

Tuesday, 26 February 2019: ASX ANNOUNCEMENT (ASX: LCK)

## Corporate Update

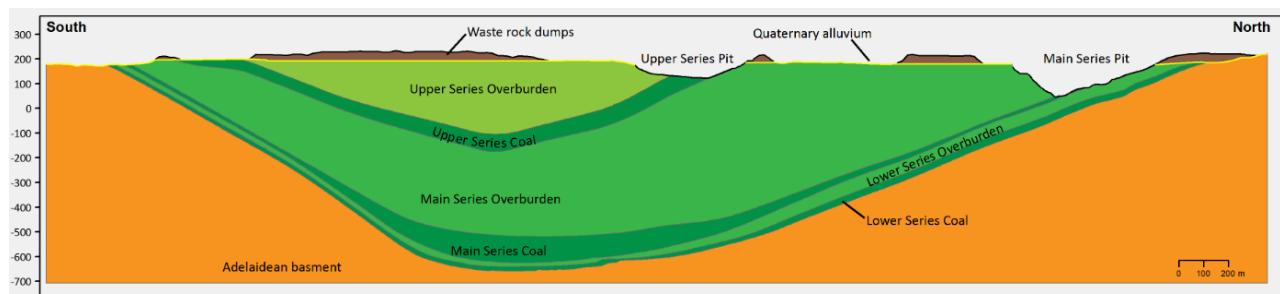
### Process for Reserve Upgrade Commenced

- Update on Reserve Upgrade Process to Convert 2C Resource to 2P Reserve
- Over 12 Expressions of Interest received for LCK gas

Leigh Creek Energy Limited (ASX: LCK) ("LCK" or "the Company") is pleased to provide an update on the corporate activities of the Company.

#### Reserve Upgrade Process to uplift PRMS from 2C Resources to 2P Reserves

LCK's current 2C Resource of 2,963.9 PJ is contained entirely within PEL 650. The PCD has demonstrated commercial gas production from 1 of 3 coal seams located within the Telford basin and there is additional opportunity for resource upgrades in the future. The Company expects to realise a significant reserve large enough to support a commercial project of over 20 years. Thereafter, LCK expects that additional resources will be upgraded as the project progresses.



Stylised Geological model of Telford Basin. PCD Operations were conducted within the Main Series Coal.

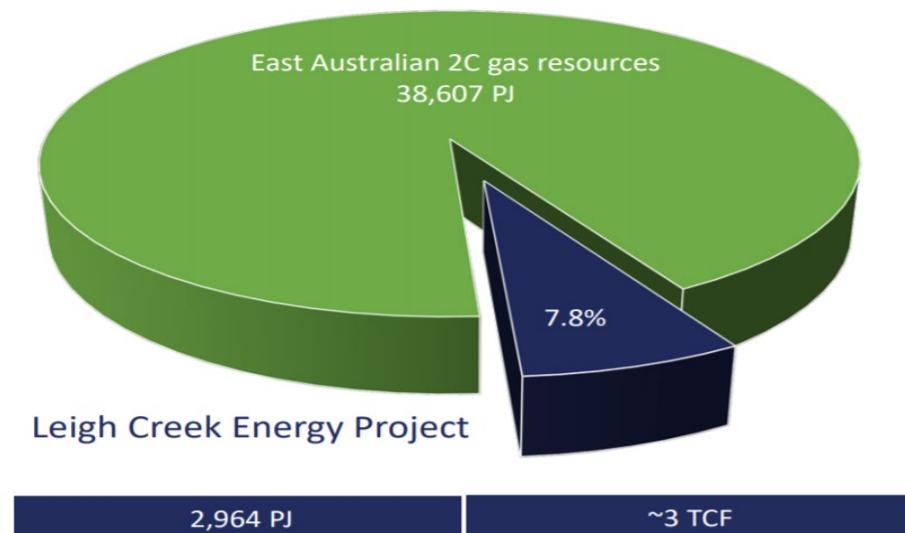
The Society of Petroleum Engineers (SPE) – Petroleum Resources Management System (PRMS) is the internationally recognised standard for reporting oil and gas resources and reserves. The PRMS is the petroleum equivalent to the Australian JORC system for minerals.

