

Thursday, 11 October 2018: ASX ANNOUNCEMENT (ASX: LCK)

LCK Produces First Syngas

- PCD operational - 'First Syngas' produced
- Initiation of Gasifier and First Syngas occurred on the 10th of October 2018
- 2C PRMS resource expected to be upgraded before end 2018

Leigh Creek Energy Limited (ASX: LCK) ("LCK" or "the Company") is pleased to announce that the Company successfully initiated the gasifier with the production of first syngas occurring on the 10th of October 2018. This is a great endorsement of the LCK technical team, LCK's shareholders who have supported the Company, and LCK's management team and staff who have never wavered in their commitment to producing syngas.



LCEP First Syngas Production Facility

Managing Director's comments

LCK Managing Director Phil Staveley commented: *"we are very pleased to be able to report that we have produced first syngas flows at the LCEP. This significant Company milestone unlocks a large energy resource and enables the Company to quickly move toward having this resource upgraded to reserve status by the end of 4Q 2018. We look forward to updating the market as we move closer to certification."*

PCD Design Parameters

LCK will operate the PCD with the aim to:

- Produce syngas, a combination of CO, CH₄ (the major component of natural gas piped around Australia), nitrogen and hydrogen;
- Produce syngas at over 1 million cubic feet per day (commercial design rates will be up to 3 times higher);
- Demonstrate that LCK can operate the ISG gasifier safely and in an environmentally responsible manner;

- Provide information for the development of the commercial project; and
- Provide the information required for the review of the existing SPE-PRMS 2C 2,963.9 PJ resource and the likely partial conversion from contingent resources to reserves (refer ASX announcement 8 January 2016).

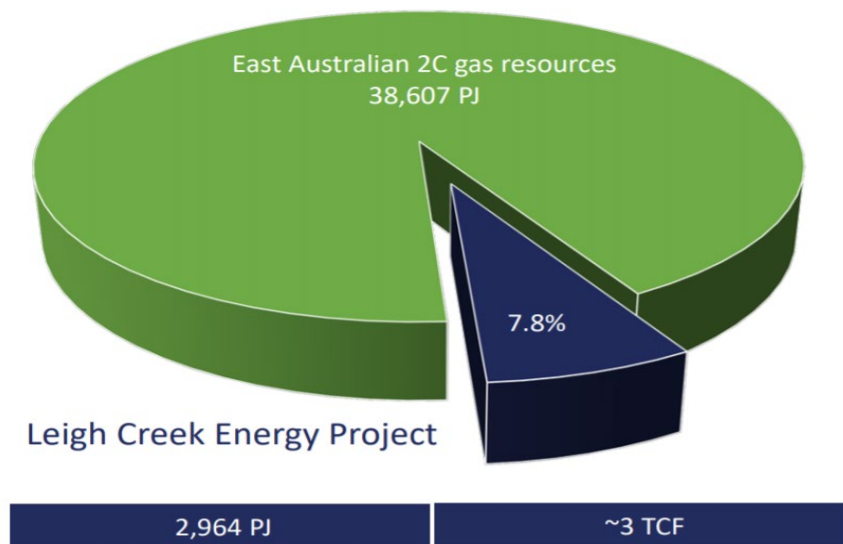
The Company will continue its extensive monitoring regime during the PCD operations stage. This information will then be analysed relative to the large amount of baseline environmental information the Company has collected to date.

Resource Use

LCK has many options with this syngas and is working with its partners to optimise the best use of it to provide the best return to shareholders. Amongst those options are:

- Electricity
- Pipeline Natural Gas
- Ammonia and Urea
- Other Petrochemical Products.

LCK has a 2,963.9PJ 2C resource. To put this quantity in context, as shown below, at end 2017, LCK's 2C resource represented approximately 7.8% of the East Australian 2C gas resources.



(EnergyQuest Quarterly Report, December 2017 Quarterly Report)

China New Energy Group Limited Share Placement

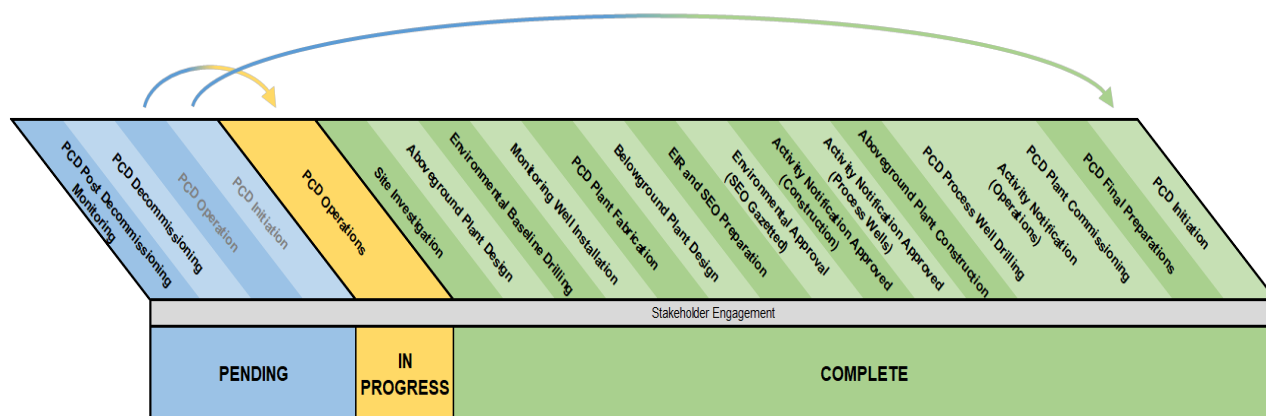
On 22 August 2018, the Company sought and received shareholder approval for the placement of 27,148,852 shares to China New Energy Group Limited (CNE), at a price of \$0.16 per share. In accordance with this approval, it was a requirement that the shares were issued within 1 month of the shareholder approval. LCK and CNE have been in discussion over the share price and both have agreed that it is in the best interest of LCK and all their shareholders that these shares be placed at a higher price considering LCK shares were trading at 24c when the trading halt was in place.

The Company will now seek to place this shortfall in due course, and is pleased to be able to do this in a stronger position after having commenced gasification at the Leigh Creek Energy Project. The Company continues its strong relationship with its major shareholder CNE and appreciates their continued support.

Summary

Successful initiation and production of first syngas is a significant milestone in LCK's progress to commercialisation. LCK is now moving toward meeting its next milestone and its near term 2018 objective of upgrading a portion of its 2,963.9PJ 2C resource to a 2P reserve by the end of Q4 2018.

Current and expected progress is represented in the following graphic:



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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. 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.

About Leigh Creek Energy

Leigh Creek Energy Limited (LCK) is an emerging energy company focused on developing its Leigh Creek Energy Project (LCEP), located in South Australia. The LCEP will produce high value products such as electricity, methane (synthetic natural gas) and ammonium nitrate products (fertiliser and industrial explosives) from the remnant coal resources at Leigh Creek, utilising In Situ Gasification (ISG) technologies, and will provide long term stability and economic development opportunities to the communities of the Upper Spencer Gulf, 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.

LCK acknowledges and respects the Adnyamathanha people, the Traditional Owners of the land on which its operations occur and pays its respects to their Elders past and present.