

28 July 2017
Manager Companies
Companies Announcements Office
Australian Securities Exchange Limited

# Quarterly report for the three months to 30 June 2017

# **Highlights**

- Fabrication of Pre-Commercial Demonstration (PCD) facility begins
- Significant capital raising with major investor China New Energy (CNE)
- Independent Expert Report (IER) in progress to support approval of Tranche 3
- Australian energy market turmoil continues

Leigh Creek Energy Limited (LCK) is pleased to provide an update on the development of the Leigh Creek Energy Project (LCEP) in South Australia for the three months to 30 June 2017.

# **Pre-Commercial Demonstration Stage update**

The completion of the first two tranches of the capital raising sets the foundation for the construction of the Pre-Commercial Demonstration plant (PCD). Construction and operation of the PCD will serve many purposes. Not only will it physically display the production of syngas from LCK's gasification technology, it will also provide the South Australian Government with the environmental data required for commercial scale approvals, and it will deliver the economic parameters for final design planning for the commercial plant.

The construction and operation of the PCD facility will be a major de-risking event for LCK and a significant step forward in its plans to commercialise its Leigh Creek Energy Project (LCEP) in South Australia.

#### **Construction Contracts**

With the first two tranches of funding for the PCD in place, LCK's work programmes are being accelerated through the awarding of contracts to construct and install PCD items.

Gasco Pty Ltd (Gasco) has been awarded the contract for supply of the Thermal Oxidiser and Cold Vent. Gasco is a leading combustion and specialist engineering company in Australia. The Thermal Oxidiser combusts Syngas at high temperature, allowing the disposal of organic and condensate products from operation of the PCD. The Cold Vent is a safety device which would be used in the event of a blockage or accident in the gas processing equipment or thermal oxidiser. This is essentially the PCD's safety pressure release valve.

ABB Australia Pty Ltd (ABB) has been awarded the contracts for supply of the Gas Analyser and Gas Instruments, realizing further cost and operational efficiencies. ABB is a global technology leader that works closely with utility, industry, transportation and infrastructure customers. The Gas Analysis package is a critical piece of equipment for the PCD, as it will analyse the Syngas composition for commercial considerations. The instrumentation package is required for correct operation of the PCD plant.

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Ottoway Engineering will provide bespoke gas handling equipment for the PCD to transport syngas from the underground gasifier to the Thermal Oxidiser. The scope of this contract is the fabrication and installation of the above ground plant for the PCD including piping, knock-out, metering and condensate handling skids. Importantly, the fabricator will be installing the equipment on site ready for commissioning and operation. Ottoway Engineering is one of Australia's leading mechanical fabrication and installation contracting companies and provides specialised services to the petro-chemical, mining, defence and water industries.

ATSys will provide electrical, controls and high end communication and data transfer systems for the PCD. ATSys is a control systems integration specialist in electrical and control systems design, programming and configuration, testing and commissioning, support and maintenance of systems.

Subject to gaining the necessary approvals, it is anticipated that fabrication of these elements of the PCD will be complete in October 2017, installed on site November 2017, with commissioning (including testing and operator training) planned for December 2017.

The PCD will use commercial-scale equipment and be operated at commercial rates of production. For this reason, the transition from pre-commercial to commercial operations will only require replication.

# **Environmental Baseline Drilling program complete**

The program for drilling baseline groundwater and pressure monitoring wells is complete. This program comprised three groundwater monitoring wells and one pressure monitoring well. Data from these wells is being analysed to complete the conceptual model for environmental baseline characterisation. The conceptual model identifies the baseline environmental conditions of the PCD which is an essential input into the documents seeking approval to operate the PCD.

