



PRE COMMERCIAL DEMONSTRATION SUCCESS



Non-Deal Corporate Presentation

February 2019

DISCLAIMER

This presentation has been completed by Leigh Creek Energy Limited. It may contain forward looking statements that are subject to risk factors associated with the energy industry. It's believed that the expectations reflected in these statements are reasonable, but 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 & production results, reserve estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal & regulatory developments, economic & financial market conditions in various countries & regions, political risks, project delay or advancement, approvals & cost estimates amongst other items, & the cumulative impact of items.

This presentation may also contain non-IFRS measures that are unaudited, but are derived from & reconciled to the audited accounts. All references to dollars, cents or \$ in this presentation are to Australian currency, unless otherwise stated.

Mineral Resource Compliance Statement

Estimates of Mineral Resources reported in this announcement were initially reported & released to the ASX on 8 Dec 2015. We are not aware of any new information or data that materially affects the information included in the 8 Dec 2015 announcement & all the material assumptions & technical parameters underpinning the estimates in that announcement continue to apply & have not materially changed.

Gas Resources Compliance Statement

Gas Resources reported in this announcement were initially reported & released to the ASX on 8 Jan 2016. We are not aware of any new information or data that materially affects the information included in the 8 Jan 2016 announcement & that all the material assumptions & technical parameters underpinning the estimates in that announcement continue to apply & have not materially changed. All estimates are based on the deterministic method for estimation of petroleum resources.



SUCCESSFUL PCD OPERATIONS



MILESTONES

April 2018
Environmental Approval

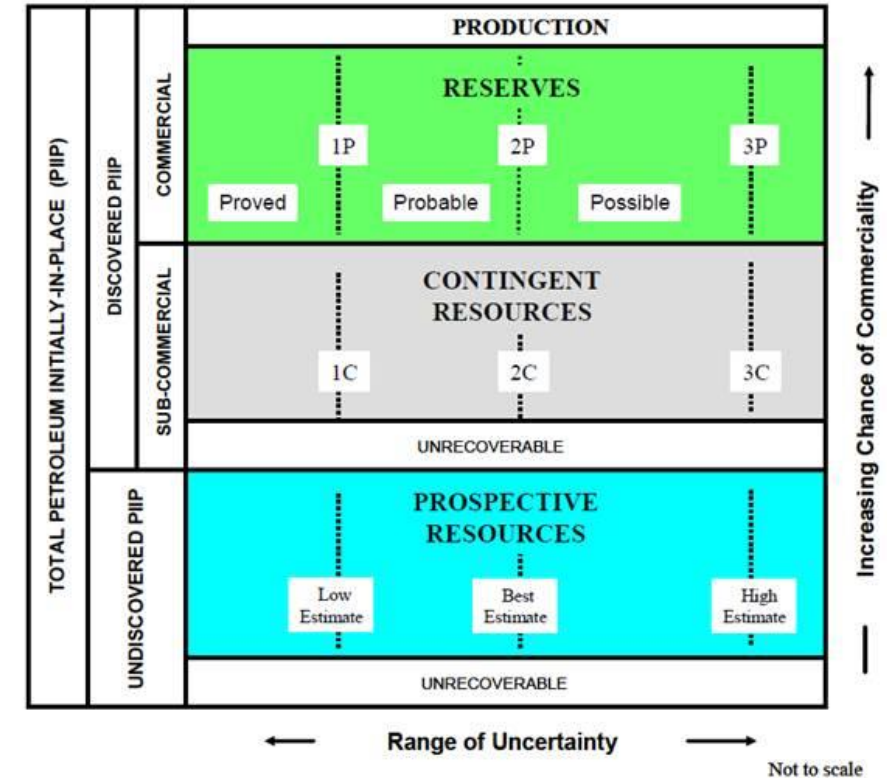
October 2018
PCD Operations/First Gas

February 2019
Commercial Gas

End Q1 2019
2P Reserve Certification

PCD OBJECTIVES ACHIEVED

- ✓ Produce syngas comprising Methane (CH₄), Hydrogen (H), Carbon Monoxide (CO) and Nitrogen (N)
- ✓ Produce syngas at over 1MMcfd
- ✓ Provide key data and information for the development of the commercial project
- ✓ Capture information required to upgrade the existing SPE-PRMS of 2,964 PJ 2C resource to 2P reserve
- ✓ Demonstrate that LCK can operate the In-Situ Gasification (ISG) gasifier safely and in an environmentally responsible manner



