



**NORTHERN TERRITORY'S LITHIUM VALLEY  
FINNISS LITHIUM PROJECT**

MINING THE TERRITORY CONFERENCE  
Darwin September 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:**

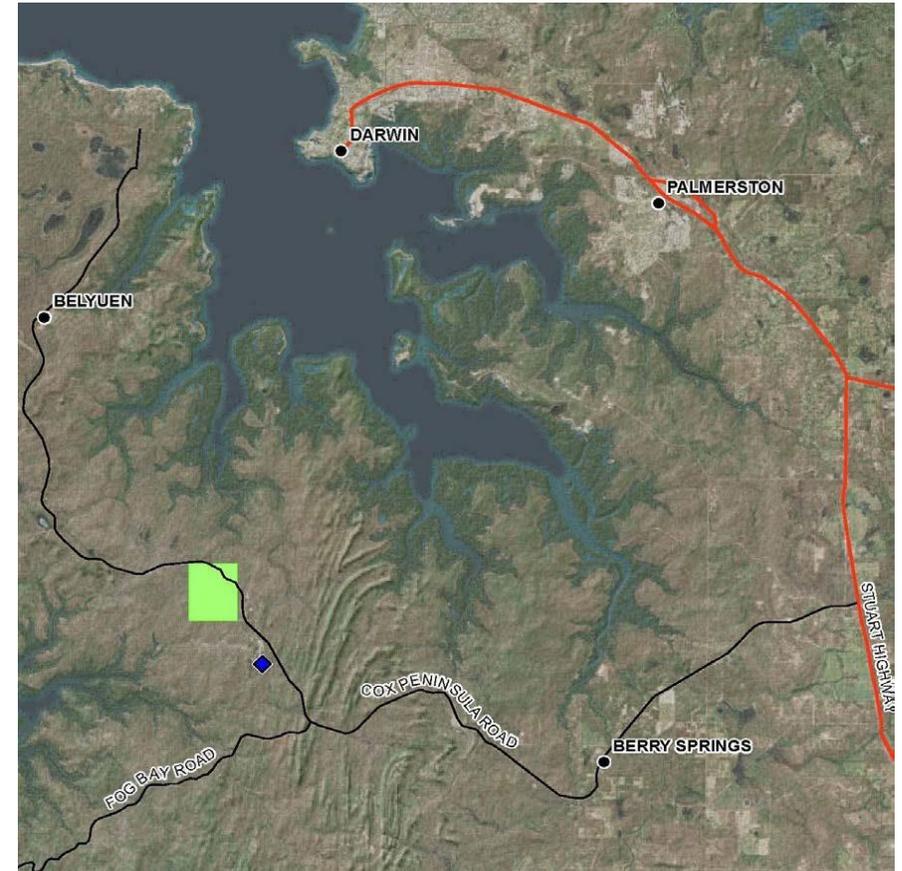
Unless otherwise stated, all cashflows are in Australian dollars, are undiscounted and are not subject to inflation/escalation factors, and all years are calendar years.