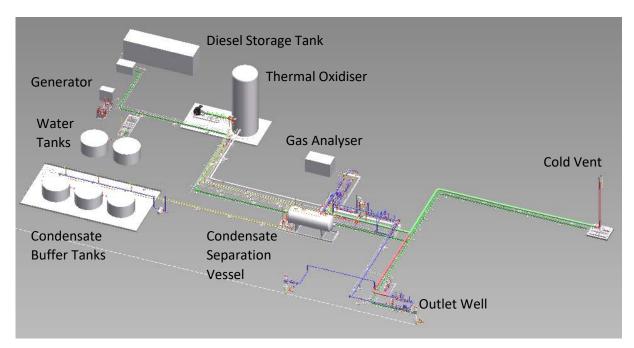
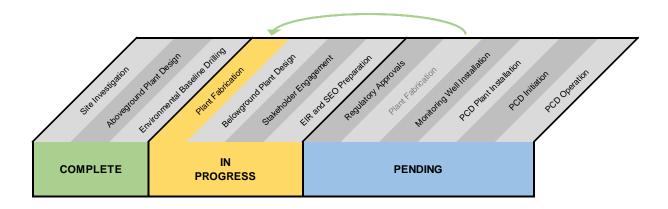


Figure 1: Indicative view of the PCD plant components

# **PCD Progress Summary**

With the funding for the construction of the PCD secured, the driving focus of the LCK Operations team is towards flaring of demonstration gas in the fourth quarter of 2017. The LCEP is accelerating rapidly. Current and expected progress is represented in the following graphic:



# LCK is an emerging Energy Company

LCK has a certified PRMS 2C Syngas Resource of 2963.9 PJ of syngas (refer ASX announcement January 8, 2016). The syngas produced from the In Situ Gasification (ISG) process can be utilised for various purposes including power generation, pipeline quality Natural Gas, and fertiliser production. With ongoing studies determining the most appropriate pathway to commercialisation, LCK is ideally situated to take advantage of the current and future anticipated market volatility and opportunities this creates.

Each of the potential pathways to commercialisation hold in common that the first and immediate step is completion of the Pre-Commercial Demonstration plant (PCD).

# **Corporate**

#### Settlement of capital raising funds

As previously announced, LCK completed a substantial capital raising at the end of the March Quarter. The total amount raised is \$21.85m, before fees, at an average share price of \$0.146 in three tranches. The first tranche of \$5.9m at an issue price of \$0.135 settled in the March Quarter. The second tranche of \$3.4m, at an issue price of \$0.15, settled in early May 2017, three weeks before the original due date. The third tranche of \$12.5m, also at \$0.15 per share, will be subject to a shareholder vote at a General Meeting planned for later this quarter.

When LCK made the initial announcement of the three stage capital raising it was intended that the settlement of Tranche 3 would occur no later than eight weeks after the completion of Tranche 2. The timeline has now been modified in agreement with China New Energy (CNE). As this third Tranche will take CNE to greater than a 20% shareholding in LCK, a General Meeting of shareholders is required to approve the transaction. Preparations for this General Meeting are currently underway including the commissioning of an Independent Experts' Report.

### **Fully funded for construction of PCD**

As of 30 June, the company's total cash balance was \$8.7m with planned expenditure in the coming quarter of \$6.6m. With the additional funds from Tranche 3 and continued access to the CBA R&D working capital debt facility (subject to negotiation), we remain on schedule to be fully funded through to completion of the PCD. A summary of the cash flows for the quarter are attached in the Appendix 5B.

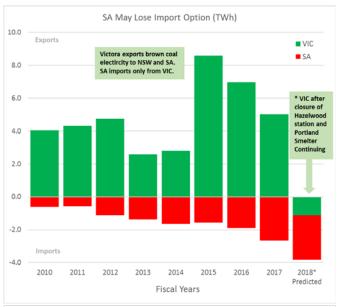
#### 249D Notices

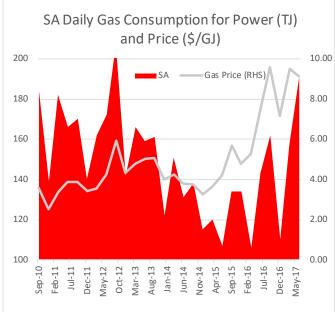
During the quarter, the company was served with two 249D notices by a group of shareholders. Based on legal advice, LCK determined both notices were invalid and did not call a general meeting as requested by these shareholders.