On 8<sup>th</sup> of January 2016, LCK announced its maiden PRMS 2C gas resource of 2,963.9 PJ. The independent certification of the gas resource at the Company's Leigh Creek tenement was conducted by MHA Petroleum Consultants LLC (MHA), unconventional energy specialist based in Denver, Colorado. MHA is an internationally recognised PRMS certifier and has conducted hundreds of reserve and resource evaluations in the U.S. and internationally, both onshore and offshore, under various scenarios defined by the PRMS, SEC, and NI 51-101. MHA has extensive experience in converting complex technical reservoir data, production forecasts, and economic information into comprehensive reserve and resource evaluations.

MHA maintains a large number of blue-chip international clients including Santos Ltd, Origin Energy Resources (Australia), ConocoPhillips, BP PLC, ExxonMobil, Halliburton, Koch Industries, Murphy Oil Canada, Sasol Petroleum International, Schlumberger, and Royal Dutch Shell.

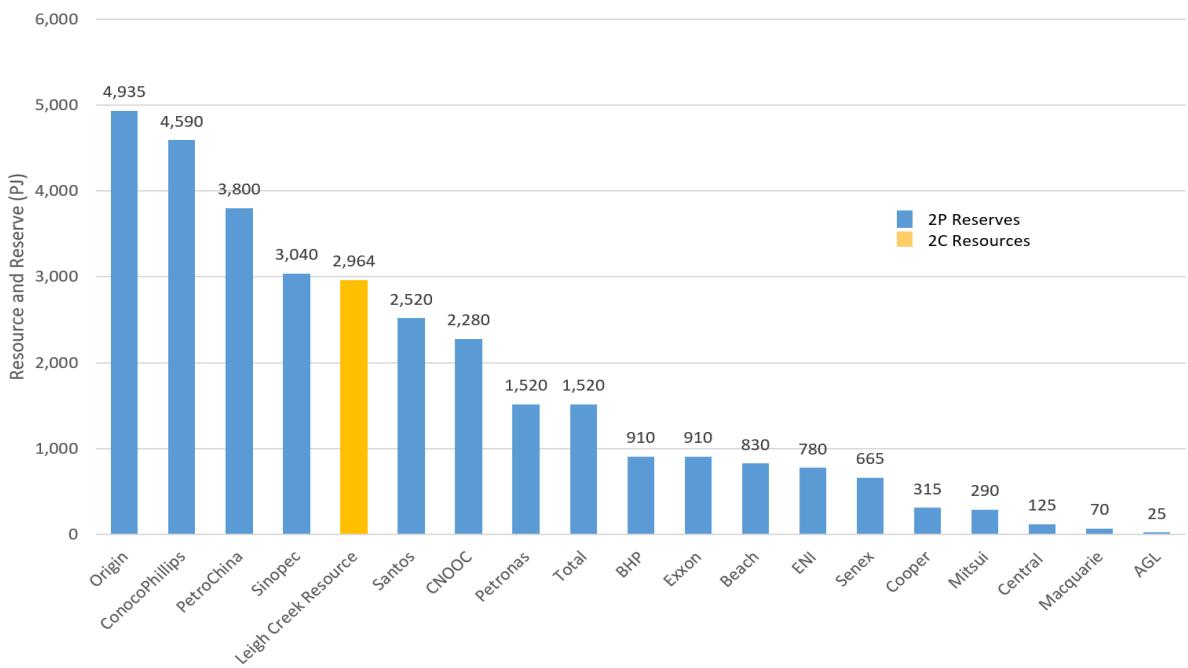
## Context of the LCK Resource

LCK is in the process of working with MHA to upgrade its current 2,963.9 PJ 2C resource, which represents 7.8% of Australian East Coast Gas resources, to a 2P Reserve. The Company anticipates updating the market during Q1 2019.



