

MINING 3-4 FEBRUARY 2020 INVESTMENT CAPE TOWN

Corporate Presentation

**4 February 2020** 



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# Important and cautionary notes

The information in this release that relates to metallurgy and metallurgical test work has been reviewed by Mr Noel O'Brien, FAusIMM, MBA, B. Met Eng. Mr O'Brien is not an employee of the company, but is employed as a contract consultant. Mr O'Brien is a Fellow of the Australasian Institute of Mining and Metallurgy, he has sufficient experience with the style of processing response and type of deposit under consideration, and to the activities undertaken, to qualify as a competent person as defined in the 2012 edition of the "Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves" (The JORC Code). Mr O'Brien consents to the inclusion in this report of the contained technical information in the form and context as it appears.

The information in this report that relates to Ore Reserves underpinning the Production Target have been prepared by Mr Blair Duncan (BEng (Mining), MBA) as Chief Operating Officer of Core Lithium Ltd who is a member of the Australasian Institute of Mining and Metallurgy and is bound by and follows the Institute's codes and recommended practices. He has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Blair Duncan consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

This document has been prepared by Core Lithium Ltd ("Core", "Company") and provided as a basic overview of the tenements held or controlled by the Company. This presentation does not purport to be all-inclusive or to contain all the information that you or any other party may require to evaluate the prospects of the Company.

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The mineral tenements of the Company as described in this presentation are at various stages of exploration, and potential investors should understand that mineral exploration and development are high-risk undertakings.

There can be no assurance that exploration of the Tenements, or any other tenements that may be acquired in the future, will result in the discovery of an economic ore deposit. Even if an apparently viable deposit is identified, there is no guarantee that it can be economically exploited.

This document contains statements which may be in the nature of forward-looking statements. No representation or warranty is given, and nothing in this presentation or any other information made available by the Company or any other party should be relied upon as a promise or representation, as to the future condition of the respective businesses and operations of the Company.

There is a low level of geological confidence associated with the inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised.

### **Cautionary Statement:**

The DFS results are based upon the updated Grants Mineral Resource of 22 October 2018 and the update BP33 Mineral Resource Estimate of 6 November 2018. The Mineral Resource contains Measured, Indicated and Inferred Mineral Resources in section 3.1 below. Whilst there is sufficient Measured & Indicated Mineral Resources to complete the production schedule during the 17-month payback period. There is a low level of geological confidence associated with the Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised. The Inferred Mineral Resource is not the determining factor in determining the viability of the Finniss Project as the Inferred Mineral Resource represents only 4.4% of the production during the 17 month pay-back period in the Reserve Case. The DFS Reserve Case contains 14% Inferred material. The DFS does not rely upon additional Mineral Resources from the company's other prospects. Further drilling in 2019 is expected to improve the classification of all of the company's Mineral Resources.

# Important and cautionary notes

### **Competent Person Statements:**

The Mineral Resources and Ore Reserves underpinning the Production Target have been prepared by competent persons in accordance with the requirements of the JORC code. The information in this release that relates to the Estimation and Reporting of Ore Reserves is based on, and fairly represents, information and supporting documents compiled by Mr Blair Duncan. Core confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the Mineral Resource and Ore Reserve estimates in the announcements "Grants Lithium Resource Increased by 42% ahead of DFS" dated 22 October 2018, "Over 50% Increase in BP33 Lithium Resource to Boost DFS" dated 6 November 2018. "Maiden Sandras Mineral Resource Grows Finniss to 6.3Mt" dated 29 November 2018. "Finniss Mineral Resource Grows to 8.6Mt with Hang Gong" dated 31 January 2019, "Upgrade of Mineral Resource at Carlton Grows Finniss Project" dated 12 March 2019, "Finniss Feasibility Study and Maiden Ore Reserve" dated 17 April 2019 and "Initial Resource for Lees Drives Finniss Mineral Resource" dated 6 May 2019 continue to apply and have not materially changed. Core confirms that it is not aware of any new information or data that materially affects the Exploration Results included in this announcement as cross referenced in the body of this announcement. The information included in this presentation has been obtained from the "Finniss definitive Feasibility Study and Maiden Ore Reserve" announcement dated 17 April 2019 and Core confirms that all material assumptions and technical parameters underpinning the forecast financial information derived from the Ore Reserve and Mineral Resource continue to apply and have not materially changed.

