



**PRE FEASIBILITY STUDY  
FINNISS LITHIUM PROJECT**

June 2018

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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.

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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.

## Important and Cautionary Notes

### **Cautionary Statement:**

The PFS results are based upon the updated Grants Mineral Resource of 8 May 2018 (ASX announcement 8 May 2018). The Mineral Resource contains Indicated and Inferred material (see Table 5 in section 3.1 below – 37% Inferred material and 63% Indicated material) and does not contain any material in the Measured classification. Whilst there is sufficient Indicated Mineral Resources to complete the production schedule during the 12-month payback period, there is a reliance on Inferred Mineral Resources for the full PFS schedule. 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 Finnis Lithium Project as the inferred Mineral Resource represents 14% of the production during the 12 month pay-back period. The PFS has targeted a well-defined mineralised pegmatite envelope where it is considered that there are reasonable grounds for the conversion of Inferred to Indicated or Measured Resource status. Which will then reasonably allow the production target to be achieved in both the grade and size which has been outlined in this PFS. This PFS development option considers the Grants Mineral Resource alone. The PFS does not rely upon additional Mineral Resources from the company's other prospects. Further drilling in 2018 is expected to improve the classification of all of the company's Mineral Resources.

### **Competent Person Statements:**

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 estimates in the announcements "Grants Lithium Resource Upgrade" dated 8 May 2018 and "Maiden Resource Estimate at BP33" dated 23 May 2018 continue to apply and have not materially changed. The Mineral Resources underpinning the production target have been prepared by a Competent Person in accordance with the requirements of the JORC code. 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. Core confirms that all material assumptions underpinning production target and forecast financial information derived from the product target announced on 25 June 2018 continue to apply and have not materially changed.

### **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 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 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 not subject to inflation/escalation factors, and all years are calendar years.

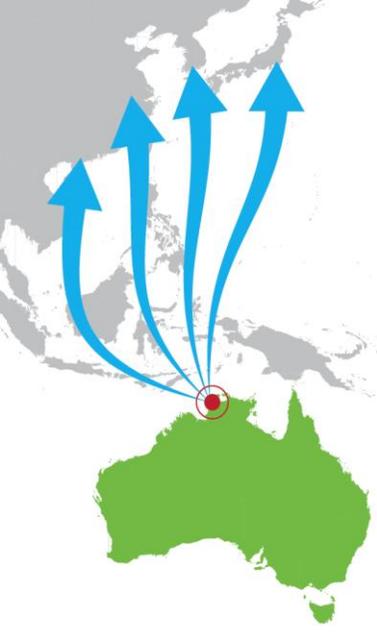
### **Accuracy:**

The PFS has been prepared to an overall level of accuracy of approximately -15% to +25%.

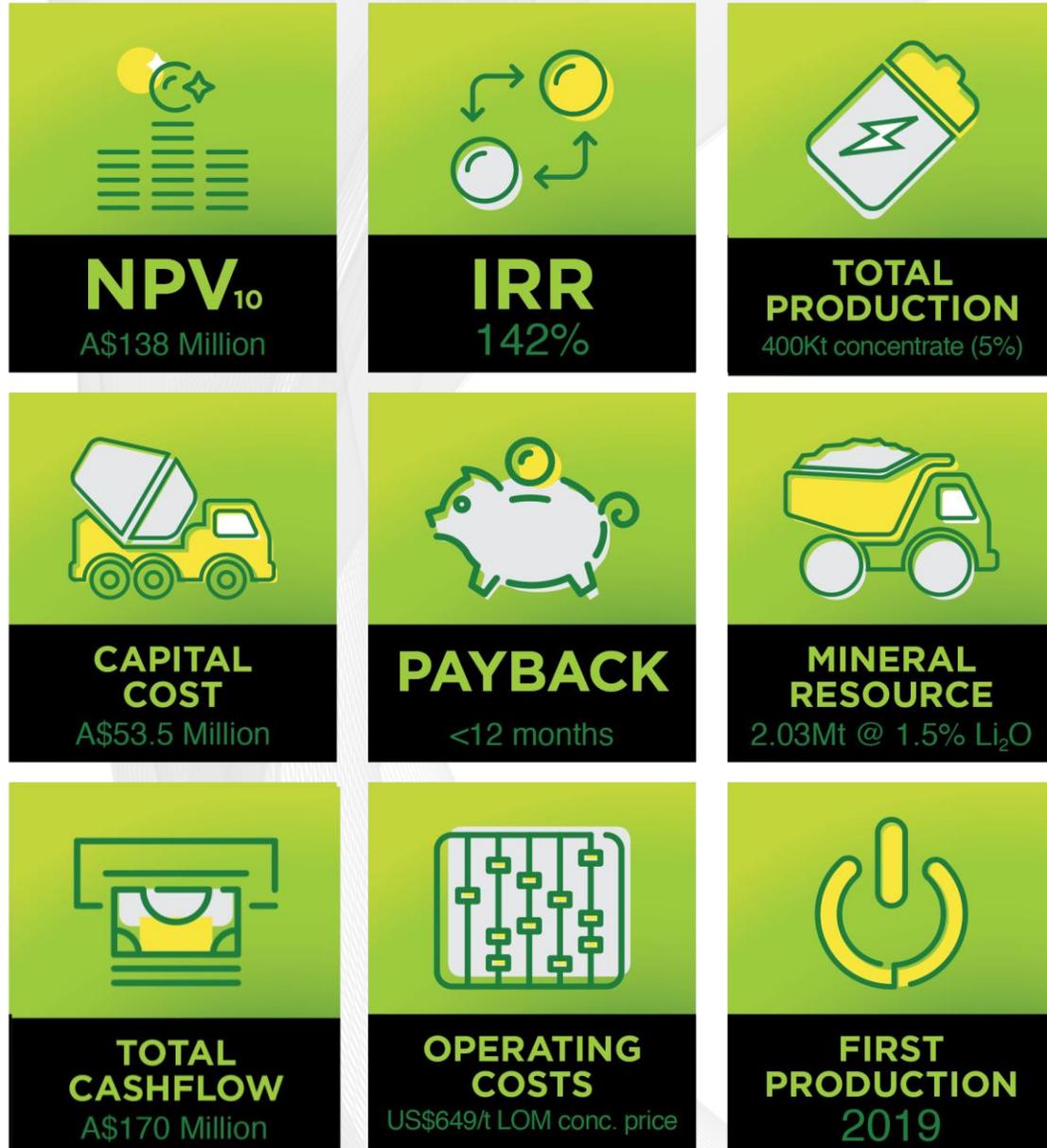
# Lithium Pre-Feasibility Study Highlights

- CXO on a pathway to lithium production - targeting late 2019
- Development of the high grade (1.5%) Grants deposit only modelled in the PFS
- Numerous nearby prospects expected to drive growth (i.e. BP33 Resource not yet reflected in PFS)
- Preliminary Feasibility Study (PFS) delivers strong financial outcomes:
  - **Capital Cost only \$53.5 million**
  - **A\$168 million in free cashflow generated**
  - **Low Operating Cost US\$279/t concentrate delivers 57% operating profit margin**
  - **NPV<sub>10</sub> of A\$140 million (pre-tax)**
  - **IRR of 142%**
  - **Payback in less than 12 months**
- Low-capex production of spodumene concentrate, for export from Darwin port
- Binding offtake agreement with Yahua (one of China's largest lithium producers)
  - Includes US\$20 million prepayment facility
- Significant potential to grow Resource base across a number of high grade prospects
- Arguably the best logistics chain to Asia and supporting infrastructure of any Australian lithium project, providing significant strategic advantages
- **Enterprise Value of \$20 million offers substantial leverage to Development and Exploration**





