

# ASX: **CXO** Announcement

6 August 2021

## Definitive Feasibility Study Investor Presentation

Advanced Northern Territory lithium developer, Core Lithium Ltd (ASX: **CXO**) (“Core” or “Company”), provides an update to the presentation lodged by the Company as “Definitive Feasibility Study Investor Presentation” on 26 July 2021. The presentation is in the same form as originally lodged other than an update to comparative data presented on Slide 16.

This announcement has been approved for release by the Core Lithium Board.

For further information please contact:

Stephen Biggins  
Managing Director  
Core Lithium Ltd  
+61 8 8317 1700  
[info@corelithium.com.au](mailto:info@corelithium.com.au)

For Media and Broker queries:

Fraser Beattie  
Account Manager  
Cannings Purple  
+61 421 505 557  
[fbeattie@canningspurple.com.au](mailto:fbeattie@canningspurple.com.au)

### About the Finniss Lithium Project

The Finniss Lithium Project is Australia’s most advanced new lithium project on the ASX and places Core Lithium at the front of the line of new global lithium production.

Finniss has Federal Government Major Project Status and is also one of the most capital efficient lithium projects in Australia and has arguably the best logistics chain to markets of any Australian lithium project.

The Project lies within 25km of port, power station, gas, rail and one hour by sealed road to workforce accommodated in Darwin and importantly to Darwin Port - Australia’s nearest port to Asia.

Lithium is the core element in batteries used to power electric vehicles, and the Finniss Project boasts world-class, high-grade and high-quality lithium suitable for this use and other renewable energy sources.



# Australia's Next Lithium Producer

Definitive Feasibility and Scoping Studies  
Investor Presentation

26 July 2021

[corelithium.com.au](http://corelithium.com.au) | ASX CXO



# Important and Cautionary Notes

This presentation has been prepared by Core Lithium Ltd (“Core”, “Company”) and provides a general overview of the Company and its strategy. 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. None of the Company, any of its related bodies corporate or any of their representatives assume any responsibility for, or makes any representation or warranty, express or implied, with respect to the accuracy, reliability or completeness of the information contained in this presentation and none of those parties have or assume any obligation to provide any additional information or to update this presentation.

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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.

## Competent Person Statements

The information in this release that relates to the estimation and reporting of Ore Reserves and Mineral Resources for the Grants deposit for the Finnis Project was first reported by the Company on 26 July 2021. The information in this release that relates to the estimation and reporting of Mineral Resources for the Finnis Project (other than the Grants deposit) was first reported by the Company on 15 June 2020. The information in this release that relates to production targets and forecast financial information for the Finnis Project was first reported by the Company on 26 July 2021. The information in this release that relates to exploration targets for the Finnis Project was first reported by the Company on 20 May 2021. Core confirms that it is not aware of any new information or data that materially affects the information included in those announcements and that all material assumptions and technical parameters underpinning the exploration targets, Mineral Resource estimates, Ore Reserve estimates, production targets and forecast financial information in those announcements (as applicable) continue to apply and have not materially changed, save for the Mineral Resources estimates of the Grants deposit reported by the Company on 15 June 2020 which has been updated by the 26 July 2021 release.

## 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 scoping, pre-feasibility and feasibility studies, the Company’s business strategy, plan, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, and Mineral Resources and Reserves. Generally, this forward-looking information can be identified by the use of forward-looking 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 lithium; 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. C1 Operating Costs and All-In Sustaining Cost (AISC) references in USD throughout this presentation have been derived by converting AUD using an exchange rate of 0.70 AUD/USD.



# Australia's Next Lithium Producer

At the forefront of new global lithium production



- Australia's most advanced new lithium mining project, 88km by sealed road to Darwin Port
- Construction-ready, Low-risk in Tier 1 Jurisdiction with Government approvals in place
- Binding offtake with Yahua (75ktpa) to potentially be part of Tesla's Supply Chain
- Discussions on additional offtake and financing well-advanced



- Stage 1 DFS announced with 30% increase to Reserves, 5 years open pit mining within initial 8 year mine life
- Low capex intensity - A\$89m start-up capex, simple DMS processing to produce up to 197,000tpa
- Competitive operating costs - potential to reduce with lithium by-product credits<sup>1</sup>
- Excellent Project Value - Pre-Tax NPV<sub>g</sub> A\$384m Stage 1 (DFS + Extension Scoping Study) at US\$850 spot price
- Targeting construction start 2H 2021, production start 2H 2022 (Core has ~A\$40M cash June 2021)



- Near-term pathway to 10 year mine life - Extension Scoping Study announced on 26 July 2021, supported by Inferred Resources
- Acquisition in March 2021 of 10-16 Mt Exploration Target<sup>2</sup> to support mine life extension and Stage 2 Expansion opportunities
- Stage 2 Resource drilling underway to underpin potential future Stage 2 concentrate expansion
- Stage 3 Lithium Hydroxide longer-term plan for downstream lithium processing in the Northern Territory

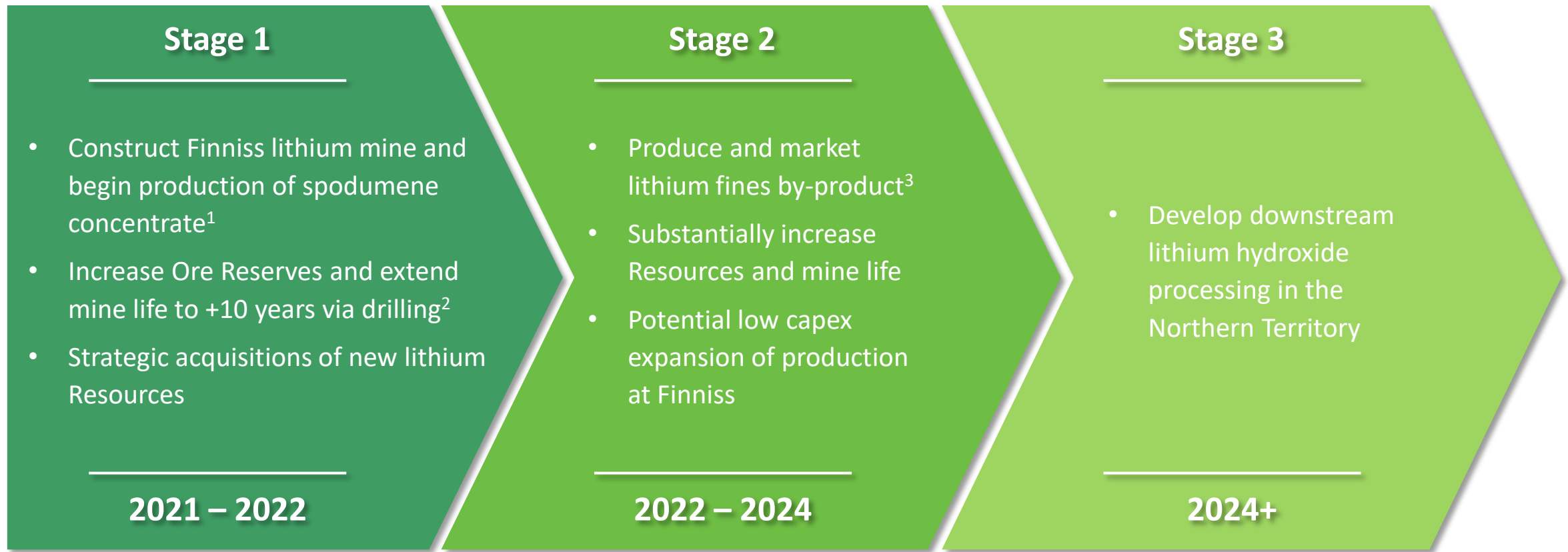
## Notes:

1. Refer 26 July 2021 ASX announcement "Scoping Study identifies potential for Lithium Fines"
2. Refer 20 May 2021 ASX announcement "Significant Lithium Exploration Target at Finniss".



# Core's Corporate Strategy

Create value and contribute to the global energy transformation through growth and vertical integration



**Notes:**

1. Refer 26 July 2021 ASX announcement "Stage 1 DFS and Updated Ore Reserves"
2. Refer 26 July 2021 ASX announcement "Scoping Study Confirms 10 Year Lithium Production" & 20 May 2021 "Significant Lithium Exploration Target at Finnis"
3. Refer 26 July 2021 ASX announcement "Scoping Study identifies potential for Lithium Fines"

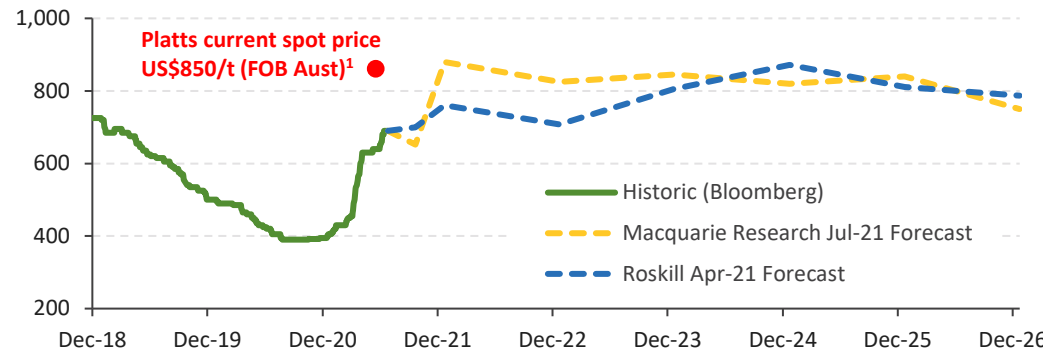
# Development of Finniss is Well Timed!