Cross referenced announcements: "Further High Grade Lithium Intersections at Finniss" dated 20 October 2016, "High Grade Lithium Intersections at Far West Prospect" dated 13 December 2016, "Lithium Mineralisation at Ahoy, Ahoy East and Far West" dated 7 February 2017, "High-Grade Lithium Intersected in New Spodumene Pegmatites" dated 5 February 2018, "New Exploration Intersections Add to Finniss Potential" dated 16 August 2018, "Exploration Further Boosts Finniss Lithium Project Potential" dated 1 November 2018, "Carlton and Hang Gong to Boost Finniss Resource Base" dated 27 November 2018, World-class High-Grade Lithium Intersection at Finniss dated 16 January 2020 and "Quarterly Activities and Cashflow Report 31 December 2018" dated 31 January 2019.

### Forward-looking Statements:

This release contains "forward-looking information" that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the pre-feasibility and feasibility studies, the Company's business strategy, plan, development,

objectives, performance, outlook, growth, cash flow, projections, targets and expectations, Mineral Resources, results of exploration and relations expenses. Generally, this forward-looking information can be identified by the use of forwardlooking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely',' believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this news release are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information. Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of scandium and other metals; possible variations of ore grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list is not exhaustive of the factors that may affect our forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information. The Company disclaims any intent or obligations to or revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law. Statements regarding plans with respect to the Company's mineral properties may contain forward-looking statements in relation to future matters that can be only made where the Company has a reasonable basis for making those statements.

### Currency:

Unless otherwise stated, all cashflows are in Australian dollars, are undiscounted and are in real terms (not subject to inflation/escalation factors), and all years are calendar years.

### Accuracy:

The DFS has been prepared to an overall level of accuracy of approximately -15% to +15%. This judgement is made following consideration of the basis studies and the features outlined in the Cost Estimation Handbook Second Edition Monograph 27 AusIMM, The Minerals Institute.



# Australia's next lithium producer

Core Continues to Advance the Finniss Lithium Project

**Approvals** Government approvals imminent

Offtake 40% secured and additional offtake being negotiated

**Finance** Targeting Final Investment Decision in 2020

**Operations** 'Construction ready' in 2020

**Production** 2021 onward - 175,000tpa high quality lithium concentrate

Core Lithium's current \$25 million Enterprise Value (EV) offers huge upside for a close to construction ready project

# Core Lithium and the Finniss Lithium Project

**Opportunities** 

Solution

ASX Listed developer with advanced lithium assets 25km from Darwin Port in Northern Australia



Defsonal

Highly leveraged projects due to higher upfront CAPEX

Market Challenges High operating costs

Sustaining customer quality

**Consequences** Curtailed production and delayed expansion plans

Global demand for lithium batteries and EV's continues to grow YoY

The lithium battery supply chain needs the Finniss Lithium Project

- ✓ Lower CAPEX
- Lower transport and OPEX
- ✓ Lower technical risk
- Higher grade and lower iron (Fe) content
- ✓ Healthy gross margins
- Quicker returns and project payback

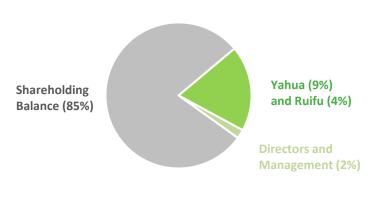
# Corporate information



Board of	Directors	Management Team		
Managing Director	Stephen Biggins	<b>Chief Operating Officer</b>	Blair Duncan	
Non-Executive Chairman	Greg English	Chief Financial Officer	Simon lacopetta	
Non-Executive Director	Heath Hellewell	Metallurgical Advisor	Noel O'Brien	
Non-Executive Director	Malcolm McComas	Commercial Marketing Manager	Robert Sills	
Company Secretary	Jarek Kopias	Exploration Manager	David Rawlings	
		Project Manager	Sean Buxton	