### **Accuracy:**

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

# BACKGROUND

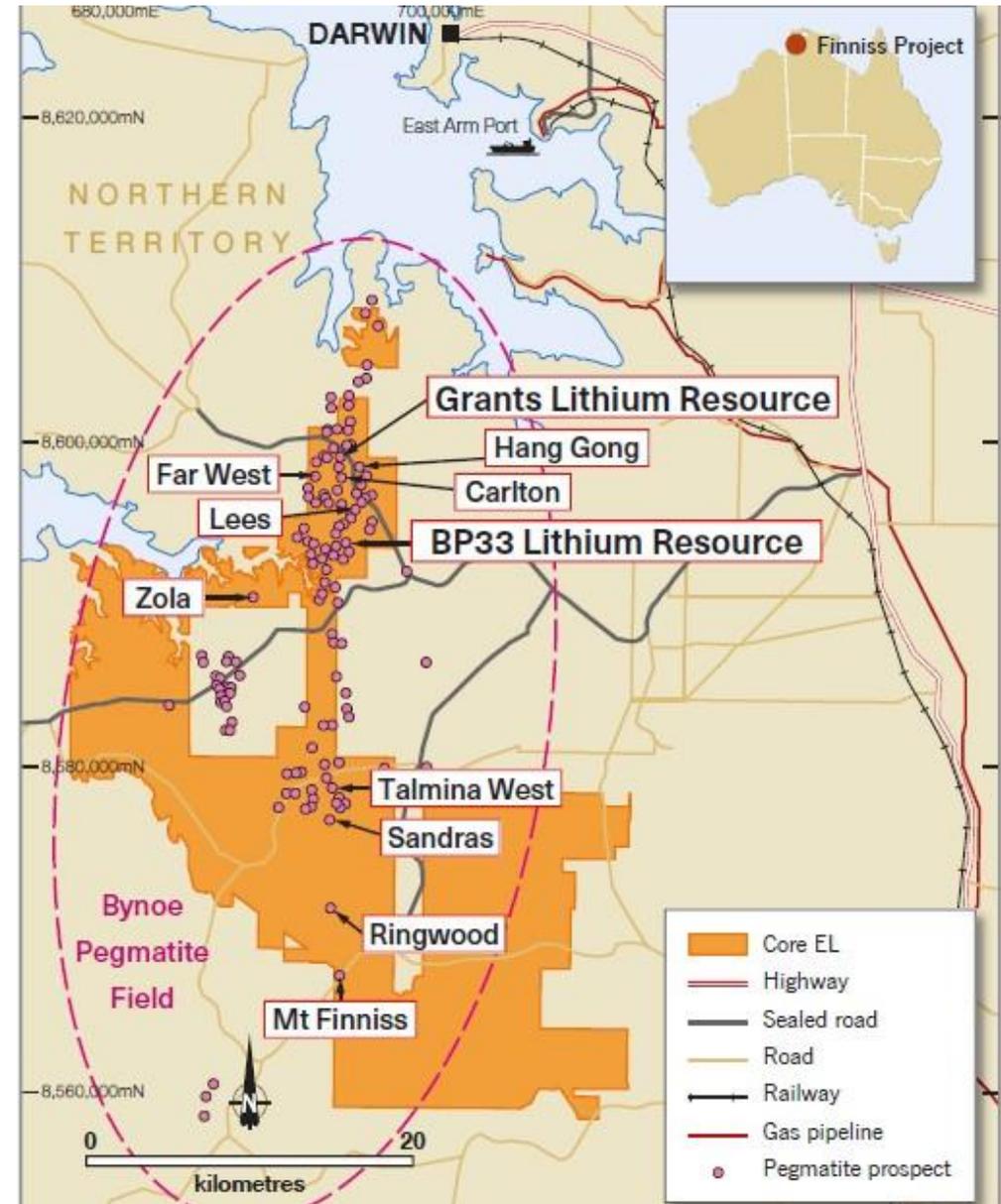
- Core Exploration Ltd (ASX: CXO) is an Australian resources company.
- The Finniss Lithium Project includes one of Australia's highest grade lithium resources.
- Project Process:
  - Mine spodumene pegmatite ("lithium rich granite")
  - Processing of the mined material on site using Dense Media Separation (DMS) to produce benign concentrate
  - No chemicals used in the processing - only water
  - Truck concentrate ("gravel") to Darwin Port for export to Asia



# FINNISS LITHIUM PROJECT

## Potentially best logistics chain to Asia of any Australian lithium project

- One of Australia's highest grade lithium resources
- Grants is close to grid power, gas and rail infrastructure
- 88km haul route to Darwin Port is on all NT Government roads licenced for road trains (Bitumen all the way).
- Large area ~500km<sup>2</sup> of tenements including over 100 historic pegmatite occurrences and MLs
- 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