# The energy crisis exacerbates

The difficulties in the energy markets in Australia were brought into sharp focus by the Condition Black event in South Australia in September 2016. In November 2016, there was another large power outage in South Australia. Since September 2016, LCK has been the subject of various approaches from the perspective of both an electricity producer and a gas supplier. We are in active discussion with potential customers and partners for delivery of the LCEP.

It is widely acknowledged in the media, by government regulators, analysts, and the private sector and its representative organisations, that the markets for both gas and electricity are currently severely supply constrained.





Source: AER, NEM Inter-Regional Trade, Gas Use, and STTM

#### **Electricity Market:**

The Hazelwood Power Station in Victoria which recently closed was a 1600MW brown coal fired power station producing about 11TWh of electricity per year, and was a major supplier in Victoria. The closure leaves South Australia with less available power for import when its wind turbines are not generating. The impact of the closure has been felt immediately, with average prices across the National Electricity Market (NEM) jumping markedly. As a reference point, wholesale electricity prices in South Australia prior to 2013 averaged \$54/MWh but in the March quarter prices tripled to \$160/MWh. The average of FY2017 was a record high \$123/MWh.

Victoria has been the only source of imported power in to South Australia. However, with the closure of the brown coal Hazelwood power station in Victoria and the continuation of the Portland Aluminium Smelter (due to government subsidies) we predict that the state will become a net importer of electricity in FY2018. This means that South Australia may lose its import option on the National Electricity Market.

# **Gas Market:**

Gas prices have also remained high during the period with average Adelaide gas prices of \$9.11/GJ for FY17 compared to long run average prices of around \$3-4/GJ. National financial media outlets continue to report that some consumers have been forced to accept

contracts between \$15/GJ and \$20/GJ if the gas is available at all.

#### **Tenements**

As of 30 June 2017, LCK had a 100% interest in the licences listed below, all in South Australia, through LCK's wholly owned subsidiary Leigh Creek Operations Pty Ltd.

- Petroleum Exploration Licence 650
- Gas Storage Exploration Licence 662
- Petroleum Exploration Licence Application 582
- Petroleum Exploration Licence Application 643
- Petroleum Exploration Licence Application 644
- Petroleum Exploration Licence Application 647
- Petroleum Exploration Licence Application 649

# Events subsequent to 30 June, 2017

LCK held a meeting of shareholders on 21 July to ratify Tranche1 and Tranche2 of the CNE capital raising that the company announced in March 2017. Both resolutions were carried with a clear majority. This will allow LCK a refresh on shares already placed and provides flexibility in the future.

Commenting on the quarterly progress, Chief Executive Officer Phil Staveley said:

"The last quarter has been an exciting one, with activity levels within the Company raised significantly following the successful capital raise with funds being applied to accelerating construction of the PCD, which is on target for completion and operation by the end of the year. The company has completed its environmental baseline drilling program, and the data from this will be used in the assessment and approval documents for the operation of the PCD. After quarter end, the overwhelmingly favourable results of the general meeting in July were a clear endorsement of management's plans for the direction of the Company."

Leigh Creek Energy – bringing reliable energy to South Australia.

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#### About Leigh Creek Energy

Leigh Creek Energy Limited (LCK) is an emerging gas company focused on developing its Leigh Creek Energy Project (LCEP), located in South Australia. The LCEP will produce high value products such as methane, electricity and potentially fertiliser and industrial explosives from the remnant underground coal resources at Leigh Creek utilising In Situ Gasification (ISG) technologies, and will provide long term growth and opportunities to the communities of the northern Flinders Ranges and South Australia.

The Company is committed to developing the LCEP using a best practice approach to mitigate the technical, environmental and financial project risks.

Leigh Creek Energy acknowledges and respects the Adnyamathanha people, the Traditional Owners of the land on which its operations occur and pay our respects to their Elders past and present.

# Resource Compliance Statement

The information in this announcement that relates to the 2C Contingent Syngas Resource was detailed in an announcement lodged with ASX on 8 January 2016 and is available to view at www.lcke.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in that announcement and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. All estimates are based on the deterministic method for estimation of petroleum resources.

# **Forward Looking Statements**

This announcement may contain forward looking statements. Forward-looking statements include, but are not limited to, statements concerning the Company's planned mining and exploration programs and other statements that are not historical facts. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward-looking statements.