Capital Structure (as at 31 December 2019)					
Share Price		~A\$0.035			
Shares on Issue		792.52M			
Market Capitalisation		~A\$28M			
Options and Rights Unlisted		74.12M			
Cash (31 December 2019)		A\$4.0M			
Debt Facilities		Nil			
Enterprise Value		~A\$24M			

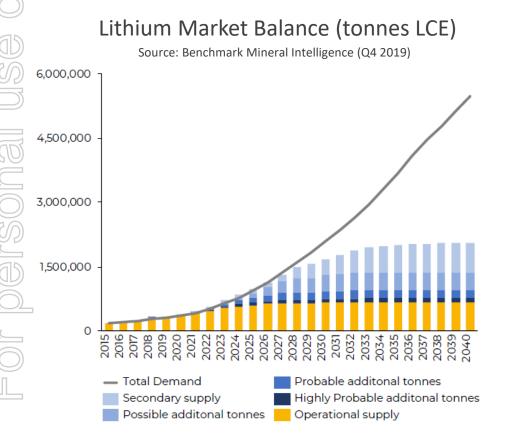
### Key Shareholder Composition (31 December 2019)

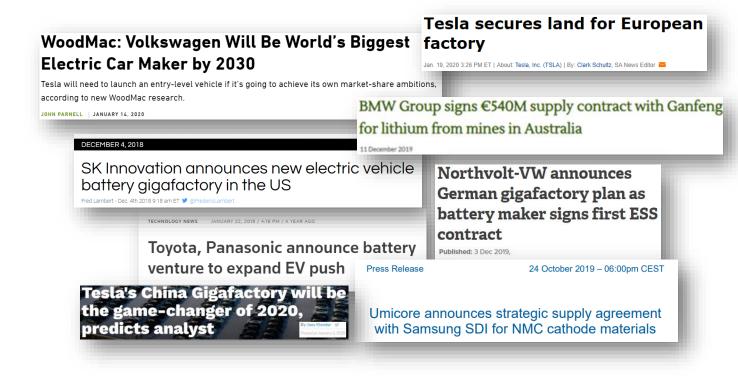


- Yahua and Ruifu have committed financing support and offtake
- Daily average stock liquidity
   1.1m shares (~40% of stock traded in last 12 months)

# Medium and long-term lithium demand increasing

Lithium converters and battery and car manufacturers positioning for significant EV sales growth





Medium- and long-term demand fundamentals outweigh short-term oversupply

# Why is Core's high-quality lithium needed?

Supply meeting volume needs in the short-term

However, new producers are experiencing

- High OPEX and product quality issues
- High CAPEX flotation process not meeting expected recoveries
- Curtailment of production and delayed expansion plans, and
- African projects can expect challenges and delays



The lithium supply chain needs reliable <a>I</a> low risk, <a>I</a> low cost, <a>I</a> high quality product

The Finniss Project ticks all the boxes

# al use only

# Definitive Feasibility Study (DFS) April 2019

# DFS was a snapshot in time - Project continues to evolve and grow

- DFS confirmed Finniss Lithium Project as robust, high-margin low-capex, lithium project
- 175,000tpa production capacity of high-quality lithium concentrate
  - Low Fe
  - Ideal coarse, low-moisture product
- DFS confirms low processing, mine, haulage and port costs
- EPC design, mining, haulage and crushing pricing tenders designed are being rolled into binding service contracts
- Targeting material extension from initial mine life in coming months through current resource drilling and mining studies

### **Management Case Highlights**



### Strong cashflow

High cashflow generated over initial project life



### Rapid payback

Payback <1.5 years from 1st conc.2



### **Excellent Revenue**

A\$160M Revenue per annum from 175,000tpa capacity



### Start-up capital cost

\$73m for process plant and infrastructure including A\$30m prestrip development at Grants



### High rate of return

80% pre-tax IRR shows high profitability for shareholders<sup>2</sup>



### Low operating cost

US\$300/t<sup>1</sup> conc. delivers high margin



<sup>1.</sup> C1 Operating Costs are defined as direct cash operating costs of production FOB, net of by product credits, divided by the amount of payable spodumene concentrate. Direct cash operating costs include mining, processing, transport, treatment and refining costs. C1 Operating Costs exclude royalties and pre-strip mine development costs.