# Grants Deposit Pre-Feasibility Study Key Metrics



# Company Information



## Directors

**Stephen Biggins**  
Managing Director ex SAU, IVR

**Greg English**  
Chairman AXE, LCK

**Heath Hellewell**  
Non-Executive Director CMM, DKM, ex DRM

## Shares

Price A\$	~\$0.043
Shares on issue	~633.5M
Market cap	~\$27.2M
Cash (30/6/2018 est.)	~\$8M
Enterprise Value	~\$19M

## Management

**Blair Duncan**  
General Manager Development

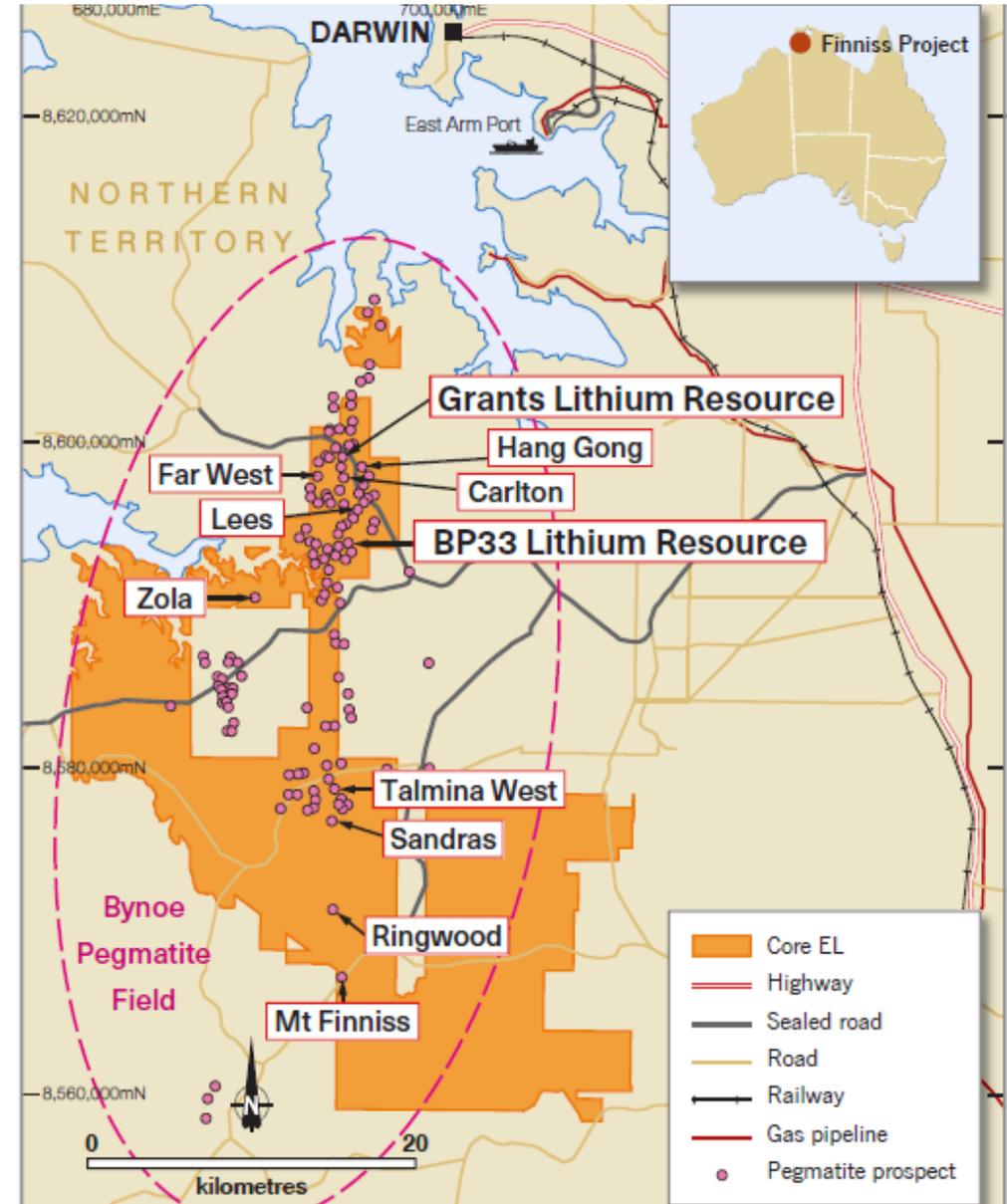
**David Rawlings**  
Exploration Manager

**Jarek Kopias**  
Co Sec / CFO

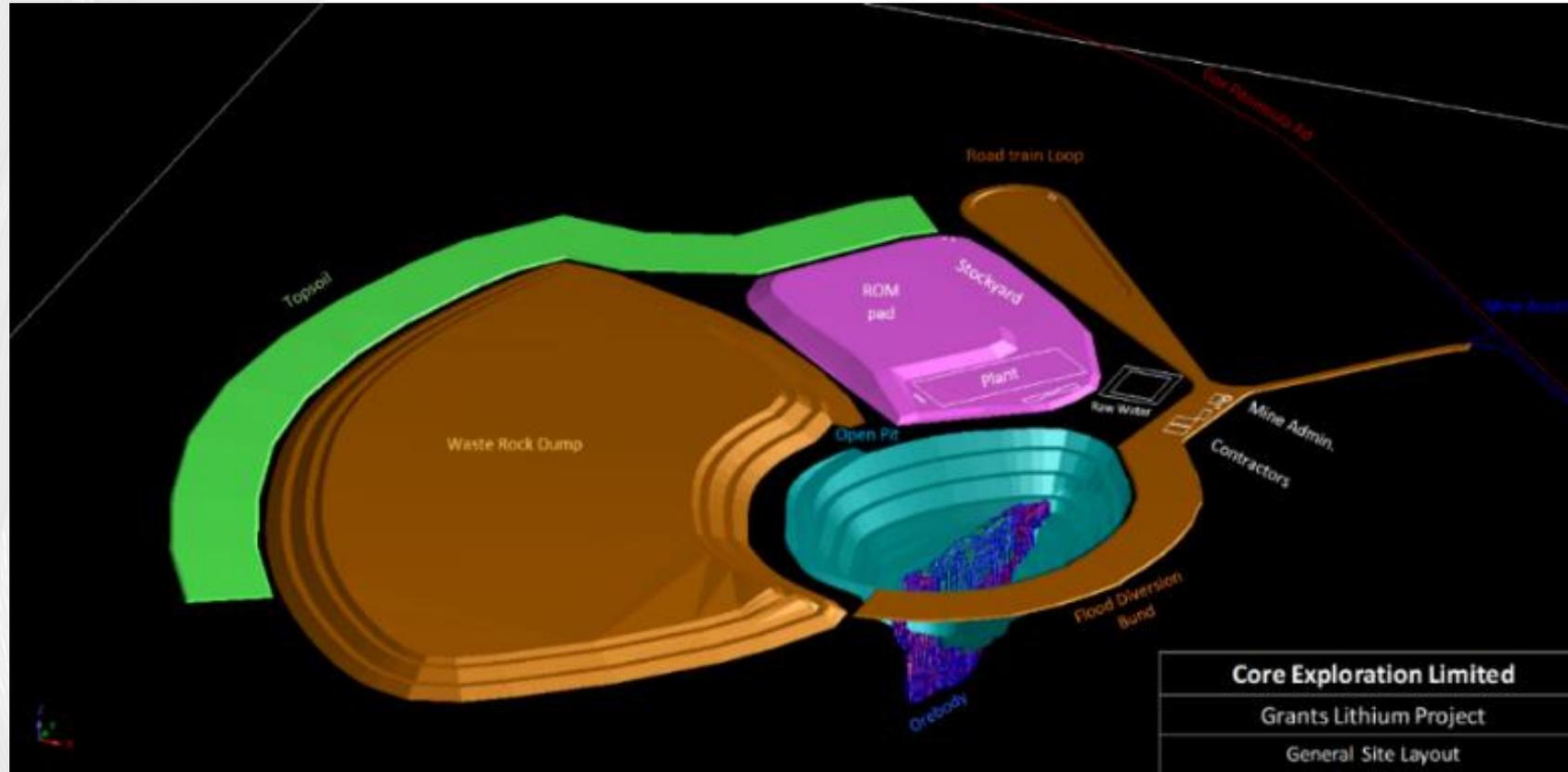
# Finniss Lithium Project

## Core's dominant position in this emerging lithium province

- First mover advantage
- One of Australia's highest grade lithium resources
- Over 100 historic pegmatite occurrences
- Large area ~500km<sup>2</sup> of tenements
- Granted Mining Lease over historic pegmatite mine
- Widespread high grade spodumene drill intersections at multiple prospects
- Existing and new large pegmatite targets to be tested
- Easy trucking distance by sealed road to Darwin Port