KEY LEARNINGS

1. Understanding of how Leigh Creek coal (all coal is different) reacts to ISG conditions
 - geology, hydrology, mechanical equipment
 - 'plastic' qualities
2. Updated well design to meet conditions
3. Time between drilling and initiation critical
4. First time we've drilled laterally at Leigh Creek



MILESTONE COMPLETIONS

1. Environmental Approval	Q2 2018	✓
2. Activity Notification – Construction of Surface Plant	Q2 2018	✓
3. Capital Raising	Q2 2018	✓
4. Pre-Commercial Demonstration (PCD) Construction Commences	Q2 2018	✓
5. Activity Notification – ISG Well Installation	Q2 2018	✓
6. Activity Notification – PCD Operations	Q2 2018	✓
7. Construction and Commissioning	Q3 2018	✓
8. ISG Well Pair Completed	Q3 2018	✓
9. Initiation of ISG Chamber/First Gas	Q3 2018	✓
10. Commercial Gas	Q1 2019	✓

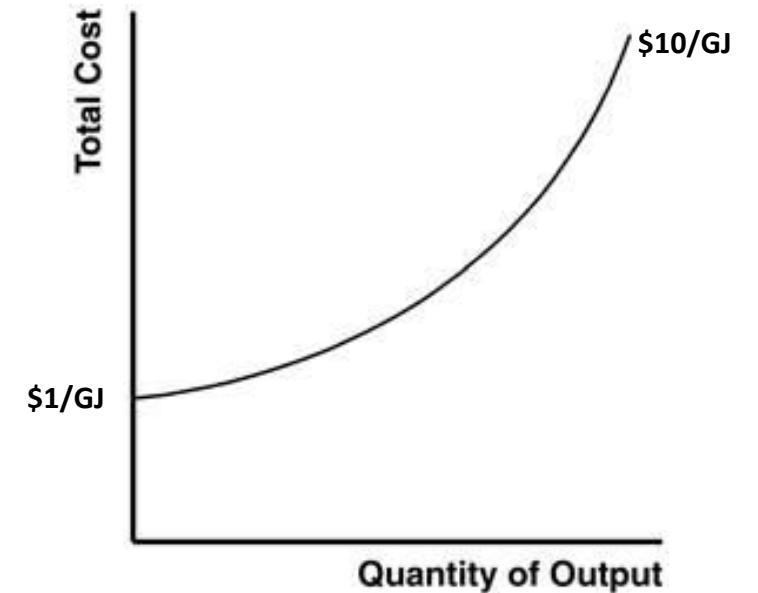
VALUE PROPOSITION – GAS AND UREA

1. Potentially (once upgraded) the largest uncontracted 2P reserve outside of Gladstone LNG projects in East Coast gas market
2. Key Events pending
 - 2P status
 - Joint Ventures
 - Near term revenue
 - Other commercial opportunities

Company	East Coast Gas Reserves (PJ)
Shell	11,204
Origin	5,202
ConocoPhillips	4,802
PetroChina	4,802
Sinopec	3,201
Santos	2,677
CNOOC	2,001
BHP	1,153
Exxon	1100
LCK	?
Senex	660
Beach	567
Cooper Energy	305
Central Petroleum	126

Reserve numbers from respective latest Company Annual Reports

Urea Cost Curve



- Syngas 70% input cost
- IPL – every \$1/GJ \uparrow CH₄ takes \$14m from NPAT
(Incitec Pivot 2018 Annual Report)