Core is construction-ready, with current prices at US\$850/t and a significant supply deficit forecast

## Spodumene Prices (US\$/t, 6% Li<sub>2</sub>O, CFR)<sup>3</sup>

Lithium prices are up strongly in 2021:

- ✓ Platts reporting spot sales at US\$850/t (FOB Aust)<sup>1</sup>
- ✓ Other market commentators forecasting continued price increases in the short- to medium-term

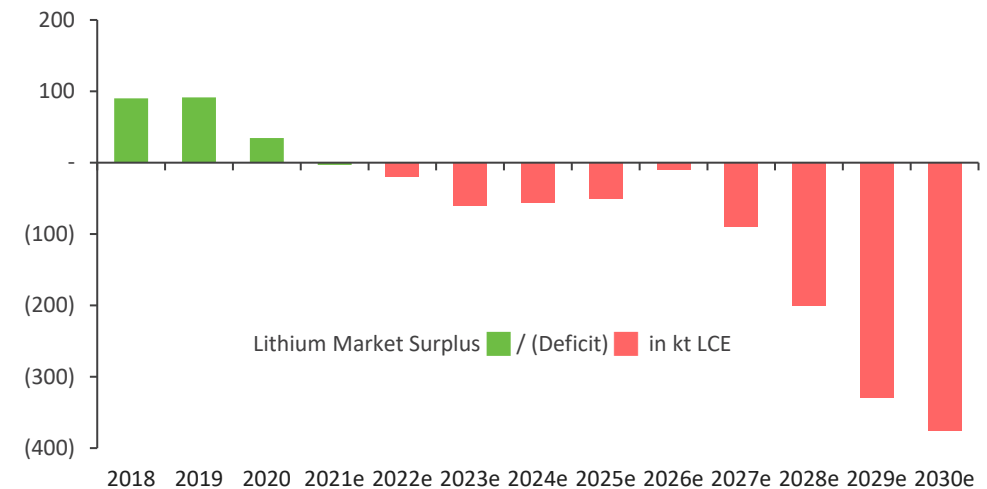


### Notes:

1. Source: Platts Battery Metals Market Commentaries (16 July 2021).
2. Source: Macquarie Lithium Market Update (1 July 2021).
3. Sources: Bloomberg, Macquarie Lithium Market Update (1 July 2021), Roskill Q2 Quarterly Lithium Price Deck (April 2021).

## Lithium Chemical Market Balance (kt LCE)<sup>2</sup>

Lithium market is in a state of “perpetual deficit”, with prices expected to continue to rise<sup>2</sup>



# Delivering Value and Growth

The Finnis Lithium Project has strong economics with valuation upside

Stage 1 DFS\*



Pre-Tax NPV<sub>8</sub>

**A\$221m**

(Apr-21 Roskill Price)

**A\$315m**

(US\$850/t FOB Spot Price)

Stage 1 DFS +  
Extension Scoping Study (ESS)\*



Pre-Tax NPV<sub>8</sub>

**A\$259m**

(Apr-21 Roskill Price)

**A\$384m**

(US\$850/t FOB Spot Price)

Stage 1 DFS + Extension SS\*  
incl. Lithium By-Product



Pre-Tax NPV<sub>8</sub>

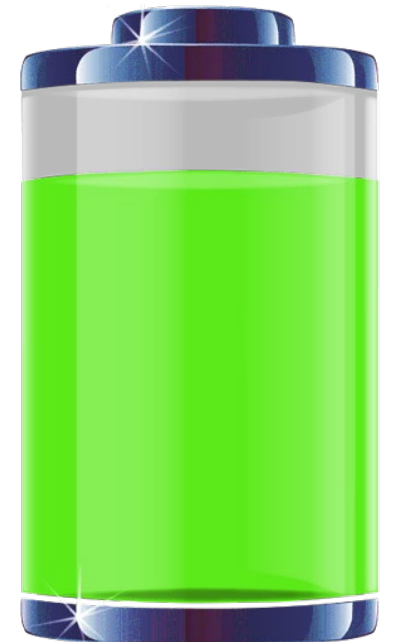
**A\$289m**

(Apr-21 Roskill Price)

**A\$411m**

(US\$850/t FOB Spot Price)

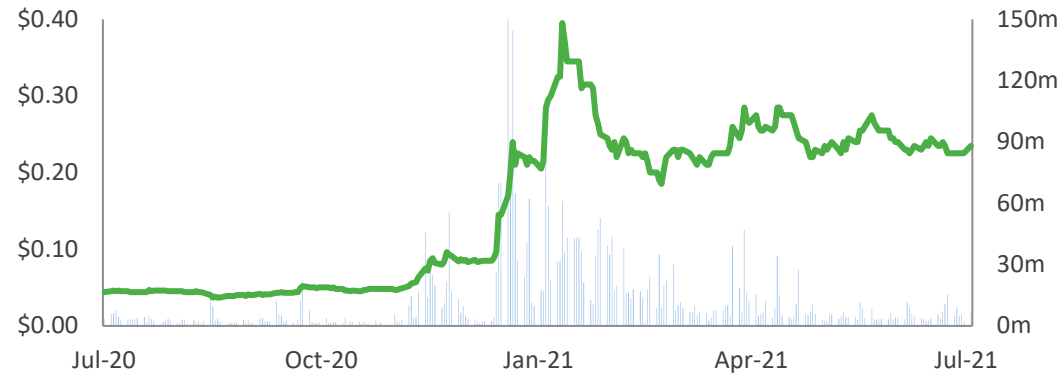
Stage 2 Potential Expansion  
+  
Stage 3 Potential Lithium  
Hydroxide



\*Stage 1 DFS is 8-year Life of Mine, Stage 1 DFS + ESS is 10 years

# Corporate Information

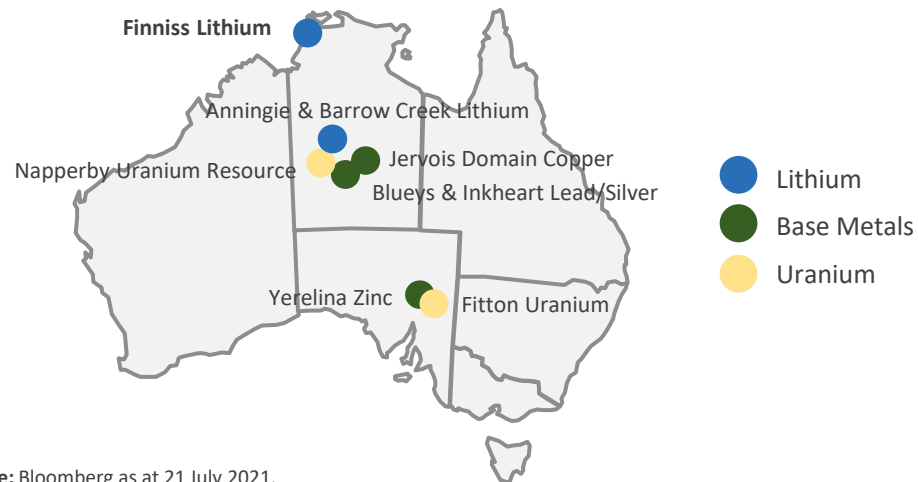
## Share Price (Last 12 Months)



## Capital Structure

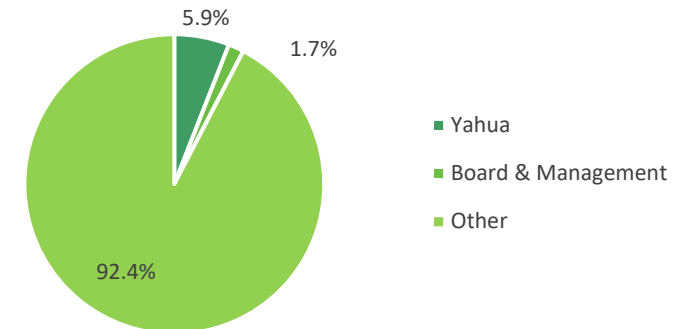
Share Price (as at 21 July 2021)	A\$0.235/sh
Shares on Issue	1,174.1M
<b>Market Capitalisation</b>	<b>~A\$276M</b>
Unlisted Options and Performance Rights	127.8M
Cash (31 March 2021)	A\$41M
<b>Enterprise Value</b>	<b>~A\$235M</b>

## Key Projects



Source: Bloomberg as at 21 July 2021.

## Major Shareholders





# Experienced Board & Management Team

Experienced management team with development and operational mining experience and skills



**Greg English**

**Non-Executive Chairman**

- Mining engineer and lawyer
- +20 years' experience in multi-commodity projects throughout Australasia
- Partner of Piper Alderman Lawyers, specialising in mining, commercial and securities law



**Stephen Biggins**

**Managing Director**

- Geologist & MBA
- 25 years' experience as a geologist and executive in the mining industry in Australia and internationally
- Previously has been founding MD of several ASX-listed companies, having built prospective portfolios of lithium, gold, uranium & base metal exploration projects in Australia, Asia and Africa



**Heath Hellewell**

**Non-Exec Director**

- Exploration geologist with +20 years experience in gold, base metals & diamond exploration in Australia & West Africa
- Most recently co-founding Executive Director of Doray Minerals, and a Non-Executive Director of Capricorn Metals
- Previously held senior positions with De Beers Australia and Resolute Mining



**Malcolm McComas**

**Non-Exec Director**

- Investment banker with leadership roles at several global firms including County NatWest (Citi) & Grant Samuel
- Currently Non-Executive Director of Pharmaxis and Actinogen Medical and Non-Executive Chairman of Fitzroy River Corporation
- Previously Non-Executive Director of BC Iron and Consolidated Minerals



**Blair Duncan**

**Chief Operating Officer**

- Mining engineer & MBA
- Extensive mining experience gained in the commodities of coal, gold, copper, nickel, vanadium, iron ore and lithium
- Instrumental in building & the management of the Nullagine Iron Ore mine for BC Iron