# Proposed Site Layout



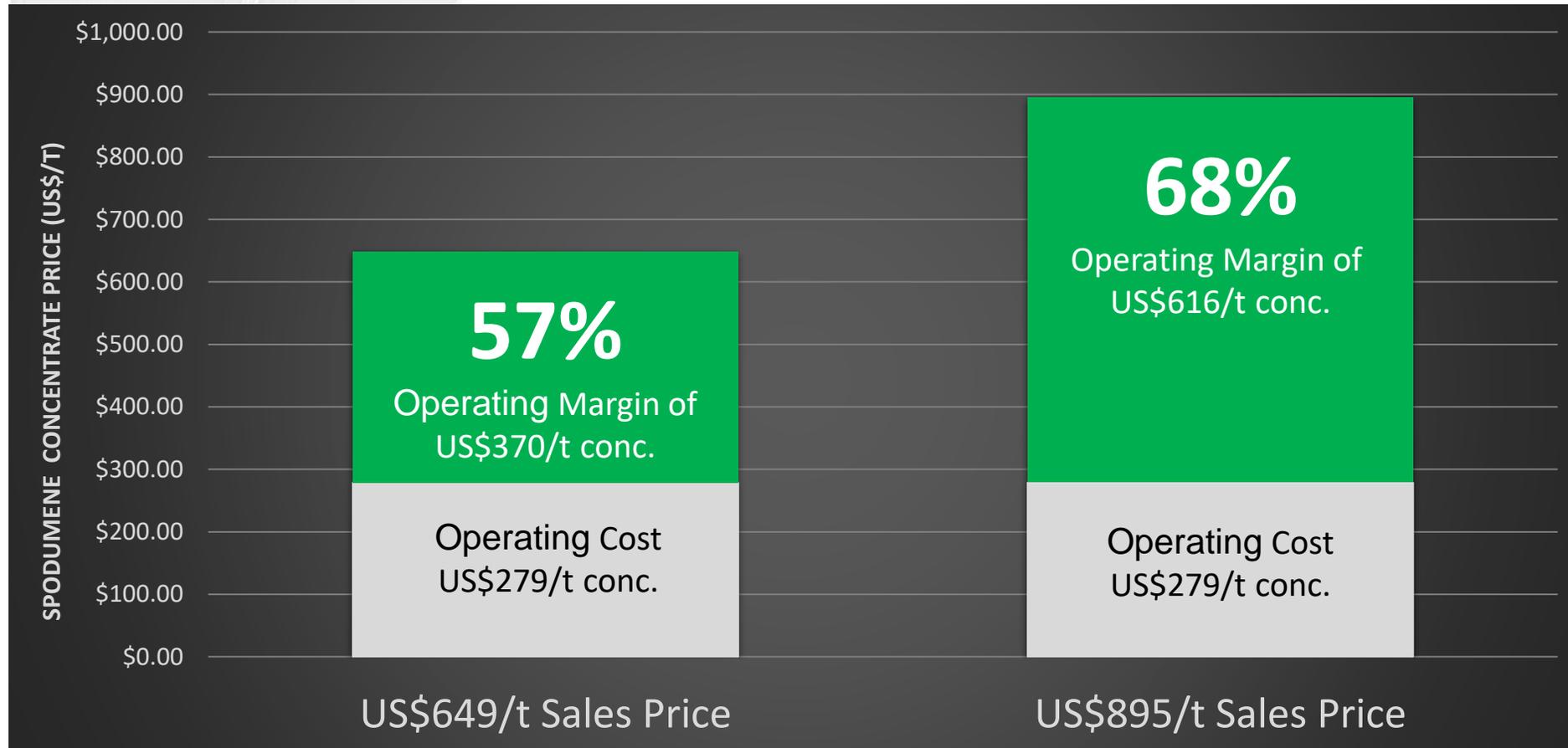
# Capital Costs

Capital	Estimate – A\$'000
Mobilisation	\$ 1,943
Site Establishment	\$ 562
Groundwater Management	\$ 55
Mine Development (Clear & grub)	\$ 997
Demobilisation	\$ 948
Rehabilitation	\$ 584
DMS Plant	\$ 20,046
TSF	\$ 1,725
Sustaining Capital	\$ 2,300
Pre-production Capital	\$ 24,390
<b>Total (including contingencies of \$3.8 million)</b>	<b>\$ 53,550</b>

# Operating Costs

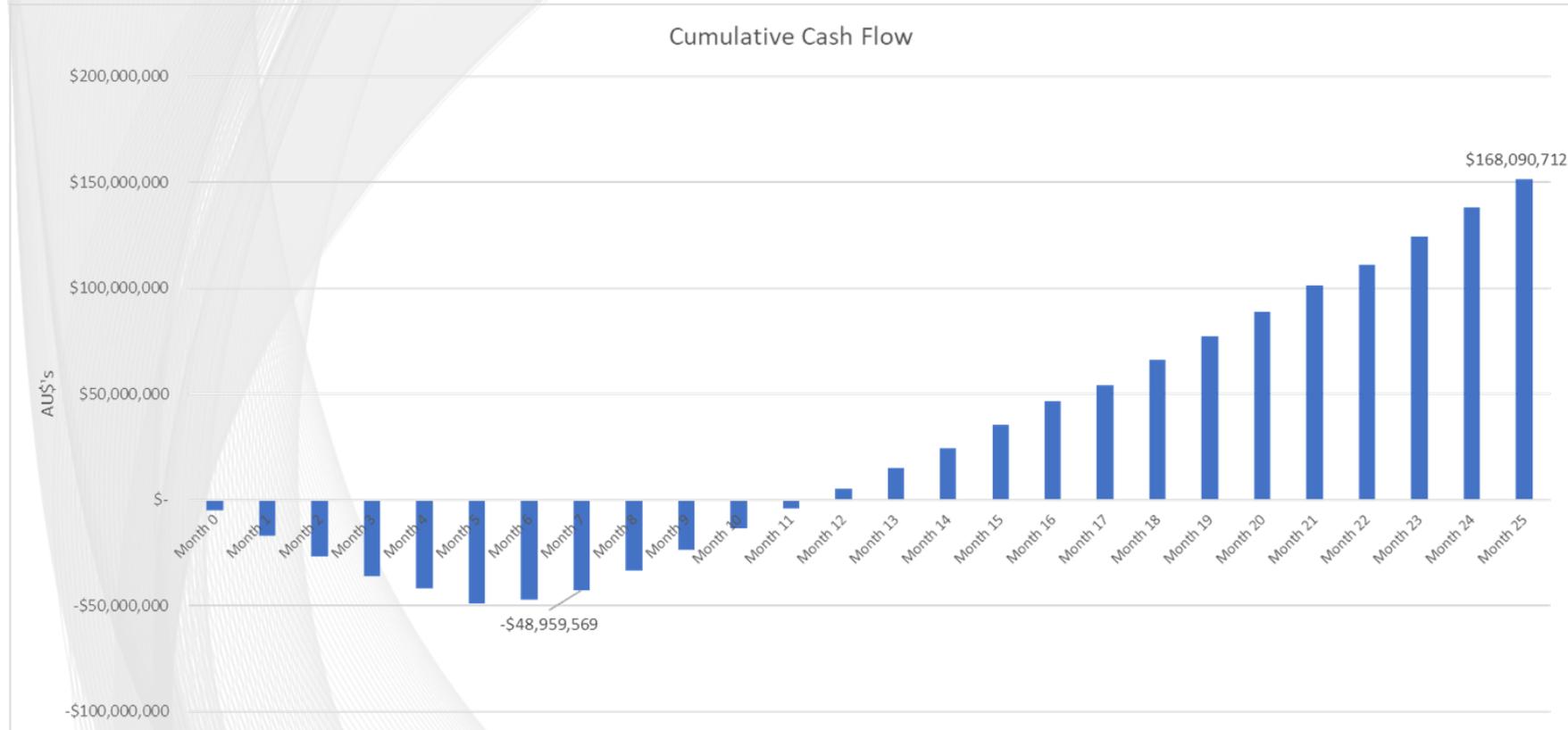
Operating	Unit Costs
<b>Mining Costs</b>	
<b>Mining Costs – Contractor</b>	\$ 186.17
<b>Mining Costs – Owner</b>	\$ 22.53
<b>Sub-total</b>	\$ 208.70
<b>Processing</b>	\$ 71.19
<b>Hauling</b>	\$ 11.47
<b>General &amp; Administration</b>	\$ 8.00
<b>Port Costs</b>	\$ 7.50
<b>Total Unit Operating Cost</b>	<b>A\$ 306.86 / t conc. US\$ 230.15 / t conc.</b>
<b>Royalties</b>	A\$ 64.86
<b>Total Unit Operating Costs (inc Royalties)</b>	<b>A\$ 371.72 / t conc. US\$ 278.79 / t conc.</b>