STRONG MARKET DYNAMICS

GAS DEMAND

1. East Coast Gas Crisis
2. \$10GJ 'norm'
3. Contract certainty/term

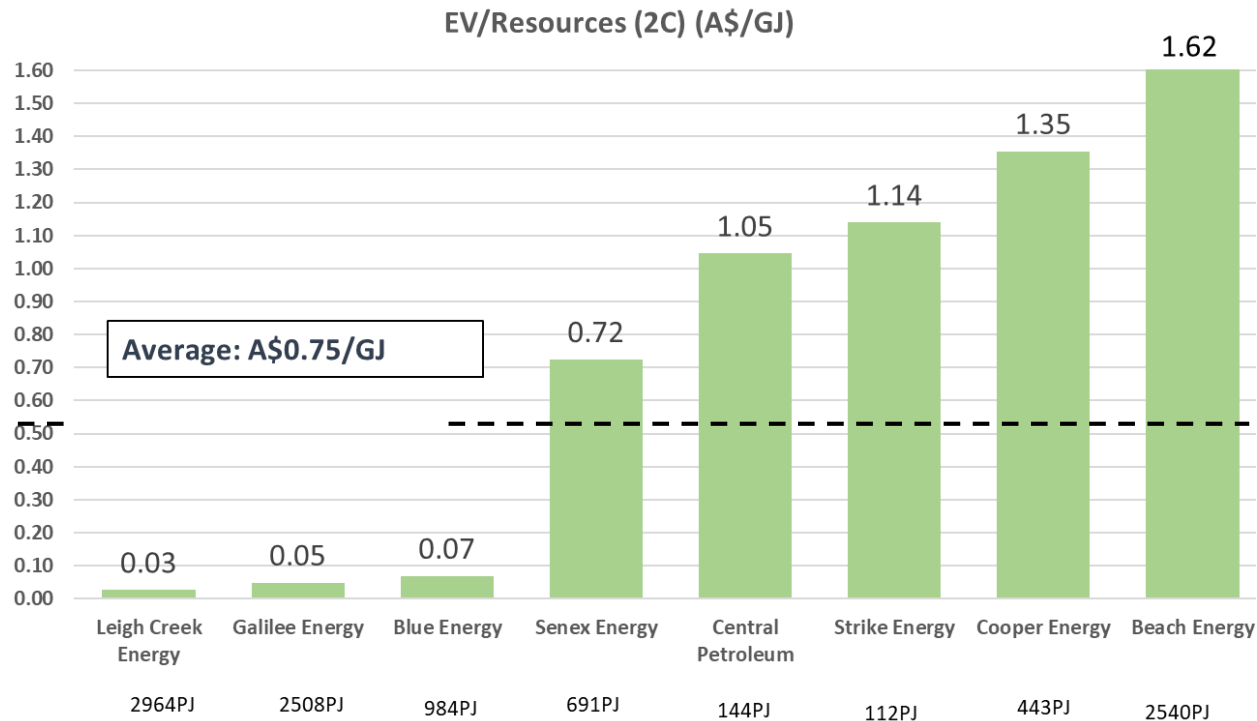
FERTILISER DEMAND

1. 95% Imported
2. SYNGAS – no need for Methane feedstock
3. Australian producer under pressure

SUPPLY FACTORS

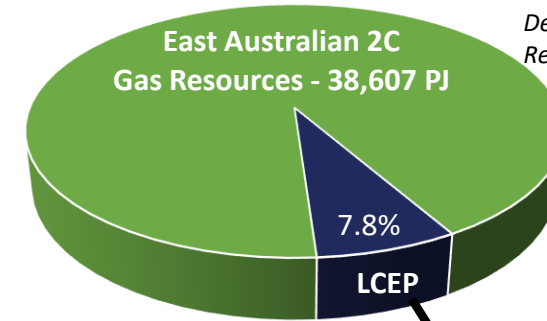
1. Restriction on gas exploration due to politics
2. 7.8% Australian East Coast 2C resource
3. 2C to 2P Q1 2019