<sup>2.</sup> NPV has been discounted using a discount rate of 10% and NPV, IRR and Free Cash Flow are pre-tax nominal calculations. Payback is calculated from sale of first concentrate. Where nominal values are noted, costs and revenues are escalated at 2% CPI

# Prime location and valuable infrastructure available





Excellent location and infrastructure advantages



# Darwin Port

# **Heads of Agreement**

# Core has agreement with Darwin Port to ship 250,000tpa of spodumene concentrate

Darwin Port is Australia's nearest port to China

East Arm Wharf facilities at Darwin Port are well suited to handle potential future production from Core's lithium projects

Heads of Agreement signed with Darwin Port in respect of potential export of lithium products from Grants

Agreement provides Core with capacity to export up to either:

- 250ktpa of spodumene concentrate; or
- 1Mtpa of spodumene Direct Shipping Ore (DSO)

# Grants Lithium Project - First in line at Finniss





High Quality Spodumene Concentrate

# High grade Ore Reserves + efficient DMS process

= High quality spodumene concentrate

# **Concentrate Quality**

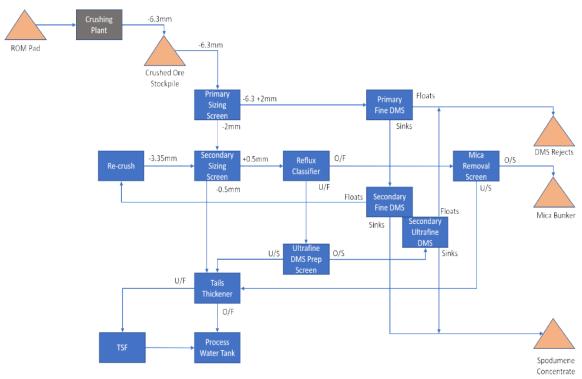
DELSONA

Li<sub>2</sub>O concentrate 5.5-6.0% Net Recoveries +70%

# Finniss Lithium Product Specifications

Specification	Target	Min.	Max.	Typical
Percentage < 0.1mm sizing	< 0.5%	-	1.0%	< 0.2%
Percentage < 0.5mm sizing	< 1.0%	-	3.0%	< 1.0%
Percentage > 1.0mm sizing	> 80%	75%	-	> 78%
P50 sizing	2.5mm	2.0mm	3.5mm	2.5mm
Max sizing	P <sub>100</sub> < 10mm	-	10mm	-
Moisture (H₂O)	2.0%	-	3.0%	< 2.0%
Lithia (Li₂O)	5.7%	5.0%	6.0%	> 5.5%
Fe <sub>2</sub> O <sub>3</sub>	<0.7%	-	1.0%	0.70%
Mica	<0.8%	-	3.0%	< 1.0%
Na₂O	<1.0%	-	2.0%	1.3%
K <sub>2</sub> O	<1.0%	-	0.9%	< 0.7%
CaO + MgO + MnO (total)	<1.0%	-	2.0%	0.4%
P <sub>2</sub> O <sub>5</sub>	<0.5%	-	1.0%	0.30%
S	<0.05%	-	0.05%	< 0.02%

# Dense Media Separation (DMS) Flowsheet (No flotation circuit required)



# Binding offtake agreement

## Offtake and investment with some of China's Largest Lithium Converters

Binding offtake for 75,000tpa of spodumene representing approx. 40% of Core's 175,000tpa production capacity

Core is also in the process of negotiating further offtake and finance agreements with some of Asia's largest lithium consumers and producers.

# 🊧 Sichuan Yahua Industrial Group Co.,LTD

- One of China's largest lithium producers and has significant expansion plans. 12,000tpa lithium hydroxide refinery and a 6,000tpa lithium carbonate refinery, plans to expand its production to 50,000tpa of lithium salt production.
- The company is an A-share listed company on the Shenzhen-stock exchange in China, with a market capitalisation of CNY 7.92 billion (~A\$1.65 billion).
- Yahua is a major supplier of lithium salts in China. Yahua Group has long term stable relationships with a number of the large downstream customers of lithium batteries and has broad marketing and distribution channels including BYD, Zhenghua Materials, Dangsheng Tech, etc., and has cooperation relationship with LG Korea, GSEM, Panasonic.
- Yahua Group already has significant business interests in Australia, including operations in Darwin, where it manufactures explosives.