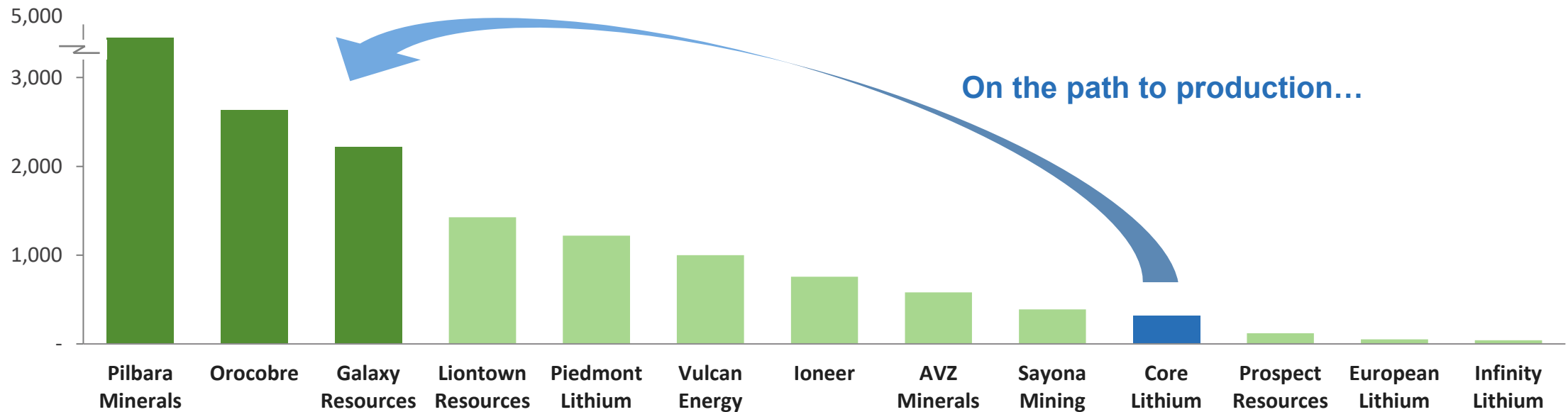
**Simon Iacopetta**

**Chief Financial Officer**

- Chartered Accountant
- Mining executive with broad experience in precious and base metals publicly listed mining companies in Australia, America and Africa
- Previously CFO of Ramelius Resources

# Australia's Next Lithium Producer

ASX Listed Peers - Market Capitalisation (A\$m)



	Pilbara Minerals	Orocobre	Galaxy Resources	Liontown Resources	Piedmont Lithium	Vulcan Energy	Ioneer	AVZ Minerals	Sayona Mining	Core Lithium	Prospect Resources	European Lithium	Infinity Lithium
Status	Producing	Producing	Producing	PFS	SS	PFS	DFS	DFS	DFS	DFS	DFS	PFS	PFS
Approval to Mine?	Y	Y	Y	N	N	N	N	N	N	Y	Y	N	N
Country	Australia	Argentina	Argentina / Australia	Australia	USA	Germany	USA	DRC	Canada	Australia	Zimbabwe	Austria	Spain

# Stage 1 DFS Results

Strong project economics, low start-up capex and globally competitive operating costs



## Ore Mined

7.4Mt @ 1.3% Li<sub>2</sub>O



## Mine Life

8 years



## First Production

2022



## Average Production

173ktpa @ 5.8% Li<sub>2</sub>O



## Start-Up Capex<sup>1</sup>

A\$89m



## Commodity Price<sup>2</sup>

US\$743/t



## C1 Operating Costs<sup>3</sup>

US\$364/t



## Pre-Tax Free Cash Flow

A\$344m



## Pre Tax IRR<sup>4</sup>

53%



## Post-Tax NPV<sub>8</sub>

A\$170m



## Pre-Tax NPV<sub>8</sub>

A\$221m



## Pre-Tax NPV<sub>8</sub>

A\$315m (US\$850)

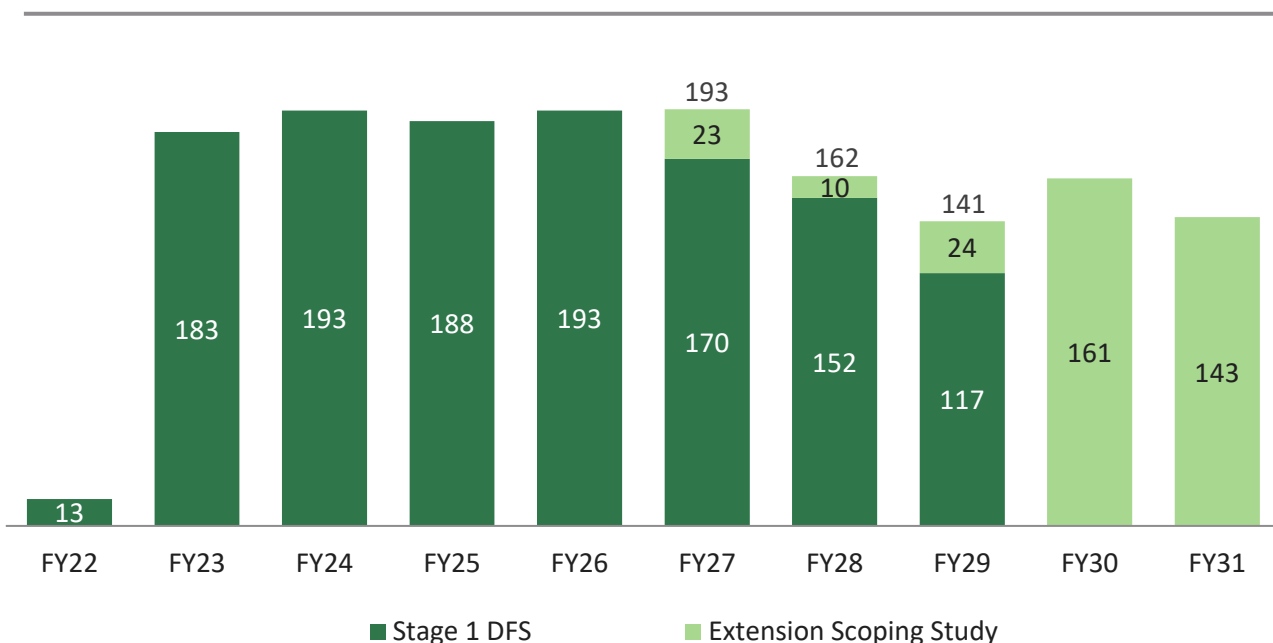
### Notes:

1. Start-Up Capex includes pre-strip mine development for the Grants Open Pit of A\$34 million.
2. Commodity Pricing assumptions are derived from Roskill April 2021 forecast and represents the average spodumene concentrate received price over the LOM. Assumptions include sea freight of US\$20/t of concentrate and a pro-rata grade adjustment for 5.8% Li<sub>2</sub>O grade.
3. C1 Operating Costs are defined as direct cash operating costs of production FOB, divided by spodumene concentrate production. Direct cash operating costs include mining, processing, transport, port, and ship-loading costs. C1 Operating Costs exclude royalties and sustaining capital, with the LOM average calculated from commencement of commercial production. AUD:USD assumption is 0.70.
4. 2-year Payback from sale of first concentrate.

# Stage 1 Extension Scoping Study

Increased production and a further 2 year potential mine life extension with inclusion of Inferred Resources

Concentrate Production (kt)



Extension Scoping Study based on mining of Inferred Resources at Grants, BP33, Carlton and Hang Gong

Metric	DFS <sup>2</sup>	Extension Scoping Study <sup>2,4</sup>
Start-up capex <sup>1</sup>	A\$89m	A\$89m
Mine life	8 years	10 years
Ore inventory	7.4 Mt	9.8 Mt
Total conc. production	1.21 Mt	1.56 Mt
C1 operating costs <sup>3</sup>	US\$364/t	US\$372/t
Pre-tax IRR	53%	56%
Pre-tax cash flow	A\$344m	A\$415m
Pre-tax NPV <sub>8</sub>	A\$221m	A\$259m
Pre-tax NPV <sub>8</sub> (US\$850 spot)	A\$315m	A\$384m

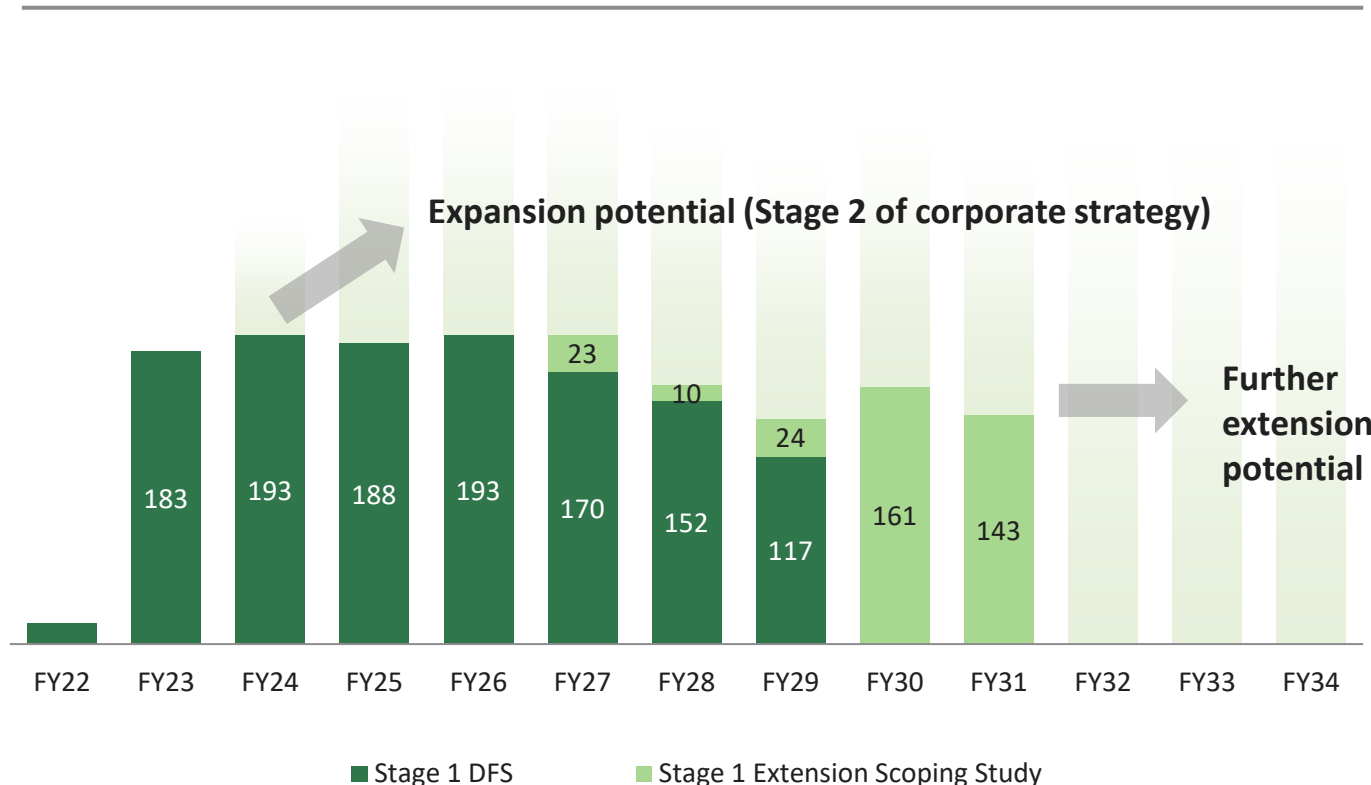
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4. Pre-tax IRR, Pre-tax NPV and Pre-tax cash flow are exclusive of corporate tax.