In addition, estimates of resources could also be forward-looking statements. Although the Company believes that its expectations reflected in these statements are reasonable, they may be affected by a variety of changes in underlying assumptions which could cause actual results or trends to differ, including but not limited to: price fluctuations, actual demand, currency fluctuations, drilling and production results, reserve estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates amongst other items, and the cumulative impact of items.

For a more detailed discussion of such risks and other factors, see the Company's Annual Reports, as well as the Company's other filings. Readers should not place undue reliance on forward looking information. The Company does not undertake any obligation to release publicly any revisions to any forward —looking statement to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

+Rule 5.5

# **Appendix 5B**

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

# Name of entity

| LEIGH CREEK ENERGY LIMITED            |  |  |  |
|---------------------------------------|--|--|--|
| ABN Quarter ended ("current quarter") |  |  |  |
| 31 107 531 822 June 2017              |  |  |  |

| Con | solidated statement of cash flows              | Current quarter<br>\$A'000 | Year to date (12<br>months)<br>\$A'000 |
|-----|--|----------------------------|--|
| 1.  | Cash flows from operating activities           |                            |  |
| 1.1 | Receipts from customers                        |                            |  |
| 1.2 | Payments for                                   |                            |  |
|     | (a) exploration & evaluation                   | (1,128)                    | (5,542)                                |
|     | (b) development                                |                            |  |
|     | (c) production                                 |                            |  |
|     | (d) staff costs                                | (503)                      | (2,829)                                |
|     | (e) administration and corporate costs         | (583)                      | (2,659)                                |
| 1.3 | Dividends received (see note 3)                |                            |  |
| 1.4 | Interest received                              | 7                          | 33                                     |
| 1.5 | Interest and other costs of finance paid       | -                          | (5)                                    |
| 1.6 | Income taxes paid                              |                            |  |
| 1.7 | Research and development refunds               | -                          | 835                                    |
| 1.8 | Other (provide details if material)            |                            |  |
| 1.9 | Net cash from / (used in) operating activities | (2,207)                    | (10,167)                               |

| 2.  | Cash flows from investing activities |      |       |
|-----|--------------------------------------|------|-------|
| 2.1 | Payments to acquire:                 |      |       |
|     | (a) property, plant and equipment    | (64) | (126) |
|     | (b) tenements (see item 10)          |      |       |
|     | (c) investments                      |      |       |
|     | (d) other non-current assets         |      |       |

<sup>+</sup> See chapter 19 for defined terms

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| Con | solidated statement of cash flows              | Current quarter<br>\$A'000 | Year to date (12<br>months)<br>\$A'000 |
|-----|--|----------------------------|--|
| 2.2 | Proceeds from the disposal of:                 |                            |  |
|     | (a) property, plant and equipment              | -                          | 2                                      |
|     | (b) tenements (see item 10)                    |                            |  |
|     | (c) investments                                | -                          | 27                                     |
|     | (d) other non-current assets                   |                            |  |
| 2.3 | Cash flows from loans to other entities        |                            |  |
| 2.4 | Dividends received (see note 3)                |                            |  |
| 2.5 | Other (provide details if material)            |                            |  |
| 2.6 | Net cash from / (used in) investing activities | (64)                       | (97)                                   |

| ·    |   | T     |        |
|------|---|-------|--------|
| 3.   | Cash flows from financing activities  |       |        |
| 3.1  | Proceeds from issues of shares  | 3,620 | 9,315  |
| 3.2  | Proceeds from issue of convertible notes                                    |       |        |
| 3.3  | Proceeds from exercise of share options                                     |       |        |
| 3.4  | Transaction costs related to issues of shares, convertible notes or options | (577) | (577)  |
| 3.5  | Proceeds from borrowings  | 1,610 | 1,610  |
| 3.6  | Repayment of borrowings   |       |        |
| 3.7  | Transaction costs related to loans and borrowings                           | 23    | (95)   |
| 3.8  | Dividends paid  |       |        |
| 3.9  | Other (provide details if material)  Government Grant                       | -     | 20     |
| 3.10 | Net cash from / (used in) financing activities                              | 4,676 | 10,273 |