Source: EnergyQuest Quarterly Report, December 2017

## East Coast Gas Reserves vs LCK Resources



Source: CCZ and the Australian Energy Regulator

## Gas Expressions of Interest Process

The Company recently invited expressions of interest (EOI) from parties for up to 50PJ per annum produced by LCK at Leigh Creek. As a result of the EOI the Company has received over a dozen formal responses from several of Australia's largest gas retailers and users. The Company will continue these discussions on an ongoing basis and will advise the market accordingly of any material developments.

The Pre-Commercial Demonstration (PCD) produced all the targeted commercial gases with a peak flow rate of 8,913sm<sup>3</sup> per hour (7.5mmcf per day) from a single gasifier. The Company is designing its commercial-scale project to operate 20 or more gasifiers. The results of the EOI process will provide valuable insight into how many gasifiers LCK's offtake customers require and the number of gasifiers required for LCK to develop sufficient resources for its own needs.

## Expressions of Interest

- 50PJ/year available for purchase
  - Pipeline gas
- One of Australia's largest 2C resource
  - Rare opportunity to secure gas

Leigh Creek Energy (ASX: LCK) is seeking Expressions of Interest (EOI) for the sale of up to 50PJ of gas per annum.

LCK plans to sell to Australian companies in need of gas.

This EOI is for gas surplus to LCK's needs in its planned fertiliser facility at Leigh Creek.

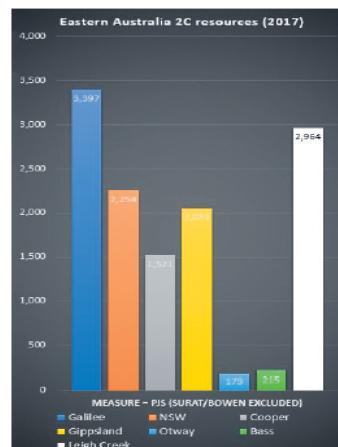
This is one of Australia's largest undeveloped and uncontracted gas resources.

LCK currently has a 2,964 PJ 2C resource.

This undervalued resource is about to be converted to a 2P reserve.

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*Expressions of interest can be made by contacting the company—[gassales@lcce.com.au](mailto:gassales@lcce.com.au)*



[lcce.com.au](http://lcce.com.au)

AUD\$1 PJ = 1.07 USD

## Ammonia and Urea Production

Globally, ammonia and urea are made by reforming Natural Gas (methane) into syngas (synthesis gas). In Australia, this process requires fertiliser producers to purchase natural gas at prices between \$8 and \$12 per GJ (*The Australian Newspaper 'Energy Costs Threaten Industry'* 12 December 2018), and then convert (reform) that gas at an extra cost to produce the syngas needed as the feedstock for ammonia and urea production. The LCK ISG process has a major cost advantage compared to other producers as our process starts with the syngas produced by ISG, making it significantly more cost-competitive than the process of reforming natural gas therefore LCK has the ability to create syngas for dramatically less than domestic producers (lowest point on the cost curve).

## Crown Ascent Development Funding Update

As previously announced the Company completed a convertible note agreement for AUD\$3m to Crown Ascent Development Ltd. It was to be paid in two tranches with the final tranche completing on the 24<sup>th</sup> of February 2019. As of this date AUD \$2.2m has been received and both parties have agreed to extend the date for the balance to the 7<sup>th</sup> of March 2019.

## Rights Issue

The Company announced on 8<sup>th</sup> January a 1:15 non-renounceable pro rata Rights Issue to existing eligible (as at 11 January 2019) LCK shareholders, at an issue price of \$0.12 per new share.

The Closing Date of this issue is 28<sup>th</sup> February 2019.

## Boardroom Radio

Justyn Peters, Executive Chairman of Leigh Creek Energy Limited and Tony Lawry, LCK Head of Investor Relations, were interviewed recently on Boardroom Media.

Topics covered included:

1. Status of LCK's Leigh Creek Energy Project in general and specifically the recent successful outcomes of the Pre-Commercial Demonstration stage
2. The Petroleum Resources Management System (PRMS) and what this means to LCK's pending recertification
3. LCK's future plans

The 10 minute interview can be found at:

<https://www.boardroom.media/broadcast-single/5c64b40577c6f42a1c42d130>

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### **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](http://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.*