# Exceptional Economics



- Globally competitive, low operating costs provide the framework for strong operating profits

# Strong Cash Generation

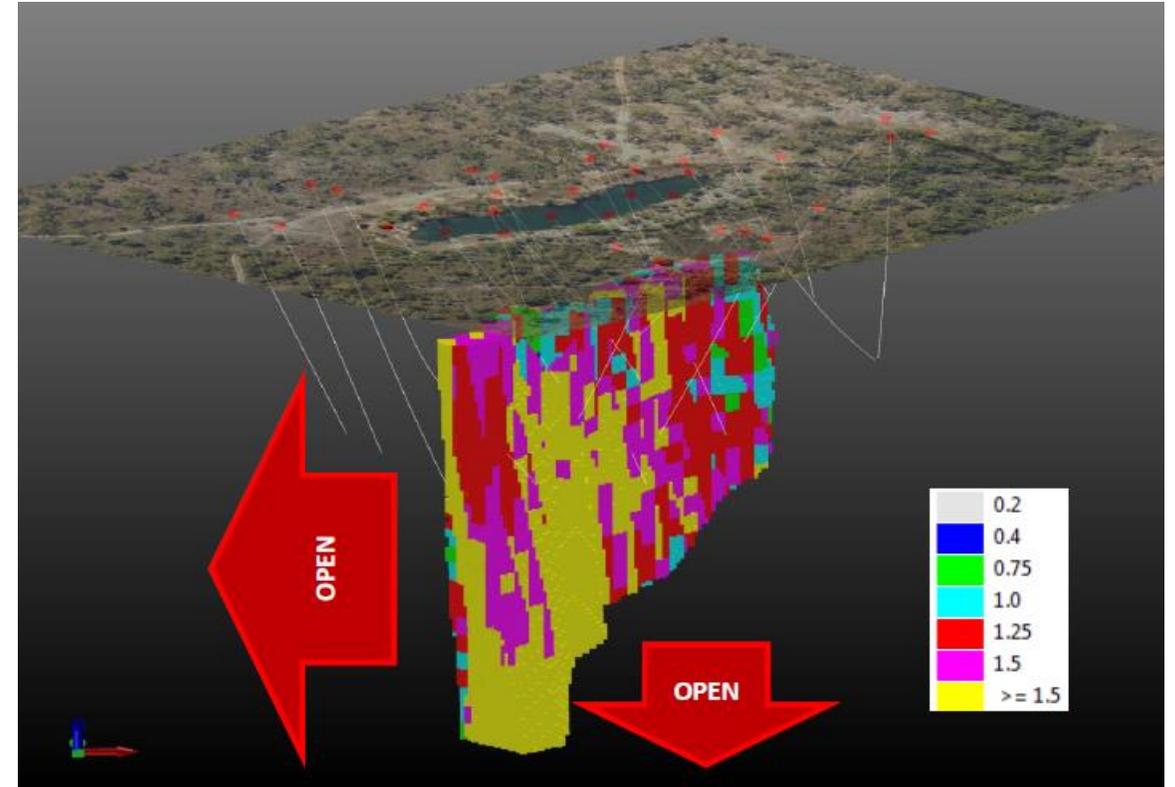


- **\$53.5 million capex will deliver close to \$170 million in free cash over 26 months**
- **Rapid payback <12 months**
- **Does not factor in any upside from processing additional ore sources that may be delineated within the Finnis Project**

# Significant Upside Potential

- PFS focussed on Grants only
- Significant upside potential through addition of other ore sources within the Finniss Project
- The incremental value of additional ore sources is very high given no need for additional process plant infrastructure
- BP33 Mineral Resource of 1.4Mt at 1.40%  $\text{Li}_2\text{O}$  represents obvious opportunity for additional mine life
  - Current resource adds 70% to Grants resource
  - BP33 open to south and south-west
  - Similar geology to Grants
  - Most southern intercept in resource 75m at 1.68%  $\text{Li}_2\text{O}$ \*
- BP33 will be considered as part of the Feasibility Study later in 2018
- Other widespread lithium-bearing pegmatites yet to be drilled

\*ASX:CXO 11/04/18



Schematic view of BP33, showing resource open along strike

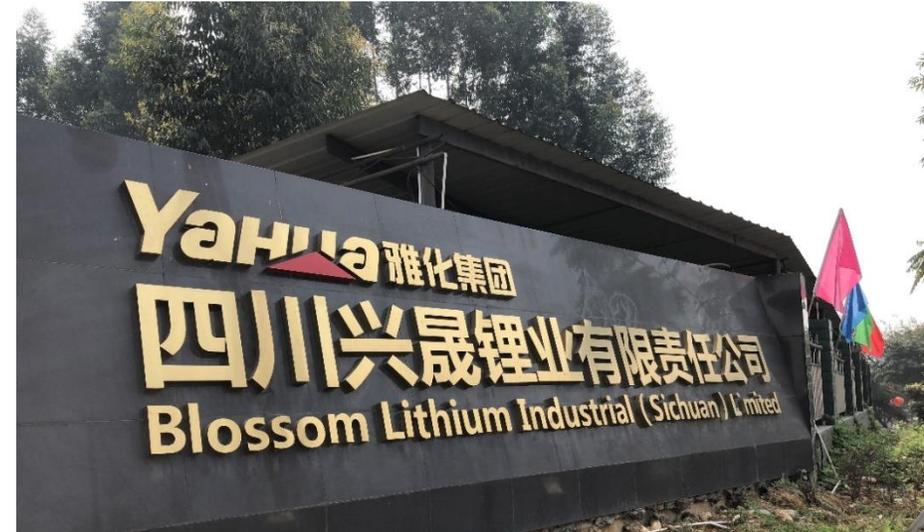
# Countdown to First Lithium Production



# BINDING LITHIUM OFFTAKE AND US\$20M PRE-PAYMENT

Core has signed a 1 million tonne binding offtake and US\$20 million pre-payment agreement with Yahua

- Binding offtake and pre-payment agreements signed with Yahua (\$2B market cap)
- Yahua is one of China's largest lithium producers
- Offtake agreement provides for the supply of 1 million tonnes of lithium DSO (or concentrate equivalent) from Finniss Lithium Project
- US\$20 million conditional prepayment facility, to be repaid through the supply of future DSO or Li<sub>2</sub>O concentrate
- Targeting first deliveries from 2019