# This Is Just the Beginning ...

The recently announced Exploration Target has the potential to significantly add Mineral Resource tonnes, and support further extensions and potential Stage 2 Expansion of Finniss

Concentrate Production (kt)



Exploration Target	Million tonnes		Li <sub>2</sub> O (%)	
	Low	High	Low	High
	9.8	16.2	0.8	1.4

Potential to:

1. Further extend mine life, and/or
2. Expand production with low incremental capex (Stage 2 of corporate strategy), and/or
3. Underpin a downstream lithium processing operation in the NT (Stage 3)

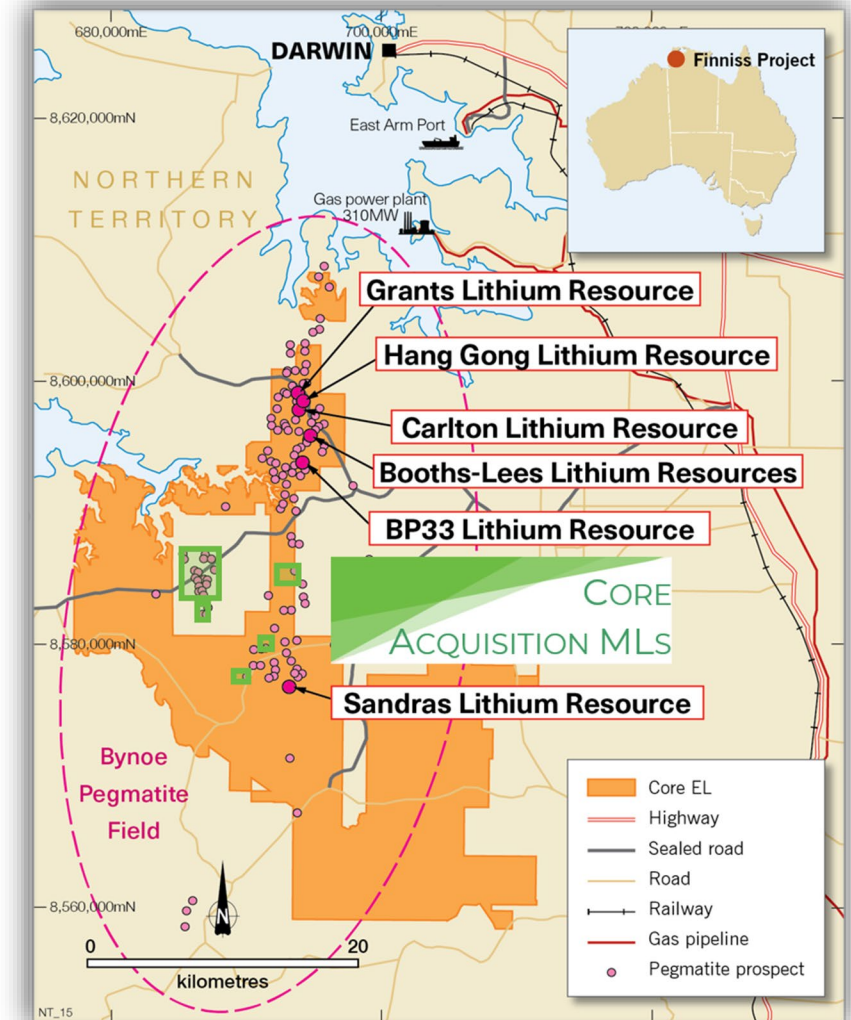
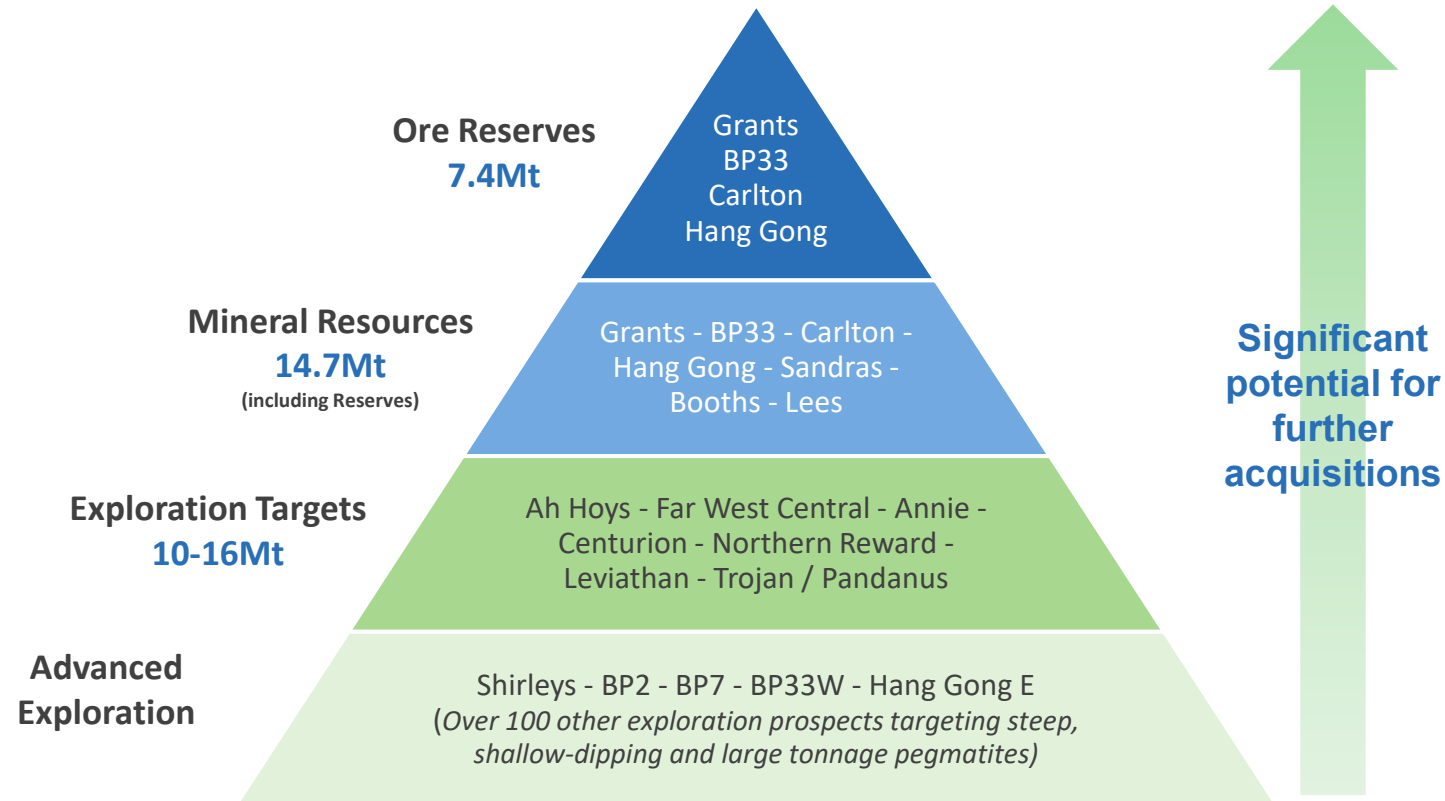
Drilling underway to convert to Mineral Resources

*The Exploration Target is supported by historical drilling, trenching & exploration results. The potential quantity & grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource & it is uncertain if further exploration will result in the estimation of a Mineral Resource.*



# Significant Exploration and Expansion Upside

Well-funded and with recent acquisitions to accelerate Reserve and Resource growth, and potential Stage 2 capacity expansion

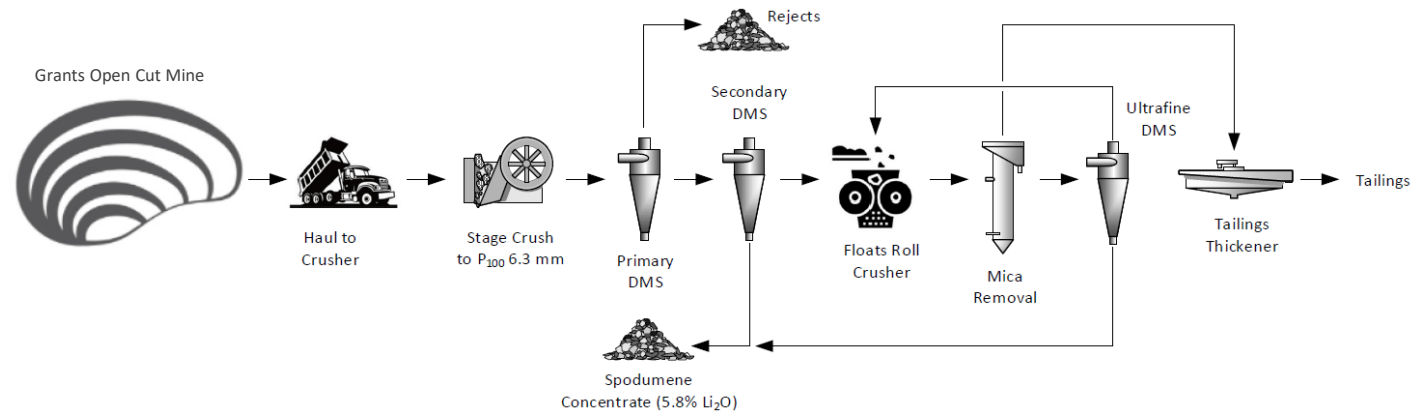


# Simple DMS Process & High Quality Concentrate

Simple processing means lower cost and low start-up risk

## Simple DMS (gravity) produces high quality product

- ✓ +99% of lithium is spodumene
- ✓ Large spodumene crystals liberate at 6mm coarse crush
- ✓ Simple mineralogy – dense spodumene separates well from lighter quartz / feldspar crystals using gravity