Offtake	Spodumene Concentrate		
Term	30 November 2023		
Annual Tonnage	75 ktpa		
Pricing	Market Price		
Reference Price	Priority to most recent price published by the LME for cash settled 6.0% spodumene concentrate contracts		
Payment Terms	Irrevocable Letter of Credit for each shipment		
Product Spec	Defined parameters with bonus / penalty arrangements		
Binding Offtake	Yes		
Shipping	Bulk - parcels of 5 dmt to 25 dmt		

**Key Binding Offtake Terms** 

**Price Floor** 

Yes - 2 years

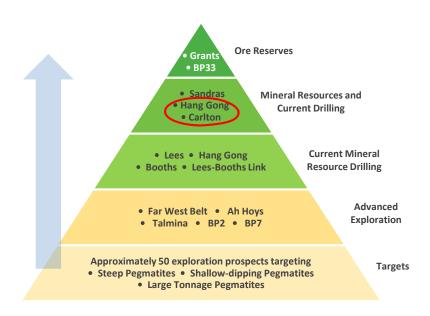
Mineral Resources and Ore Reserves expansion

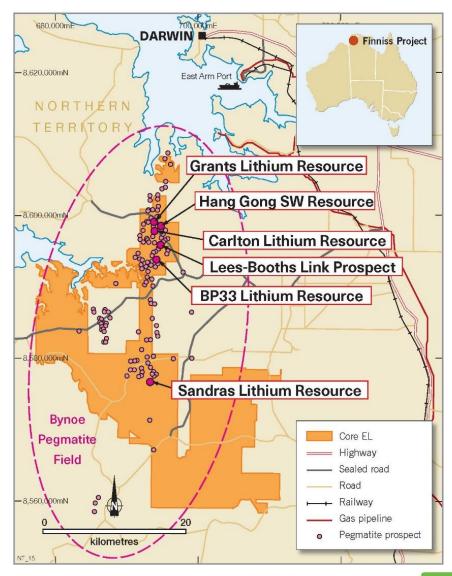
Significant upside

## **Current Project Pipeline**

**Pipeline** of high-grade lithium targets that formed the basis of recent resource drilling

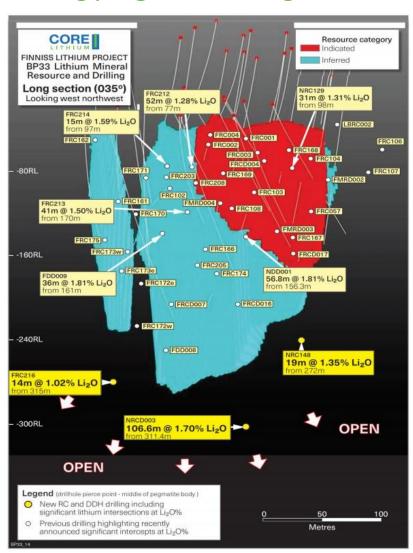
**Current and Future Drilling Programs** leading to multiple Mineral Resource and Ore Reserve increases in 2020 and beyond





# Mineral Resources and Ore Reserves expansion BP33

Drilling programs leading to Mineral Resource and Ore Reserve increases in 2020



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Thick intersections of high-grade spodumene pegmatite highlight consistent orebody quality

### **Current Mineral Resource<sup>1</sup>**

2.15 Mt at 1.51% Li<sub>2</sub>O

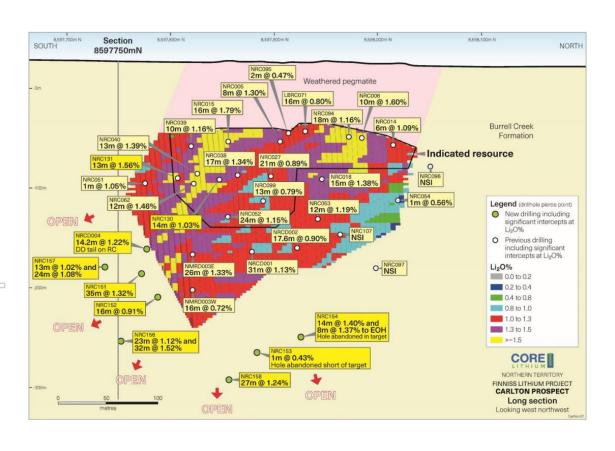
Recent high-grade drill intersections beneath current Mineral Resource envelope include:

- 107m @1.7% Li<sub>2</sub>O (NRCD003)
- 19m @1.35% Li<sub>2</sub>O (NRC148)
- 14m @1.02% Li<sub>2</sub>O (NRC216)

New drill results expected to substantially increase Ore Reserves and Mineral Resources at BP33, which still remains open at depth

# Mineral Resources and Ore Reserves expansion Carlton

Drilling programs leading to Mineral Resource and Ore Reserve increases in 2020



Wide intersections of spodumene pegmatite from recent drillholes at the Carlton Prospect

### Current Mineral Resource<sup>1</sup>

1.09 Mt at 1.3% Li<sub>2</sub>O

Recent high-grade drill intersections beneath current Mineral Resource envelope include:

- 35m @1.32% Li<sub>2</sub>O (NRC151)
- 14m @1.4% Li<sub>2</sub>O (NRC154)
- 23m @1.12% Li<sub>2</sub>O including 5m @ 2.69% (NRC156)
- 27m @1.24% Li<sub>2</sub>O including 4m @ 2.28% (NRC158)

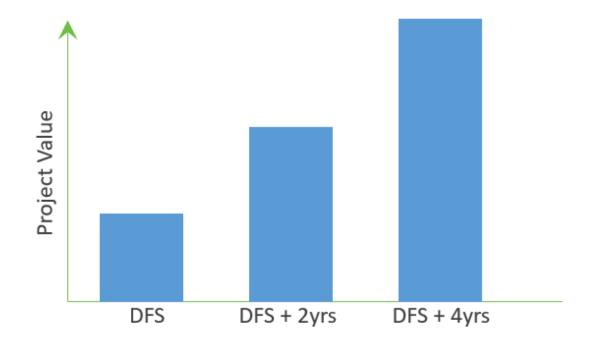
New body spodumene pegmatite found to the east of Carlton which remains open at depth.

DEFSONA

# Mineral Resources and Ore Reserves expansion Mine life

# Mine Studies and Mineral Resource/Ore Reserve upgrades underway toward increasing mine life

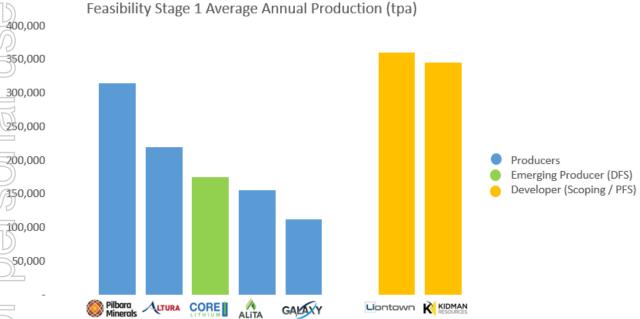
- DFS clearly showed that additional mine life has a significant upside economics
- Core recently completed Mineral Resource and Ore Reserve expansion drilling
- Mining studies in progress toward significantly increasing mine life



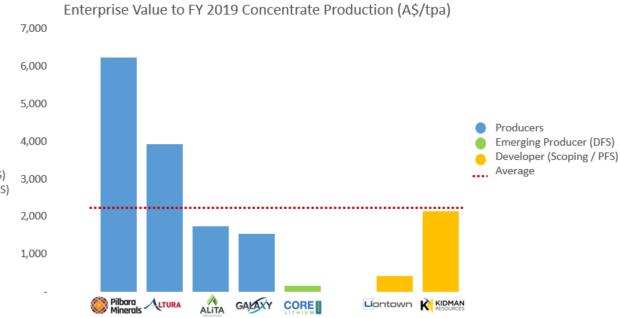
DFS showed that even modest mine life extensions have a significant positive impact on project economics

# ASX lithium sector comparison

## **Peer Valuation Comparison**



Source: ASX Releases. Production represents Stage 1 average annual proposed production as disclosed to the ASX as follows, CXO (from Apr-19 DFS), LTR (from Jan-19 Scoping Study), Kidman (from Dec-18 PFS), PLS (from Sep-16 DFS), GXY (from Oct-15 Scoping Study), AJM (from Sep-16 DFS) and A40 (from Jul-17 PFS).