# 6% $\text{Li}_2\text{O}$ CONCENTRATE AT >80% RECOVERY IN METALLURGICAL TESTWORK OF DSO SPODUMENE

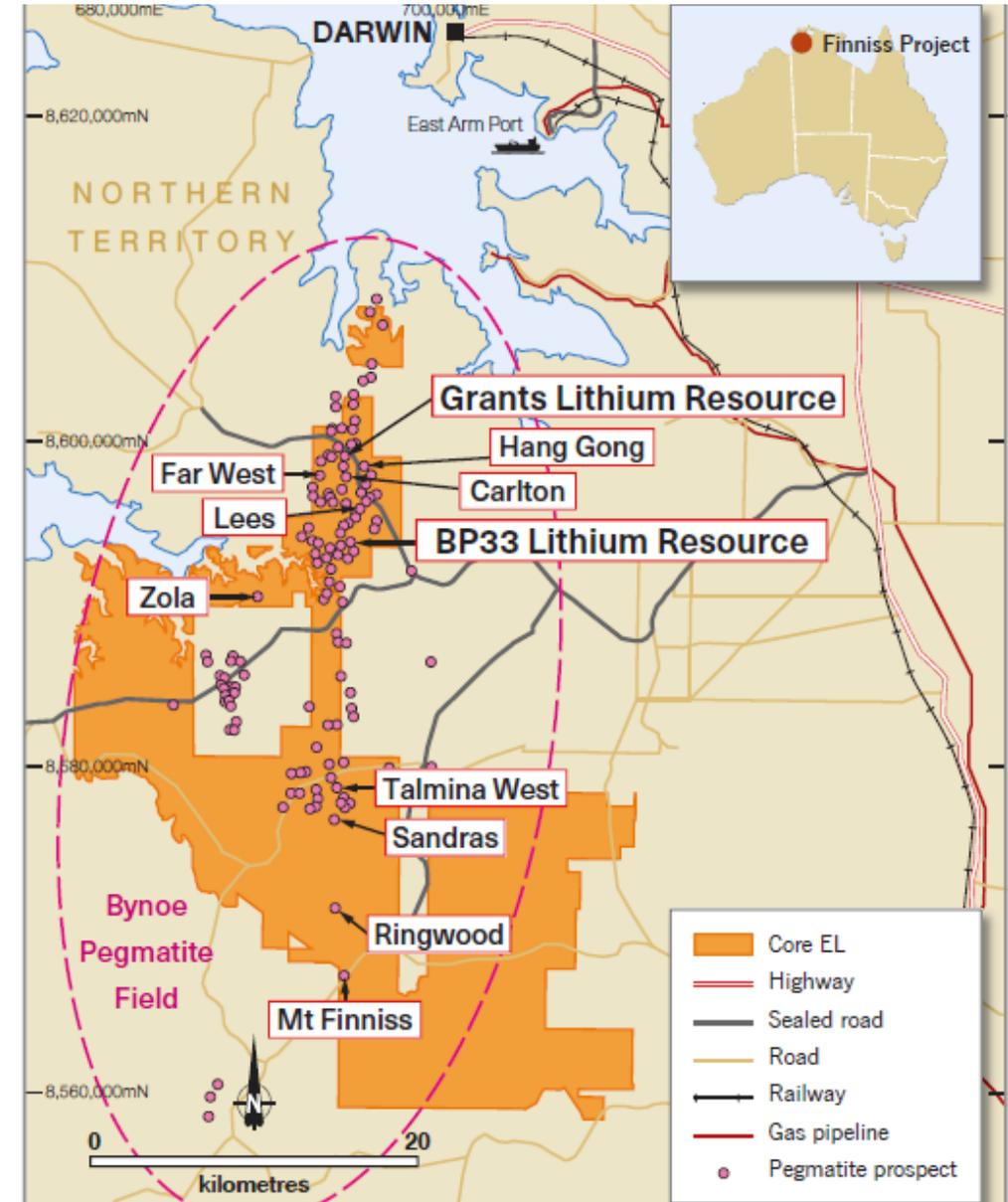
- Metallurgy confirms value of high grade spodumene ore from Grants
- Customers also recognise the good metallurgy of Grants spodumene
- **Low capex DMS process may produce a high value >5%  $\text{Li}_2\text{O}$  concentrate product at good recoveries**
- Further review of development options in PFS in context of potential additional resources expected in 2018



8.10%  $\text{Li}_2\text{O}$  Spodumene from HLS Testwork

# 2018 DRILLING TARGETING SUBSTANTIAL RESOURCE GROWTH

- Upcoming exploration and aggressive drill programs in 2018 to target growth in the resource base to support a long-life lithium production hub at Finnis Project
- Core's exploration has discovered some of the highest grade lithium in Australia, capable of producing a quality chemical grade spodumene concentrate
- Numerous high grade lithium pegmatite targets already identified
- High potential for additional resources from 500km<sup>2</sup> covering 100s of pegmatites
- 3 rigs currently drilling at Finnis with 40,000m of drilling to be conducted over next 12-months

