeable future. Maintainable earnings are the assessed sustainable profits that can be derived by a company's business and excludes any abnormal or "one off" profits or losses.

This approach involves a review of the multiples at which shares in listed companies in the same industry sector trade on the share market. These multiples give an indication of the price payable by portfolio investors for the acquisition of a parcel shareholding in the company.

Discounted future cash flows

An analysis of the net present value of forecast cash flows or DCF is a valuation technique based on the premise that the value of the business is the present value of its future cash flows. This technique is particularly suited to a business with a finite life. In applying this method, the expected level of future cash flows are discounted by an appropriate discount rate based on the weighted average cost of capital. The cost of equity capital, being a component of the WACC, is estimated using the Capital Asset Pricing Model.

Predicting future cash flows is a complex exercise requiring assumptions as to the future direction of the company, growth rates, operating and capital expenditure and numerous other factors. An application of this method generally requires cash flow forecasts for a minimum of five years.

Orderly realisation of assets

The amount that would be distributed to shareholders on an orderly realisation of assets is based on the assumption that a company is liquidated with the funds realised from the sale of its assets, after payment of all liabilities, including realisation costs and taxation charges that arise, being distributed to shareholders.

Market value of quoted securities

Market value is the price per issued share as quoted on the ASX or other recognised securities exchange. The share market price would, prima facie, constitute the market value of the shares of a publicly traded company, although such market price usually reflects the price paid for a minority holding or small parcel of shares, and does not reflect the market value offering control to the acquirer.

Comparable market transactions

The comparable transactions method is the value of similar assets established through comparative transactions to which is added the realisable value of surplus assets. The comparable transactions method uses similar or comparative transactions to establish a value for the current transaction.

Comparable transactions methodology involves applying multiples extracted from the market transaction price of similar assets to the equivalent assets and earnings of the company. The risk attached to this valuation methodology is that in many cases, the relevant transactions contain features that are unique to that transaction and it is often difficult to establish sufficient detail of all the material factors that contributed to the transaction price.

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Appendix B – Comparable companies

Company	Description
Carbon Minerals Limited	Carbon Minerals Limited, together with its subsidiaries, explores for natural resources in the Commonwealth of Australia. It holds interests in the Gunnedah Basin Coal-Seam-Gas Project located in New South Wales. The company is based in Sydney, Australia. Carbon Minerals Limited is a subsidiary of Magnum Resources Pty Limited.
Icon Energy Limited	Icon Energy Limited engages in the exploration, appraisal, and development of oil and gas properties. The company primarily conducts its exploration activities in the Cooper/Eromanga and Surat basins in Australia. It also operates in the petroleum sector. The company was formerly known as Icon Oil NL and changed its name to Icon Energy Limited in November 2000. Icon Energy Limited was founded in 1993 and is headquartered in Gold Coast, Australia.
Comet Ridge Limited	Comet Ridge Limited engages in the exploration and appraisal for coal seam gas resources and reserves in eastern Australia. The company has 100% interests in the ATP 743P and ATP 744P permits with a total area of 7,491 square kilometres located in the Galilee Basin; 20% interests in the ATP 1015 permit covering an area of 873 square kilometres located in the Galilee Basin; and 40% interests in the ATP 337P Mahalo project with an area of 911 square kilometres located in the Southern Bowen Basin, Queensland. It also holds interests in the PEL 427, PEL 428, and PEL 6 permits covering a total area of approximately 17,000 square kilometres located in the northern Gunnedah Basin, New South Wales; and holds 100% interests in the PMP 50100 permit covering an area of approximately 140 square kilometres located in the West Coast in South Island, New Zealand. The company was incorporated in 2003 and is based in Brisbane, Australia.
Galilee Energy Limited	Galilee Energy Limited, through its subsidiaries, engages in the exploration and production of oil and gas properties in Australia, Chile, and North America. The company primarily explores for coal seam gas. Its flagship project is the Glenaras Gas Project located within the ATP529 permit, which covers an area of approximately 4000 square kilometres in western Queensland's Galilee Basin. The company is based in Brisbane, Australia.
Blue Energy Limited	Blue Energy Limited, an energy company, explores, evaluates, and develops conventional and unconventional oil and gas resources in Queensland and the Northern Territory in Australia. The company was incorporated in 1992 and is based in Brisbane, Australia.
Senex Energy Limited	Senex Energy Limited explores, develops, and produces oil and gas resources in Australia. It holds a portfolio of oil and gas assets in Australia's Cooper-Eromanga Basin, as well as coal seam gas tenements in Queensland's Surat Basin. The company was formerly known as Victoria Petroleum NL and changed its name to Senex Energy Limited in 2010. Senex Energy Limited is headquartered in Brisbane, Australia.
Strike Energy Limited	Strike Energy Limited operates as an oil and gas exploration and production company in Australia and the United States. It primarily focuses on the Southern Cooper Basin Gas Project that covers a net area of 14,988 square kilometres located in South Australia. The company also evaluates and develops energy projects. Strike Energy Limited was founded in 1997 and is based in Paddington, Australia.
Armour Energy Limited	Armour Energy Limited focuses on the discovery and development of natural gas and associated liquid resources in Australia. It has 100% interests in the McArthur, South Nicholson, and Georgina Basins covering an area of 33 million acres in the Northern Territory and Queensland; and interests in the onshore Gippsland Basin, Victoria in joint venture with Lakes Oil NL. The company, through its subsidiaries, also holds interests in 7 exploration permits for minerals (EPM's) in Queensland, within the area covered by ATP1087; and 20 EPM's and 1 application covering various applications and tenements. Armour Energy Limited was founded in 2009 and is based in Brisbane, Australia.
Cooper Energy Limited	Cooper Energy Limited discovers, develops, and sells oil and gas properties. The company holds interests in petroleum exploration tenements in the Cooper, Otway, and Gippsland basins in Australia; the South Sumatra basin in Indonesia; and the Bargou, Nabeul, and Hammamet permit areas off the coast of Tunisia. As of June 30, 2016, it had proved and probable reserves of approximately 3.1 million barrels of oil. The company is headquartered in Adelaide, Australia.
Central Petroleum Limited	Central Petroleum Limited engages in the development, production, processing, and marketing of hydrocarbons in Australia. It holds interests in various oil and gas properties with 228,740 square kilometres of exploration permits in Northern Territory, Australia. The company was founded in 1998 and is based in Brisbane, Australia.
Beach Energy Limited	Beach Energy Limited explores, develops, produces, and sells oil, gas, and gas liquids. It holds interests in approximately 300 exploration and production tenements in Australia, Tanzania, and New Zealand. The company was formerly known as Beach Petroleum Limited and changed its name to Beach Energy Limited in December 2009. Beach Energy Limited was founded in 1961 and is headquartered in Glenside, Australia.