## Spodumene Concentrate Product Specifications

- ✓ 5.8% Li<sub>2</sub>O concentrate at 71.7% lithia recovery
- ✓ Coarse product <0.5mm, max 10mm
- ✓ Good handling properties for customers
- ✓ Low iron <0.7%
- ✓ Low mica <1%
- ✓ Low moisture

# Lithium Fines By-Product Upside Potential

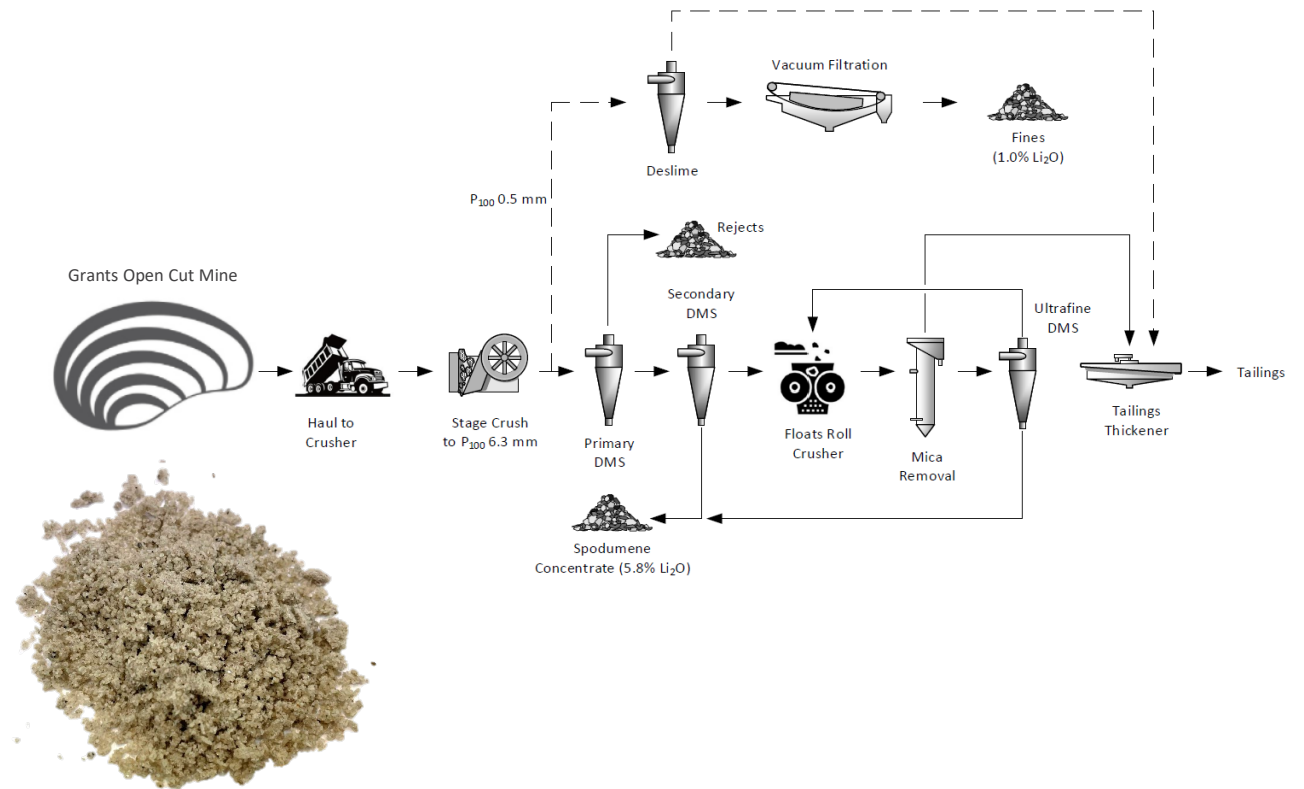
Lithium fines by-product potentially reduces opex and provides a waste stream management solution

## Lithium Fines Scoping Study – Stand-alone Economics

Fines Price (FOB) <sup>1</sup>	US\$65/t
Production Rate	110,000tpa
C1 Operating Costs <sup>2</sup>	US\$21/t
Initial Capital <sup>3</sup>	A\$8.4m
Pre-tax free cash flow <sup>4</sup>	A\$50m
Pre-tax NPV <sub>8</sub> <sup>4</sup>	A\$33m
Pre-tax IRR <sup>4</sup>	171%

## Lithium Fines Product Specifications

- ✓ Grade approximately 1.0 % Li<sub>2</sub>O
- ✓ Particle size, P<sub>100</sub> 0.5 mm, P<sub>80</sub> 0.3 mm
- ✓ Iron oxide grade < 1.0 %



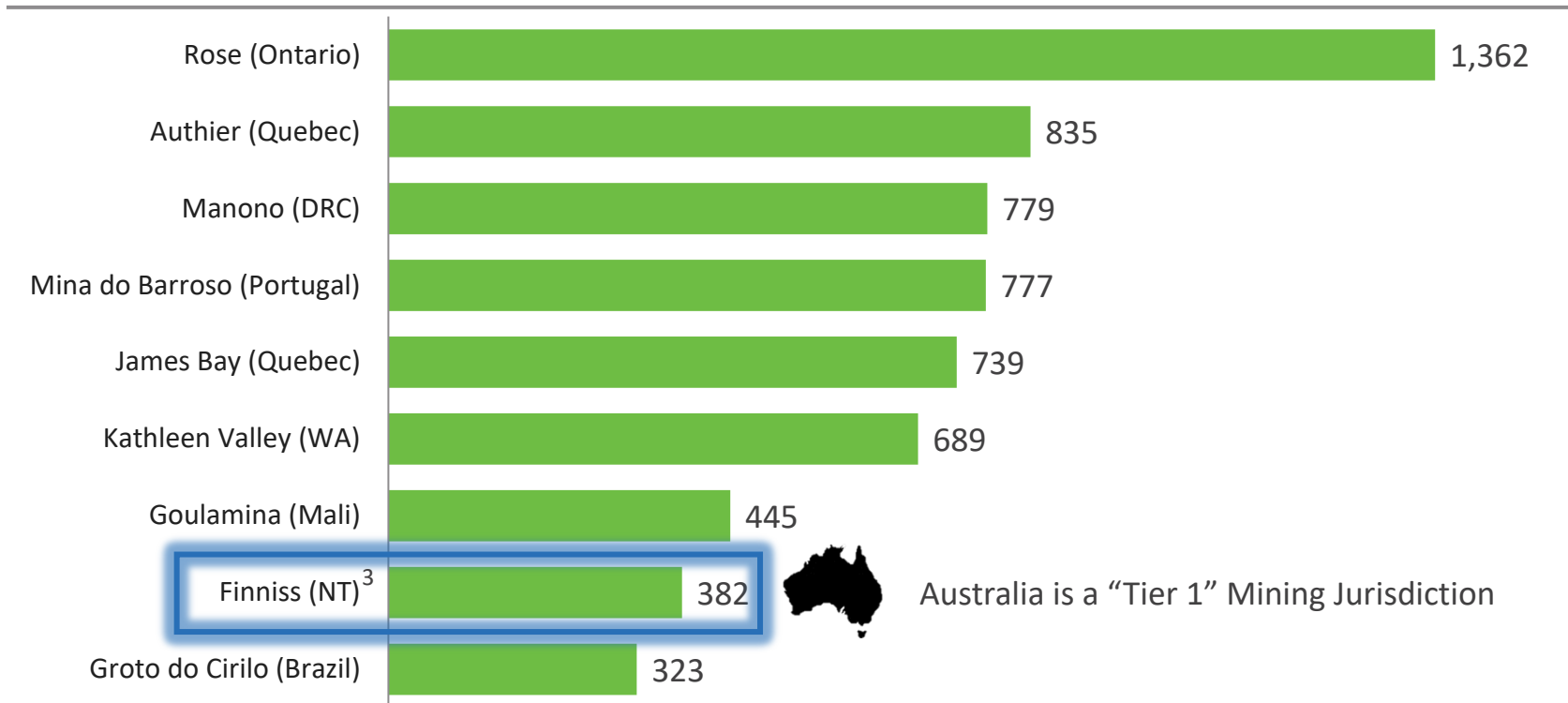
### Notes:

1. Pricing based on an assumed price of US\$80/tonne (CFR) for LF product grading 1.0% Li<sub>2</sub>O, pro-rata adjustments for grade +/- 1.0% Li<sub>2</sub>O (0.9% Li<sub>2</sub>O cut-off), sea freight of US\$20/t.
2. C1 Operating Costs are defined as direct cash operating costs of production FOB, divided by production tonnes. Direct cash operating costs include processing, haulage, port logistics, and ship-loading costs. C1 Operating Costs exclude royalties. AUD:USD assumption is 0.70.
3. Capital works required include a fines handling facility and storage shed. Construction commence in Q1 2023 and take 6 months to complete. Capital works include a 20% contingency.
4. Free Cash Flow, NPV and IRR as shown here are exclusive of corporate tax and all royalties.

# Low Capital Intensity & Low Risk

One of the world's most capital-efficient lithium mining projects

Start-up Capital Intensity (US\$/tpa)<sup>1,2</sup>



Source: Company announcements (refer Appendix slide 31), Bloomberg as at 16<sup>th</sup> July 2021.

Notes:

1. Ratio of upfront capital cost (including contingencies) and average annual spodumene concentrate production.
2. Capital cost estimates converted to USD at spot rate of AUD/USD 0.7423.
3. Based on Stage 1 DFS upfront capital cost estimate of A\$89m and average annual production of 173ktpa.