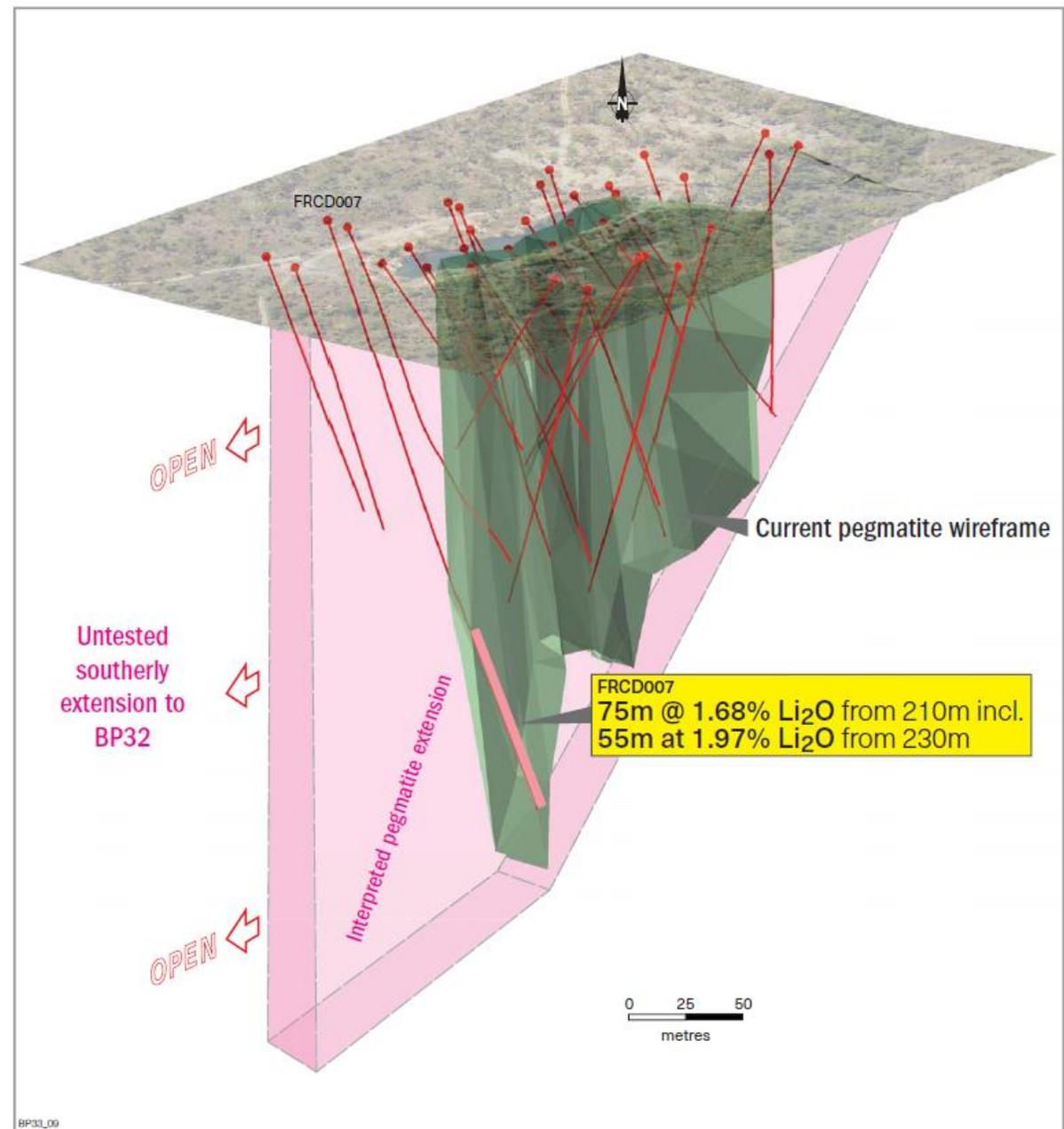


# BP33 EXPANDING

## 55M @ 2.0% SPODUMENE PEGMATITE DRILL INTERSECTION

- Wide and high-grade lithium assays returned from drilling at BP33 prospect delivers spodumene intersection amongst the best in Australia:
  - 75m @ 1.68%  $\text{Li}_2\text{O}$  from 210m\*; including:
    - 55m @ 1.97%  $\text{Li}_2\text{O}$  from 230;
    - 23m @ 2.07%  $\text{Li}_2\text{O}$  from 262m.
- Drill hole still in high-grade spodumene pegmatite at end of hole, with last metre grading 2.41%  $\text{Li}_2\text{O}$
- High-grade spodumene pegmatite body at BP33 open along strike to the south from this drillhole toward BP32 Prospect

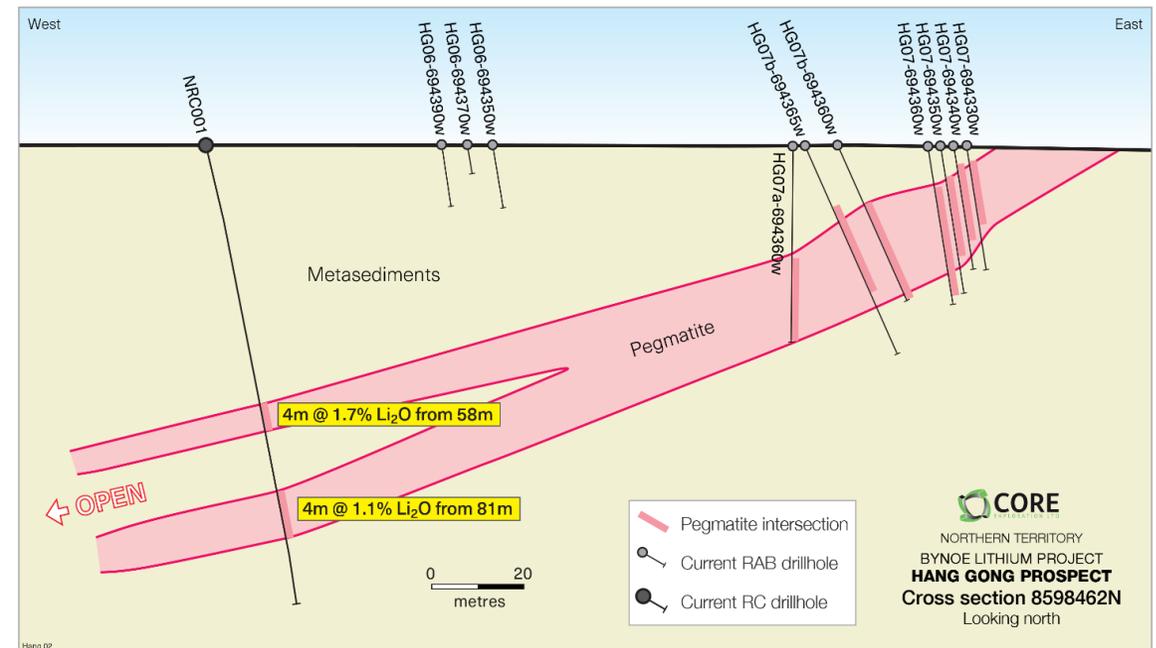
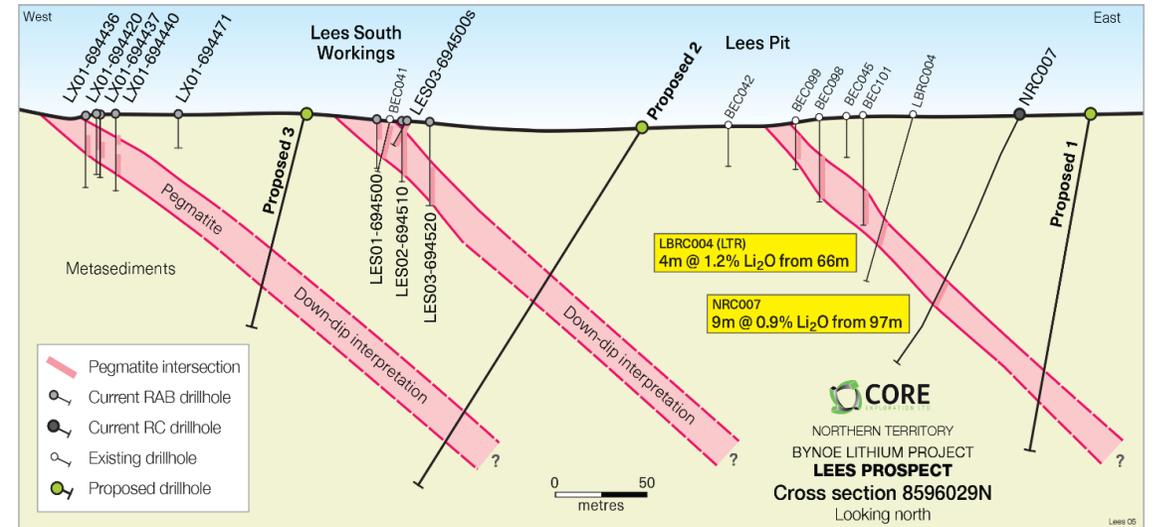
\*ASX:CXO 11/4/18



# NEW SHALLOW DIPPING, HIGH GRADE MULTIPLE STACKED PEGMATITE TARGETS

- Alternate mining scenarios
- Drilling of these new spodumene pegmatite targets at start of 2018 dry season
- Also many more pegmatites to revisit and test on large 500km<sup>2</sup> project area in 2018, including recently acquired tenure from LTR

• ASX:CXO 05/02/18



# EXCELLENT RESULTS FROM CURRENT DRILLING BUILDING RESOURCES Q1 AND THROUGH 2018

## BP33

Prospect results include\*:  
62m @ 1.24% Li<sub>2</sub>O  
54m @ 1.42% Li<sub>2</sub>O