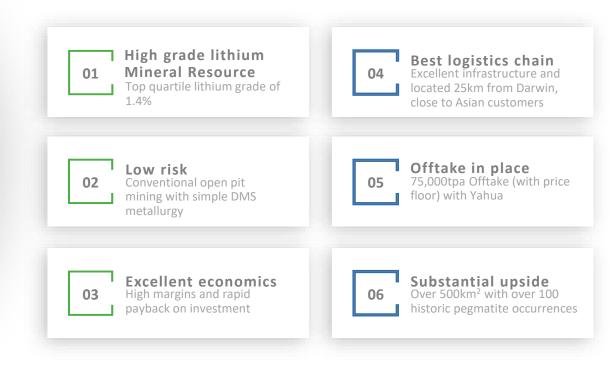
Enterprise value calculated as market capitalisation less cash plus debt. Source: ASX Releases. Production represents FY 2019 spodumene concentrate production. For CXO (from Apr-19 DFS), LTR (from Jan-19 Scoping Study) and Kidman (from Dec-18 PFS).

# Moving towards construction in 2020

		2	019		2020				2021/22	
Activity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	CY	
Mining Lease	$\checkmark$									
Feasibility Study		<b>✓</b>				<b>√</b>				
Environmental and Approvals		<b>√</b>			<b>√</b>					
Offtake and Customer Finance						<b>√</b>				
FID							v			
Mining and Construction								<b>√</b>		
Stage 1 - Commissioning and Production Ramp-up									<b>√</b>	
Stage 2 - Potential Expansion Feasibility									<b>✓</b>	
Stage 3 - Potential LiOH Feasibility									<b>✓</b>	
Exploration and Resource Upgrades	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	•					



# Positioned to be Australia's next lithium producer







# CORE

# Thank you

### For more information:

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Authorise for release by the Board of Core Lithium Ltd.

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# Appendix

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# Finniss Lithium Project Reserves and Resources

### JORC (2012) Resource Table<sup>1</sup>

Deposit		Tonnes (Mt)	Li₂O %	Li <sub>2</sub> O (t)	LiCO <sub>3</sub> (t)
	Measured	1.09	1.48	16,100	39,815
Grants	Indicated	0.82	1.54	12,600	31,160
	Inferred	0.98	1.43	14,000	34,622
	Total	2.89	1.48	42,700	105,597
	Indicated	0.63	1.39	9,000	22,257
BP33	Inferred	1.52	1.56	24,000	59,352
Sandras	Total	2.15	1.51	33,000	81,609
	Inferred	1.30	1.0	13,000	32,149
Sanuras	Total	1.30	1.0	13,000	32,149
	Indicated	0.46	1.3	6,000	14,838
Carlton	Inferred	0.63	1.3	8,000	19,784
	Total	1.09	1.3	14,000	34,622
Hang Gong	Inferred	1.42	1.2	17,000	42,041
nang Gong	Total	1.42	1.2	17,000	42,041
Lees	Inferred	0.78	1.3	9,700	23,988
<u>ues</u>	Total	0.78	1.3	9,700	23,988
Finniss Project	Total	9.63	1.3	129,400	320,006

### JORC (2012) Reserve Table<sup>1</sup>

Deposit		Tonnes (Mt)	Li₂O %	Li₂O (t)
Grants	Probable	0.8	1.6	11,600
	Proved	1.0	1.4	14,900
	Total	1.9	1.5	26,500
BP33	Probable	0.4	1.3	5,700
	Total	0.4	1.3	5,700
Finniss Project	Total	2.2	1.4	32,200