# Close to Darwin Port & Capital City Infrastructure

Infrastructure advantages means lower operating and capital costs

- Darwin Port is 88km by sealed road – Australia’s closest port to China
  - ✓ Binding agreement with Darwin Port to export up to 250ktpa of conc.
  - ✓ Existing bulk handling facilities
  - ✓ Spare capacity to facilitate Stage 2 expansion
- Close proximity to Middle Arm Industrial Precinct, with access to gas supply and other infrastructure – downstream processing potential
- Capital city of Darwin
  - ✓ international airport
  - ✓ all services & contractors
  - ✓ drive-in / drive-out workforce
- Finnis plant site is 8km from grid power
  - ✓ Connection agreement with NT Govt-owned Power & Water Corp
  - ✓ Renewable and low-emission power supply





# Potential to Join Tesla Supply Chain

Yahua recently signed a 5-year battery-grade lithium hydroxide supply deal with Tesla



- Core has binding offtake to supply 75,000tpa to Yahua for 4 years (approximately 40% of Core's Stage 1 production)<sup>1</sup>
- Yahua recently announced a production expansion from 20,000tpa LCE to 50,000tpa LCE
- Once in production, Core has potential to join the Tesla supply chain through Yahua



*Core is receiving accelerating interest from the global lithium battery and EV supply chain for additional binding offtake plus finance*

Notes:

1. Refer 1 April 2019 ASX announcement "Yahua Increases Lithium Concentrate Offtake Commitment".

# ESG Credentials in Focus

Core is committed to operating in a safe and sustainable manner, which means operating responsibly.

- Lithium production has a fundamental role to play in shaping the global energy future, as we transition to a low carbon economy
- We prioritise the health and safety of our staff and value the environment and communities in which we operate, with the aim of making a long-lasting positive contribution to our stakeholders and deliver sustainable value for shareholders.
- Core has engaged ERM Global which have completed the following:
  - ✓ **Greenhouse Gas Assessment (GHG)** showing Finniss with lowest CO<sub>2</sub> emissions from the transport of lithium compared to other Australian peer lithium projects
  - ✓ **Life Cycle Analysis (LCA)** which assessed environmental impacts across the global value chain of the studied system
  - ✓ **Sustainability Assessment** to build our approach to sustainability including the preparation of a road map in line with good industry practice



# The Core Lithium Advantages

Our Finnis Lithium Project presents a range of ESG advantages



## Small operational footprint

A combination of open cut and underground mining has reduced our overall site footprint. Finnis will share infrastructure with the nearby Grants Project to increase efficiency and reduce costs.



## Aligned Scope 1 and 2 emissions

Finnis aligns well when compared on an emission intensity level to published emission intensities for other spodumene concentrate production facilities in WA for Scope 1 and 2 emissions.



## Reduced Scope 3 emissions

The Project is located 88 km from the Darwin Port. This relatively short distance between the site, Port of Darwin and customers in Asia means that the Project's Scope 3 emissions are the lowest in Australia.



## Hydropower energy storage

Core is exploring the option of converting future reservoir into a Pumped Hydropower Energy Storage (PHES) facility with the ability to feed power back into the Northern Territory grid.



## Contributing to a low-carbon energy future

Yahua offtake means Core has potential connections to the Tesla supply chain. We are well connected to the European market through membership with the European Battery Alliance.



## Active engagement with local communities

Core is committed to giving back through maximising Indigenous employment opportunities, sourcing locally where possible and contributing to community initiatives.



## Management of cultural heritage

We are conscious of and respect local heritage. Core has established risk management practices to ensure protection of sacred sites and artefacts that may be discovered during operations.



## Water conservation

We maximise recycling of water dewatered from the pit and tailings. We reduce the use of groundwater by utilising the existing Observation Hill Dam, with plans to build second dam adjacent to the project



## Established HSE procedures

Established policies, procedures and risk management plans ensure the safety and wellbeing of our people, the environment and stakeholders.



## Smaller waste impact

By doing underground mining we produce less waste. We are exploring ways to on sell our by-products to further reduce our waste impact on the environment.

# Government Support

Major Project Status (MPS) for the Finnis Lithium Project is another major milestone

## Federal Government Support

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- Major Project Status - Finnis is of strategic significance to Australia
- Federal financing support opportunities in the form of:
  - ✓ Major Projects Facilitation Agency (MPFA)
  - ✓ Northern Australia Infrastructure Facility (NAIF)
  - ✓ Critical Minerals Facilitation Office (CMFO)
  - ✓ Modern Manufacturing Initiative (MMI)



## NT Government Support

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- Fully-approved by NT Government to start construction
- A\$5m offer of low cost concessional finance
- Creating over 200 new full-time jobs



# \$6M Federal Grant to Produce Battery Grade LiOH

Test work on spodumene concentrate from Finniss has produced battery-grade lithium hydroxide (LiOH)

- Core recently awarded \$6 million Modern Manufacturing Initiative (MMI) Grant by the Australian Federal Government
- Follows successful conversion testwork of Core's spodumene to Livent "battery grade" specification LiOH using conventional 'direct' flowsheet
- Excellent extraction and recovery of lithium to LiOH crystallisation (>95%)<sup>1</sup>
- Quality of Finniss spodumene concentrate is suitable for the high-end lithium battery, renewable energy and EV industries
- Core currently finalising LiOH Scoping Study
- With co-funding from the MMI Grant, Core will move into Feasibility Studies of building a lithium hydroxide plant in Darwin



**Notes:**

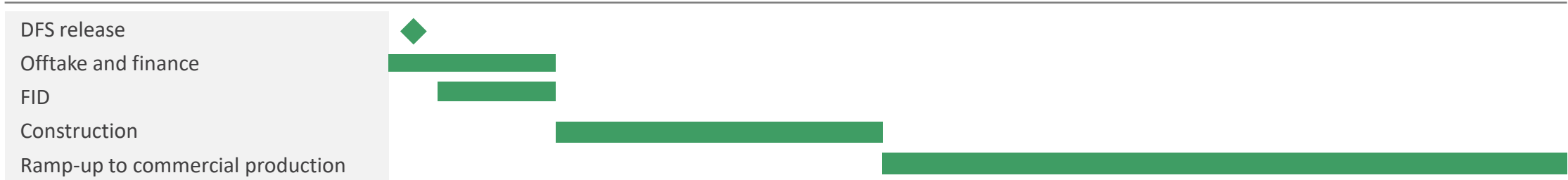
1. Refer CXO announcements "Battery Grade Lithium Hydroxide from Finniss Project" on 6 April 2021 and "\$6m Modern Manufacturing Initiative Grant from Australian Federal Government" 22 July 2021.