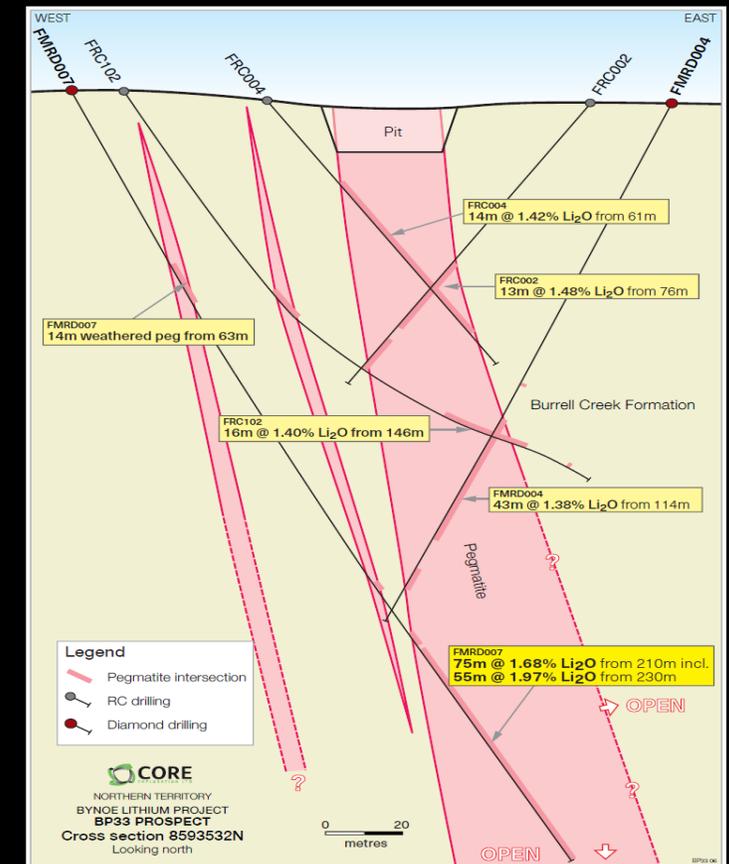
## Sandras

Prospect results include\*\*:  
27m @ 1.45% Li<sub>2</sub>O  
38m @ 1.08% Li<sub>2</sub>O