Source: S&P Global

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Appendix C – Companies using ISG technology

We have set out below a description and brief history of the listed companies that have attempted to apply ISG technology in Australia:

- Linc Energy Limited operated a coal-to-LNG demonstration facility near Chinchilla, QLD and had set up a pilot gas-producing plant using ISG technology. The company had also attempted to design a coal-to-gas facility. However, in April 2015, the Queensland Government commenced legal action against Linc Energy, alleging that their underground coal gasification plant had contaminated the soil around the Hopeland area of Queensland with carbon monoxide, hydrogen and hydrogen sulphide. Although the company refuted these allegations, the legal action and downturn in commodity prices together led to the company being placed into administration in 2016. Subsequently, the company was liquidated.

- Carbon Energy Limited constructed a pilot scale, oxygen-injected UCG plant at Bloodwood Creek, near Dalby, QLD. In 2011, the company also was successful in producing electricity from the gas generated. However, during 2012-13, the Queensland Government appointed an Independent Scientific Panel, which recommended the decommissioning and rehabilitation of the Bloodwood Creek operations. This was completed in July 2016, when the company received confirmation from the Queensland government that it had met the recommendations set by the Panel.

- Cougar Energy Limited had opened a UCG trial project near Kingaroy, QLD, which was able to produce syngas in 2010. However, in July 2010, the plant was shut down after traces of benzene and toluene were found in the groundwater. The company was also fined A$75,000 for the same. In 2011, the company initiated legal action against the Queensland Government, seeking compensation for the shutdown as well as the reopening of the plant.

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Appendix D – Glossary

$ or A$	Australian Dollar
2C	Best estimate Proved plus Probable Prospective Reserves
2P	Best estimate Proved plus Probable Contingent Resources
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
APES	Accounting Professional and Ethical Standards
APES110	Code of ethics for Professional Accounting
ASIC	Australian Securities Investment Commission
ASX	Australian Stock Exchange
CNE	China New Energy Group Limited
Corporations Act	Corporations Act 2001
CSG	Coal Seam Gas
DCF	Discounted Cash Flow
Independent Directors	The Independent Directors of LCK
EBITDA	Earnings before interest, tax, depreciation and amortisation
EV	Enterprise Value
FSG	Financial Services Guide
FY	Financial year ended 30 June
GJ	Gigajoule
GPG	Gas powered generation
GTCF, Grant Thornton, or Grant Thornton Corporate Finance	Grant Thornton Corporate Finance Pty Ltd
ISG	In-situ gasification
JORC/ JORC Code	The JORC (the "Joint Ore Reserves Committee") Code is a standard used for the public disclosure of Mineral Resource as defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore.
LCEP	Leigh Creek Energy Project
LCK or the Company	Leigh Creek Energy Limited
LNG	Liquefied Natural Gas
Non-Associated Shareholders	Shareholders of LCK not associated with CNE
NSW	New South Wales
pa	Per annum
PCD	Pre-commercial development
PJ	Petajoule
PEL	Petroleum Exploration License
PELA	Petroleum Exploration License Application
PRRT	Petroleum Resource Rent Tax
QLD	Queensland
R&D	Research and Development
RG	Regulatory Guide
RG111	ASIC Regulatory Guide 111 "Contents of expert reports"
RG112	ASIC Regulatory Guide 112 "Independence of Experts"
RG74	ASIC Regulatory Guide 74 "Acquisitions agreed to by shareholders"
SA	South Australia
SPE-PRMS	Society of Petroleum Engineers – Petroleum Resources Management System
STTM	Short Term Trading Market
UCG	Underground coal gasification
VWAP	Volume Weighted Average Price

WA	Western Australia
WACC	Weighted Average Cost of Capital