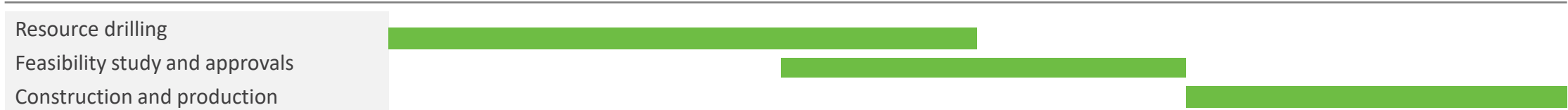
# Indicative Project Timeline

2021	2022		2023	2024	+2025
H2	H1	H2	CY	CY	CY

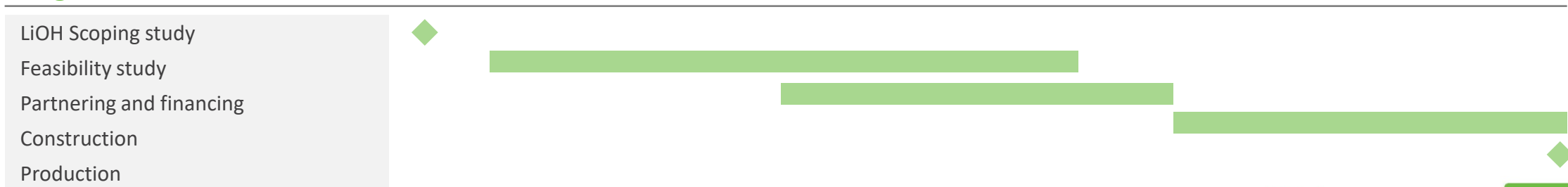
## Stage 1 Concentrate Production



## Stage 2 Potential Concentrate Production Expansion



## Stage 3 Potential Lithium Hydroxide Production





# Appendices



# Stage 1 Economic Outcomes of Studies (Cumulative)

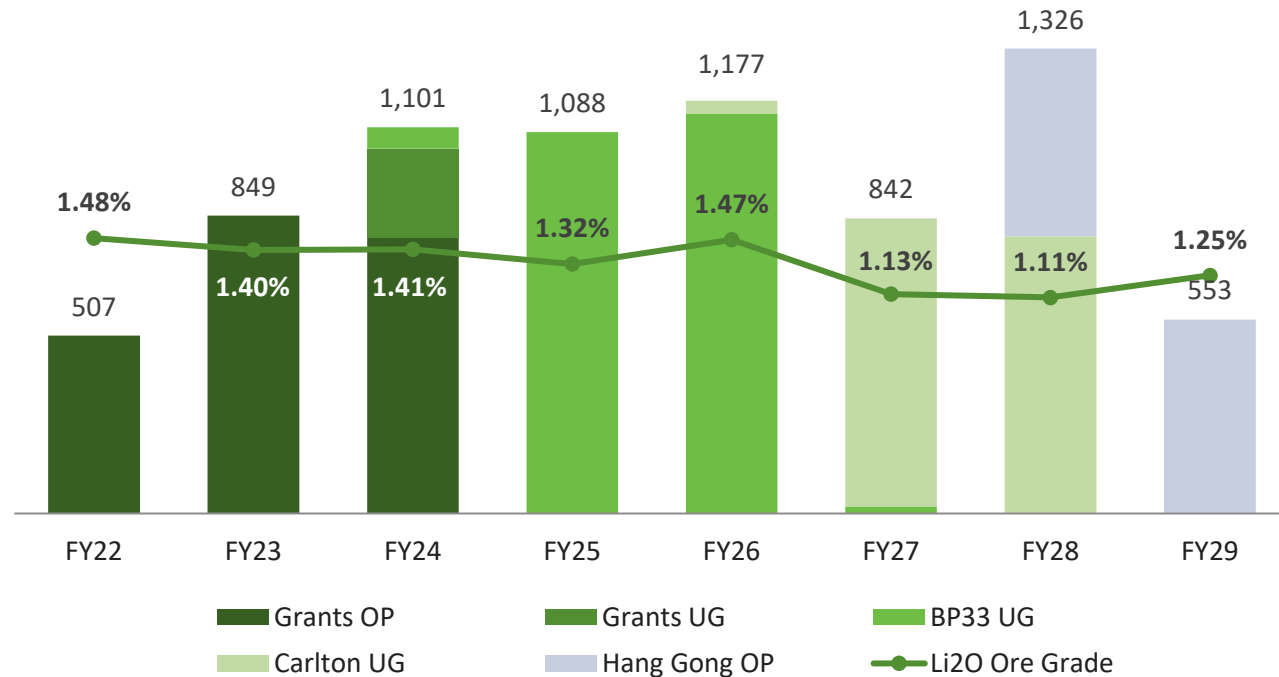
Metrics	Stage 1 DFS	Stage 1 DFS + Extension Scoping Study	Stage 1 DFS + Extension Scoping Study + Li Fines Scoping Study
Mine Life	8 years	10 years	10 years
<b>Based on Roskill Price Forecasts<sup>1</sup></b>			
C1 Operating Costs <sup>2</sup>	US\$364/t	US\$372/t	US\$349/t <sup>3</sup>
AISC <sup>4</sup>	US\$441/t	US\$454/t	US\$434/t <sup>3</sup>
Pre-Tax Free Cash Flow <sup>5</sup>	A\$344m	A\$415m	A\$460m
Pre-Tax NPV <sub>8</sub> <sup>5</sup>	A\$221m	A\$259m	A\$289m
Pre-Tax IRR <sup>5</sup>	53%	56%	59%
<b>Based on Spot Prices – US\$850/tonne (FOB)</b>			
Pre-Tax NPV <sub>8</sub> <sup>5</sup>	A\$315m	A\$384m	A\$411m <sup>6</sup>
Pre-Tax IRR <sup>5</sup>	76%	79%	81% <sup>5</sup>

**Notes:**

- Commodity Pricing assumptions are derived from Roskill April 2021 forecast. Assumptions include sea freight of US\$20/t concentrate and a pro-rata grade adjustment for 5.8% Li<sub>2</sub>O grade of spodumene concentrate.
- C1 Operating Costs are defined as direct cash operating costs of production FOB, divided by production tonnes. Direct cash operating costs include processing, haulage, port logistics, and ship-loading costs. C1 Operating Costs exclude royalties. AUD:USD assumption is 0.70.
- C1 Operating Costs and AISC in this scenario are inclusive of LF by-product credits.
- AISC are defined as C1 Operating Costs plus royalties and sustaining capital.
- Free Cash Flow, NPV and IRR shown in this table are exclusive of corporate tax, but include royalties.
- LF prices are unchanged in this scenario relative to the scenario above.

# Stage 1 DFS : Mine Plan

Ore Mined (kt) & Grade (%)



- Figure 1 shows the close proximity of Grants, BP33, Carlton, Booths, Lees and Hang Gong Resources. The Sandras Mineral Resource is in the southern region

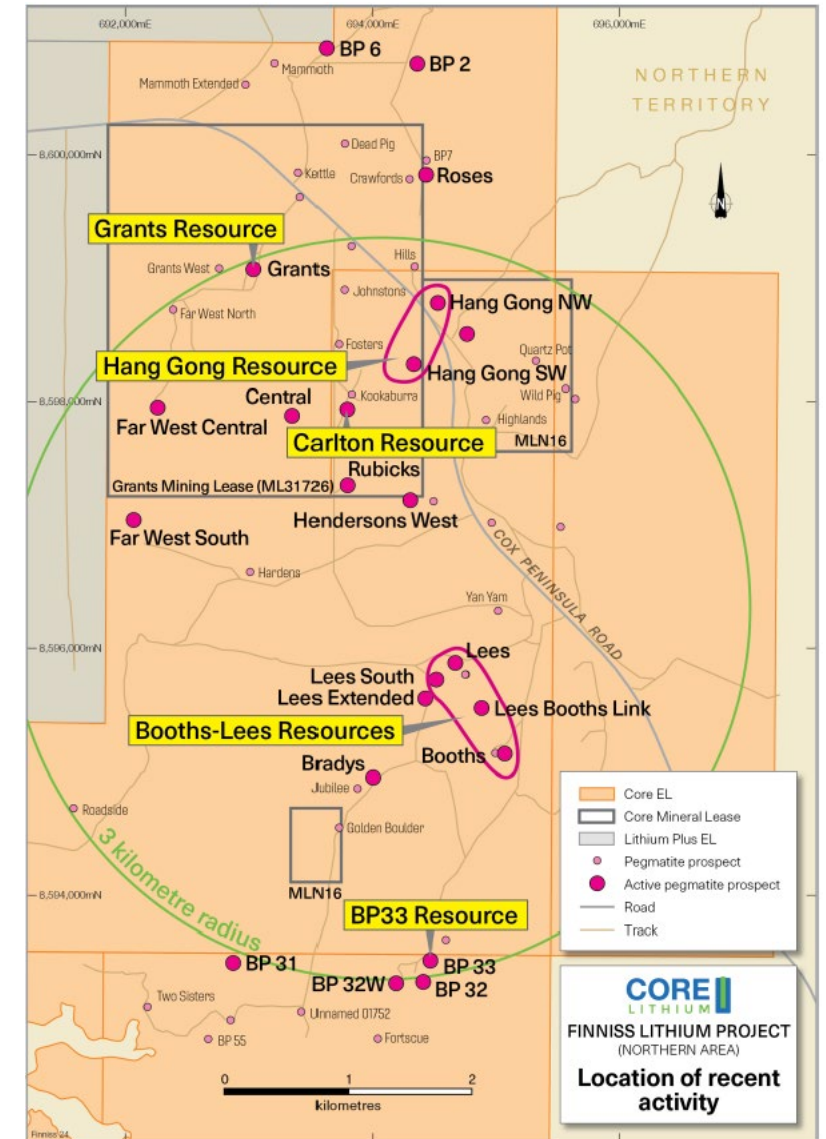


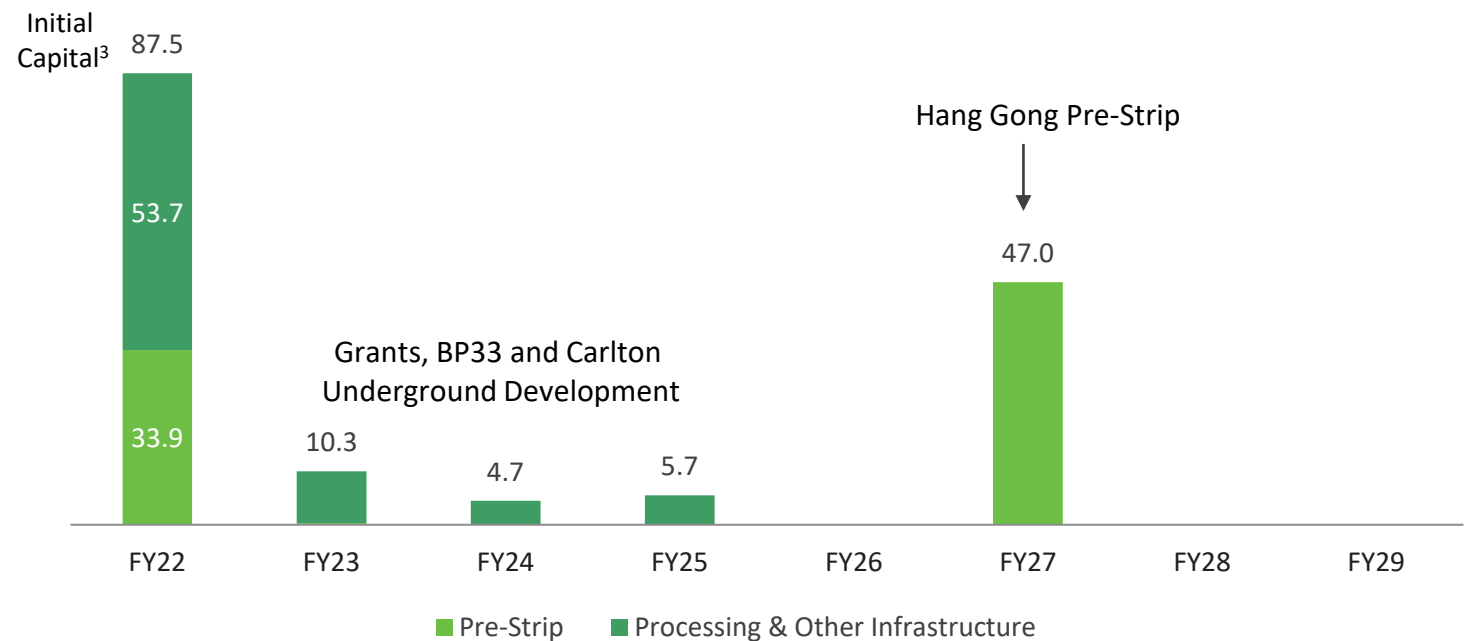
Figure 1: Map of northern Finnis Project area

# Stage 1 DFS: Capital Costs

Core is developing one of the world's most capital-efficient lithium projects

Total Initial Capital Cost <sup>1</sup>	A\$m
DMS Plant	37.9
Power & Water Supply	7.5
TSF & Water Management	6.4
Mobilisation, Utilities & Services	1.7
Site Establishment & Setup	1.1
Roads	0.6
<b>Total Start-Up &amp; Construction Costs</b>	<b>55.0</b>
Pre-Strip Grants Open Pit	33.9
<b>Total Initial Capital Cost</b>	<b>88.9</b>

LOM Non-Sustaining Capital Costs (A\$m)<sup>2</sup>



**Notes:**

1. Initial capital cost defined as capex incurred prior to commercial production.
2. Non-sustaining capex includes initial capital costs, open pit pre-strip costs and other mine establishment costs. Excludes sustaining, underground development and closure capex.
3. Initial capital consists of A\$87.5m incurred in FY22 and A\$1.4m incurred in FY23.