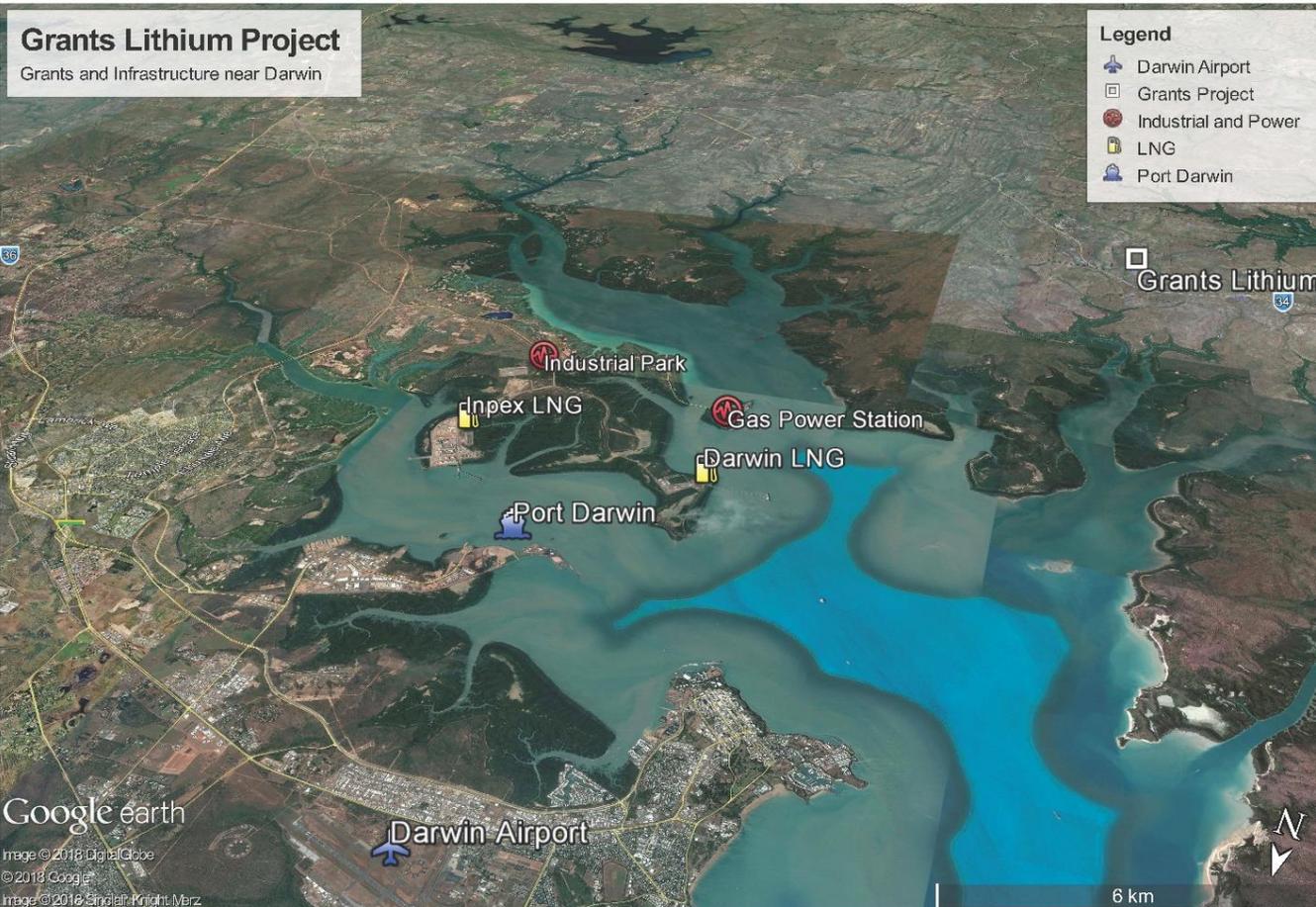
## Carlton

Prospect results include\*\*\*:  
10m @ 1.6% Li<sub>2</sub>O

ASX:CXO \*11/04/18, \*\*19/12/17, \*\*\*05/02/18



# PROJECT INFRASTRUCTURE ADVANTAGE



**Potentially best logistics chain to China  
of any Australian lithium project**

**Darwin Port located close to Grants**

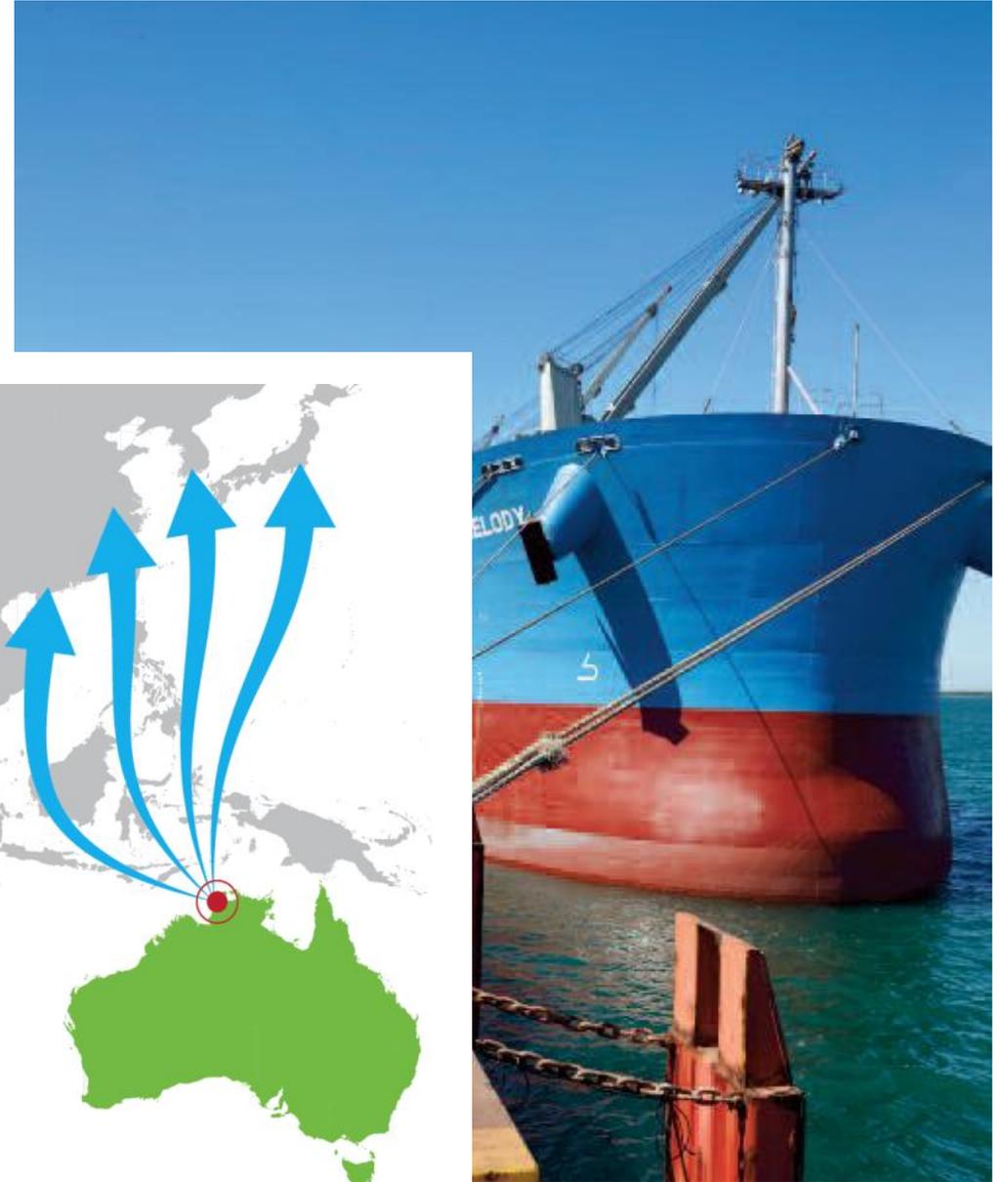
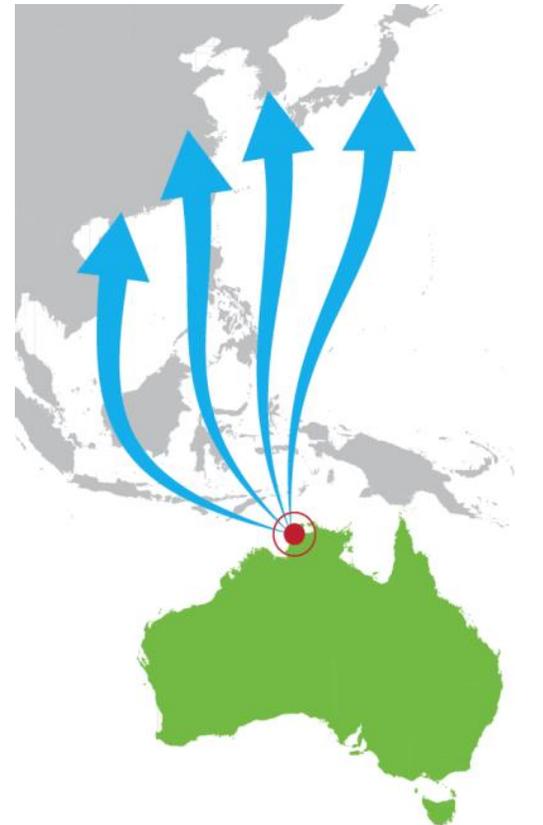
**88km route is on all Northern Territory  
Government roads licenced for road trains**

**Bitumen (black top) all the way**

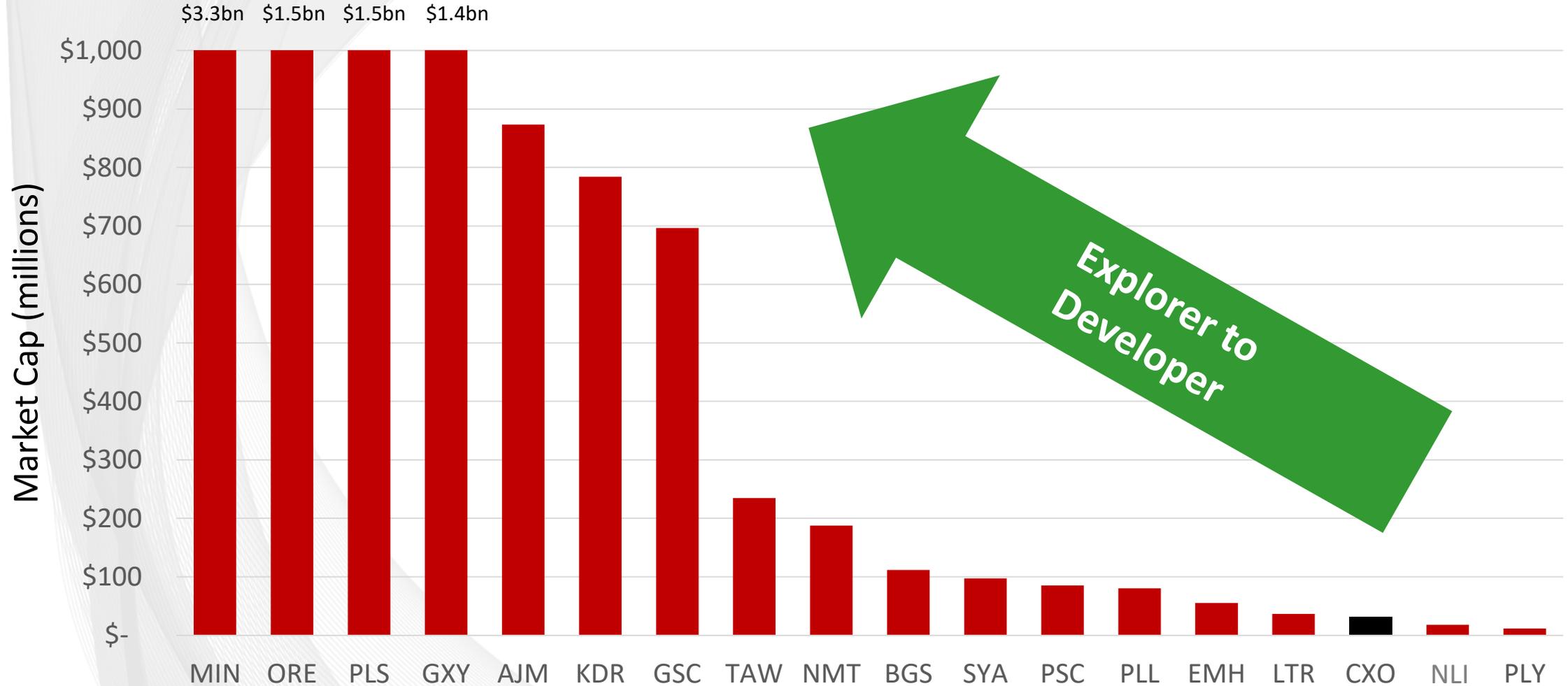
**Grants is close to grid power, gas and rail  
infrastructure**

# DARWIN PORT AGREEMENT CORE HAS AGREEMENT WITH DARWIN PORT TO SHIP 1MTPA OF SPODUMENE

- 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 1Mtpa of spodumene direct shipping ore (DSO) or up to 250,000 tpa of spodumene concentrate
- East Arm Wharf facilities at Darwin Port are well suited to handle potential future production from Core's lithium projects
- Darwin Port is Australia's nearest port to China



# ASX LITHIUM SECTOR COMPARATIVE MARKET CAP



# ON THE PATH TO PRODUCTION

- Core's development of the Finniss Project is unlocking a new lithium rich province in the Bynoe Pegmatite Field, near Darwin, NT
- Preliminary Feasibility Study (PFS) now completed, and Feasibility Study scheduled for delivery by the end of 2018
- Grants favourable characteristics drive a very high margin project, with rapid payback
- Capex only \$53.5 million, of which over US\$20 million already committed by major lithium offtake partner, Yahua Group
- Mining Lease Application and Approvals commenced for Grants Lithium Resource
- Grants is just the beginning! BP33 Resource already defined, and more to come
- Enterprise Value of approximately A\$20 million provides very significant upside exposure relative to NPV of A\$140 million

# THANK YOU



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Cannings Purple