VALUE DISCONNECT / LCK TRADES AT A DISCOUNT TO PEERS



Note: Recent M&A activity at \$0.50-\$1.50/GJ

As at 31 October 2018



Source: Energy Quest, December 2017 Quarterly Report

- The current resource estimate of LCEP:
 - 2,964 PJ
 - ~3 TCF
- Approximately 7.8% of the estimated total East Australian 2C gas resource (of 38,607 PJ)

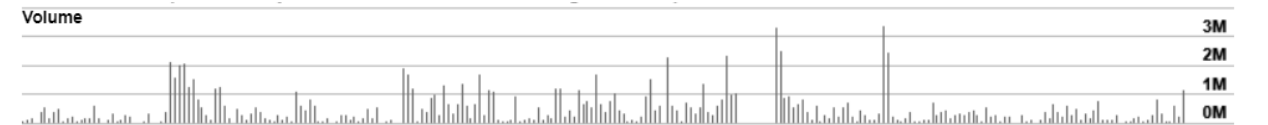


CORPORATE

ASX Ticker	LCK
Shares on Issue	482,167,271
Share Price	\$0:17
Market Cap	\$82.0m
52-week range	\$0:085 - \$0:34

Top Shareholders	%
China New Energy	28.2
CITIC	3.58
HSBC Custody Nominees	2.78
Crown Ascent Development Ltd	2.59
Omega Super A/C	2.56
Rubi Holdings	2.49