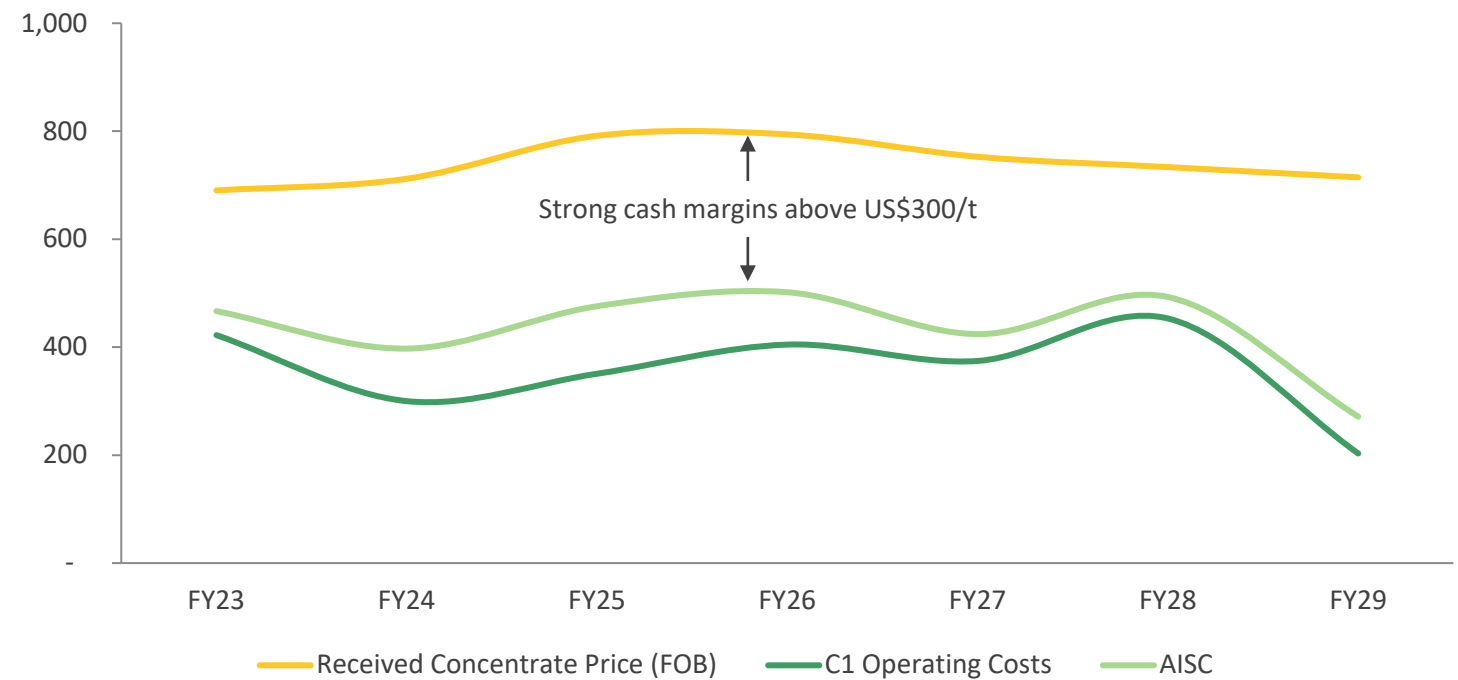


# Stage 1 DFS: Operating Costs (FOB)

Competitive operating costs ensure healthy operating margins

LOM Average Unit Operating Costs	US\$/t <sup>1</sup>
OP Mining Costs	106
UG Mining Costs	133
Processing	103
Haulage & Logistics	12
Site General & Administration	10
<b>C1 Operating Costs<sup>2</sup></b>	<b>364</b>
Royalties	36
Sustaining & UG Development Capex	41
<b>All-in Sustaining Costs (FOB)<sup>3</sup></b>	<b>441</b>

Spodumene Price<sup>4</sup> vs. C1 Operating Costs<sup>2</sup> & AISC<sup>3</sup> (US\$/t, FOB)

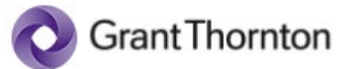


**Notes:**

1. Converted using an exchange rate of 0.70 AUD/USD
2. C1 Operating Costs are defined as direct cash operating costs of production FOB. Direct cash operating costs include mining, processing, transport, and G&A.
3. AISC includes royalties, general sustaining capex and underground development capex.
4. Spodumene price assumptions are derived from Roskill April 2021 forecast, adjusted for sea freight of US\$20/t concentrate and a pro-rata grade adjustment for 5.8% Li<sub>2</sub>O grade.

# Experienced Team to Deliver a Simple Project

High Quality Project and Execution Team



# Mineral Resources and Ore Reserves

## JORC (2012) Resource and Reserves

Mineral Resources	Classification	Ore	Grade	Contained
Deposit		Mt	LiO <sub>2</sub> %	LiO <sub>2</sub> t
Grants	Measured	1.96	1.50	29,500
	Indicated	0.60	1.50	9,000
	Inferred	0.33	1.35	4,400
	<b>Total</b>	<b>2.89</b>	<b>1.49</b>	<b>42,900</b>
BP33	Measured	1.50	1.52	23,000
	Indicated	1.19	1.50	17,000
	Inferred	0.55	1.54	8,000
	<b>Total</b>	<b>3.24</b>	<b>1.51</b>	<b>48,000</b>
Sandras	Inferred	1.30	1.00	13,000
	<b>Total</b>	<b>1.30</b>	<b>1.00</b>	<b>13,000</b>
Carlton	Measured	0.63	1.31	8,000
	Indicated	1.20	1.21	15,000
	Inferred	1.19	1.33	16,000
	<b>Total</b>	<b>3.02</b>	<b>1.28</b>	<b>39,000</b>
Hang Gong	Indicated	1.19	1.30	15,300
	Inferred	0.83	1.19	9,900
	<b>Total</b>	<b>2.02</b>	<b>1.20</b>	<b>25,200</b>
Booths & Lees	Inferred (Lees)	0.43	1.30	5,400
	Inferred (Lees South)	0.35	1.20	4,300
	Inferred (Booths/ Lees)	1.47	1.06	15,700
	<b>Total</b>	<b>2.25</b>	<b>1.13</b>	<b>25,400</b>
<b>Total Mineral Resources</b>	Total Measured	4.09	1.48	60,500
	Total Indicated	4.18	1.36	56,300
	Total Inferred	6.45	1.19	76,700
	<b>Total Resources</b>	<b>14.72</b>	<b>1.32</b>	<b>193,500</b>

Ore Reserves	Classification	Ore	Grade	Contained
Deposit		Mt	LiO <sub>2</sub> %	LiO <sub>2</sub> Kt
<b>Open pit</b>				
Grants	Proved	1.8	1.5	26.4
	Probable	0.3	1.4	4.7
	<b>Total</b>	<b>2.1</b>	<b>1.4</b>	<b>31.0</b>
Hang Gong	Probable	1.1	1.2	13.3
	<b>Total</b>	<b>1.1</b>	<b>1.2</b>	<b>13.3</b>
<b>Total - Open pit</b>	Proved	1.8	1.5	26.4
	Probable	1.4	1.3	17.9
	<b>Total</b>	<b>3.2</b>	<b>1.4</b>	<b>44.3</b>
<b>Underground</b>				
Grants	Proved	0.0	1.0	0.2
	Probable	0.2	1.5	3.4
	<b>Total</b>	<b>0.3</b>	<b>1.4</b>	<b>3.6</b>
BP 33	Proved	1.3	1.4	18.4
	Probable	1.0	1.4	13.8
	<b>Total</b>	<b>2.3</b>	<b>1.4</b>	<b>32.2</b>
Carlton	Proved	0.6	1.2	7.1
	Probable	1.0	1.0	10.7
	<b>Total</b>	<b>1.6</b>	<b>1.1</b>	<b>17.8</b>
<b>Total - Underground</b>	Proved	1.9	1.3	25.7
	Probable	2.3	1.2	27.8
	<b>Total</b>	<b>4.2</b>	<b>1.3</b>	<b>53.6</b>
<b>Total Ore Reserves</b>	Proved	3.8	1.4	52.1
	Probable	3.7	1.2	45.8
	<b>Total</b>	<b>7.4</b>	<b>1.3</b>	<b>97.9</b>

Source: Refer 26 July 2021 ASX announcement "Stage 1 Definitive Feasibility Study and Updated Ore Reserves"

1. Columns and numbers may not total exactly due to rounding

# Capex Intensity Benchmarking – Data Sources

- Rose Lithium-Tantalum: As per 13 July 2021 Company Presentation “Company Investor Presentation (July 2021) (pg 35) and as per 29 November 2017 TSX announcement “Rose Lithium-Tantalum Project - Feasibility Study NI 43 101 Technical Report” (pg 200)
- Kathleen Valley: As per 9 October 2020 ASX announcement “Updated KV PFS – Substantial Increase in NPV and Mine Life” (pg 9)
- Authier: As per 11 November 2019 ASX announcement “Revised Authier DFS Shows Boost to Profitability” (pg 3)
- Manono: As per 21 April 2020 ASX announcement “AVZ Delivers Highly Positive DFS for Manono Project” (pg 1, 4)
- Mina do Barossa: As per 14 June 2018 LSE announcement “Portugal Scoping Study” (pg 4, 20)
- James Bay: As per 9 March 2021 ASX announcement “James Bay Development Plan” (pg 3, 6)
- Goulamina: As per 20 October 2020 ASX announcement “Goulamina Lithium Project Definitive Feasibility Study” (pg 3)
- Groto do Cirilo: As per 18 October 2019 TSX announcement “NI 43-101 Technical Report on Feasibility Study – Groto Do Cirilo Lithium Project (pg 37, 39)



# Thank you

Authorised for release by the Board of Core Lithium Ltd

## For more information:

Stephen Biggins, Manager Director : +61 8 8317 1700

### **Core Lithium Ltd**

Level 1, 366 King William Street, Adelaide

## For broker and media enquiries:

Fraser Beattie: +61 421 505 557

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