| 4.  | Net increase / (decrease) in cash and cash equivalents for the period |         |          |
|-----|---|---------|----------|
| 4.1 | Cash and cash equivalents at beginning of period                      | 6,342   | 8,738    |
| 4.2 | Net cash from / (used in) operating activities (item 1.9 above)       | (2,207) | (10,167) |
| 4.3 | Net cash from / (used in) investing activities (item 2.6 above)       | (64)    | (97)     |
| 4.4 | Net cash from / (used in) financing activities (item 3.10 above)      | 4,676   | 10,273   |
| 4.5 | Effect of movement in exchange rates on cash held                     |         |          |
| 4.6 | Cash and cash equivalents at end of period                            | 8,747   | 8,747    |

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

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| 5.  | Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts | Current quarter<br>\$A'000 | Previous quarter<br>\$A'000 |
|-----|---|----------------------------|-----------------------------|
| 5.1 | Bank balances   | 297                        | 6,342                       |
| 5.2 | Call deposits   | 2,450                      | -                           |
| 5.3 | Bank overdrafts   |                            |                             |
| 5.4 | Other (Term deposits)   | 6,000                      | -                           |
| 5.5 | Cash and cash equivalents at end of quarter (should equal item 4.6 above)   | 8,747                      | 6,342                       |

| 6.  | Payments to directors of the entity and their associates                       | Current quarter<br>\$A'000 |
|---|--|----------------------------|
| 6.1   | Aggregate amount of payments to these parties included in item 1.2             | 117                        |
| 6.2   | Aggregate amount of cash flow from loans to these parties included in item 2.3 | -                          |
| 6.3 Include below any explanation necessary to understand the traitiems 6.1 and 6.2 |  | ns included in             |
|   |  |                            |
|   |  |                            |

| 7.  | Payments to related entities of the entity and their associates                | Current quarter<br>\$A'000 |
|-----|--|----------------------------|
| 7.1 | Aggregate amount of payments to these parties included in item 1.2             | 17                         |
| 7.2 | Aggregate amount of cash flow from loans to these parties included in item 2.3 | -                          |

7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

Piper Alderman lawyers were paid for legal services rendered to the Group. Non-Executive Director Greg English is a partner at Piper Alderman lawyers.

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

| 8.  | Financing facilities available Add notes as necessary for an understanding of the position | Total facility amount at quarter end \$A'000 | Amount drawn at<br>quarter end<br>\$A'000 |
|-----|--|--|---|
| 8.1 | Loan facilities  | 2,000  | 1,610                                     |
| 8.2 | Credit standby arrangements  |  |   |
| 8.3 | Other (please specify)   |  |   |

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

Secured 12 month R&D working capital facility with Commonwealth Bank of Australia

| 9.  | Estimated cash outflows for next quarter | \$A'000 |
|-----|--|---------|
| 9.1 | Exploration and evaluation               | 5,151   |
| 9.2 | Development                              | -       |
| 9.3 | Production                               | -       |
| 9.4 | Staff costs                              | 612     |
| 9.5 | Administration and corporate costs       | 786     |
| 9.6 | Other                                    | 83      |
| 9.7 | Total estimated cash outflows            | 6,632   |

| 10.  | Changes in<br>tenements<br>(items 2.1(b) and<br>2.2(b) above)                                     | Tenement reference and location | Nature of interest | Interest at<br>beginning<br>of quarter | Interest<br>at end of<br>quarter |
|------|---|---------------------------------|--------------------|--|----------------------------------|
| 10.1 | Interests in mining<br>tenements and<br>petroleum tenements<br>lapsed, relinquished<br>or reduced |                                 |                    |  |                                  |
| 10.2 | Interests in mining<br>tenements and<br>petroleum tenements<br>acquired or increased              |                                 |                    |  |                                  |

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<sup>+</sup> See chapter 19 for defined terms

# **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Sign here: Date: 28 July 2017

Company secretary

Print name: Jordan Mehrtens

#### **Notes**

- 1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
- 2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

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<sup>+</sup> See chapter 19 for defined terms