Shareholder Groups	%
Top 20	52.7
Top 50	62.7
Top 100	71.0



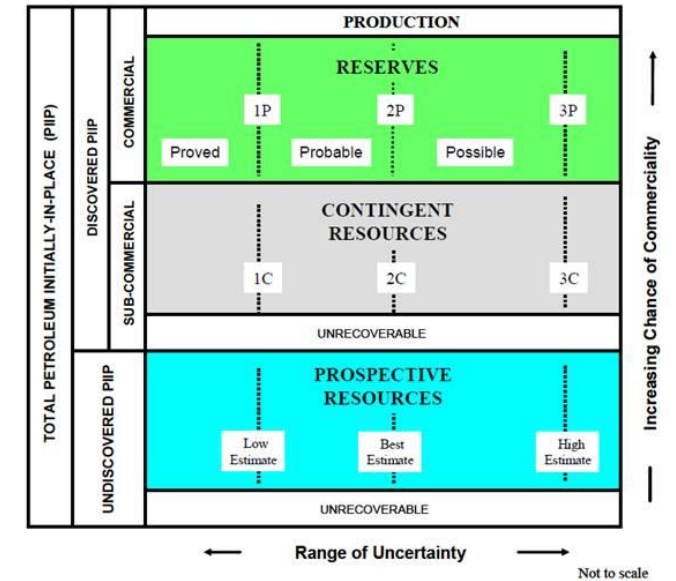
NEAR TERM MILESTONES

MILESTONES COMPLETED

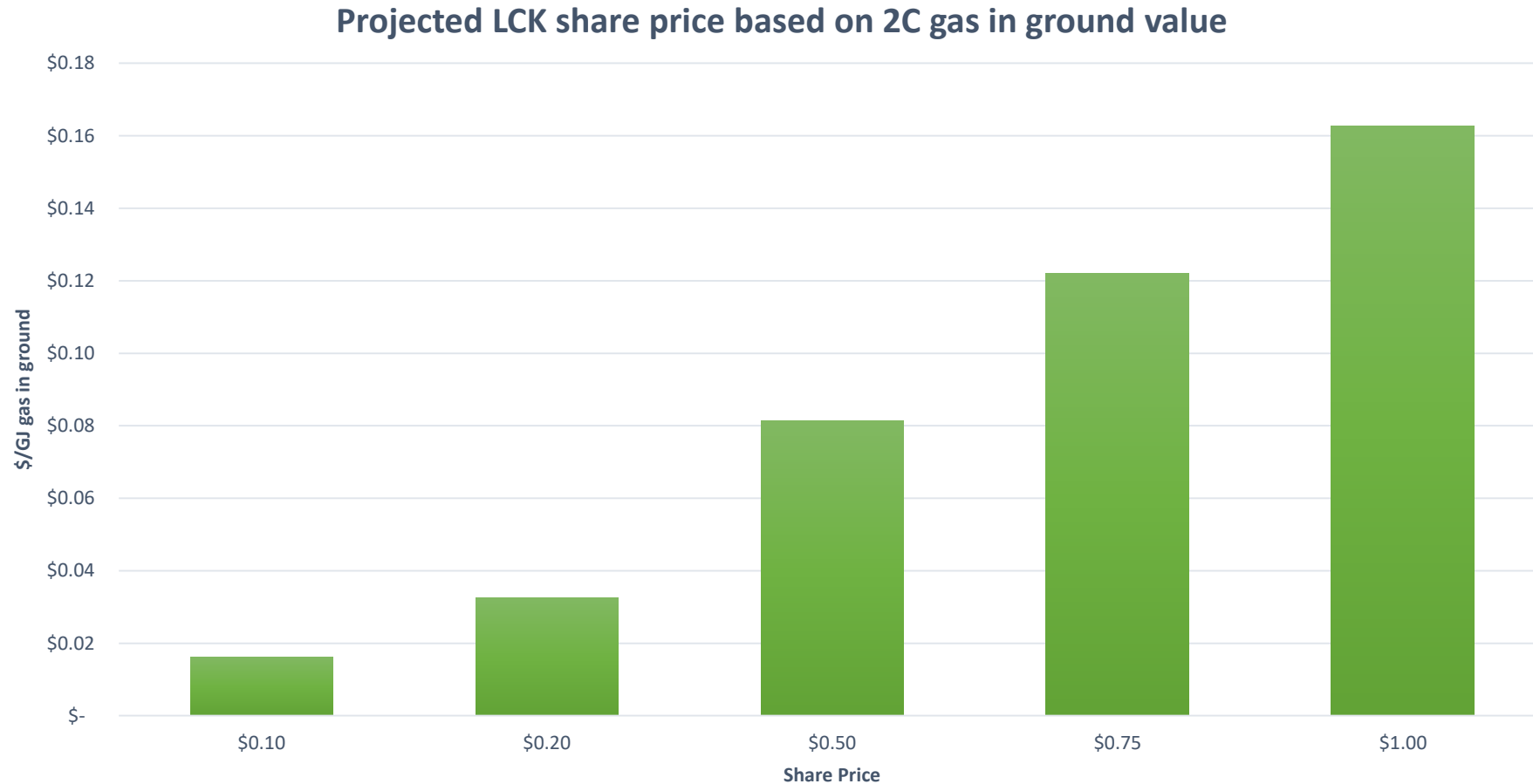
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8. Commercial Gas	Q1 2019	✓
9. PRMS Upgrade to 2P	Pending Q1, 2019	
10. Completion of PCD Operations/Decommissioning of PCD	Pending Q1/2, 2019	
11. Expressions of interest from suppliers and gas buyers	2019	
12. Joint Venture Agreement(s)	2019	
13. Commercial Agreements, Offtake Agreements, Other Opportunities	Pending/TBA	

APPENDIX - PRMS EXPLAINED

- Society of Petroleum Engineers – Petroleum Resources Management System (PRMS) is the internationally recognised standard for reporting oil and gas resources and reserves
 - PRMS is the petroleum equivalent to the Australian JORC system for minerals
1. JORC coal resource update - COMMENCED AND OUTCOME PENDING
 2. PCD outcome audit – gas quality and flow rate data recorded during the PCD operation is third party reviewed. Key information sought is the process efficiency and the amount of syngas energy produced per tonne of coal that is gasified – DONE
 - Current 2C – 377 Mt x 65% geological risk and 80% process risk x 15.2 GJ syngas per tonne of coal = c. 3000 PJ
 3. Certification – PRMS consultant will assess the ISG recoverable coal tonnes (on a risk basis) then multiply the tonnes of coal by the recovered syngas energy value to give a total amount of recoverable Syngas on a PJ basis – COMMENCED AND OUTCOME PENDING



APPENDIX - BLUE SKY



Based on 2,964 2C resource and 482,167,271 LCK ordinary shares on issue