## Conventional Open Pit Mining

- Drill & Blast
- Excavate, Load & Haul

## Waste Rock Dump

- 1,000m x 600m x 25m

## Crushing Circuit

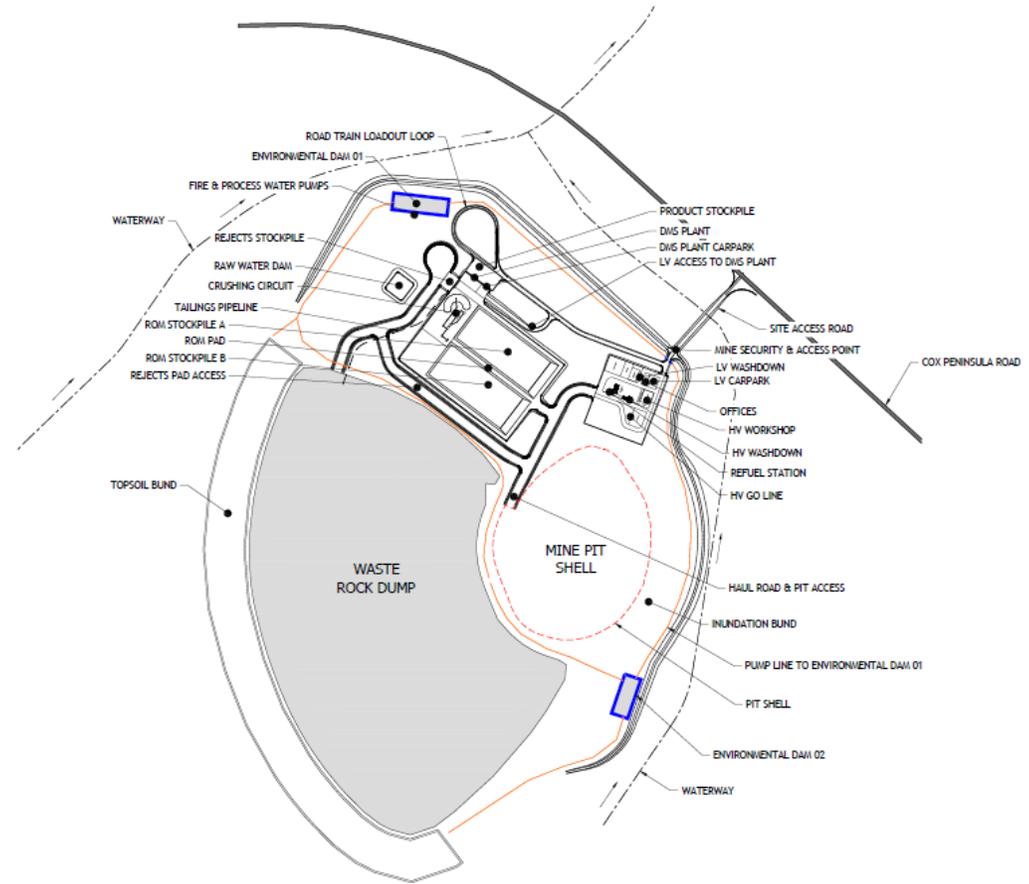
- 3-Stage Crush

## DMS (Gravity Separation) Plant

- 5.5 %  $\text{Li}_2\text{O}$  Concentrate

## Truck to Darwin Port

- 1hr by sealed road



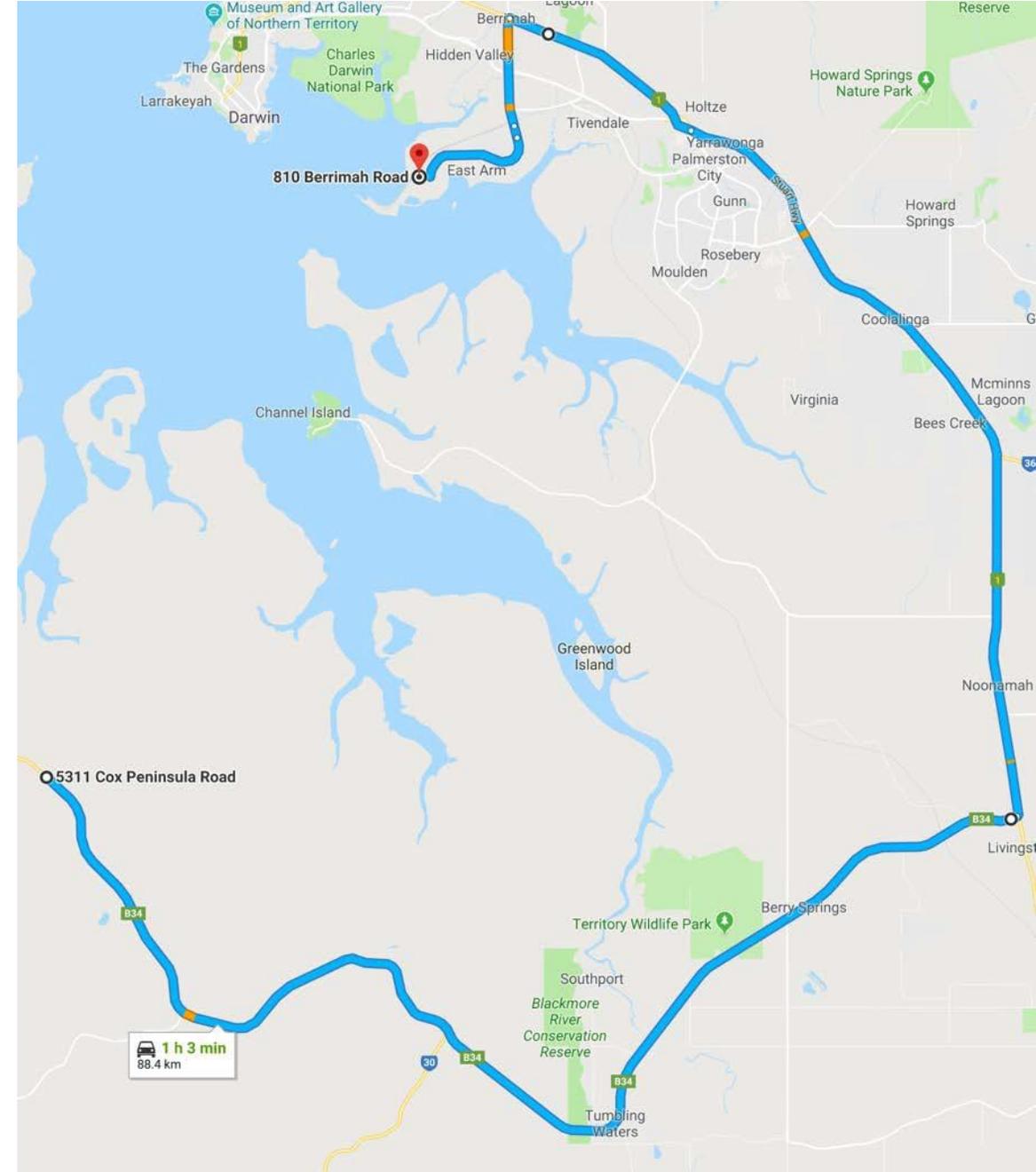
SITE LAYOUT  
1:5000



PRELIMINARY FOR  
INFORMATION ONLY

# PROPOSED TRANSPORT ROUTE

- Along Cox Peninsula Road to the Stuart Highway.
- Along the Stuart Highway to Tiger Brennan Drive.
- Onto Berrimah Road to Darwin Port.
- Total of 88.4km.
- A maximum of **10 trucks per day** completing the return trip during operations.



# LAND TENURE AND SERVICES

## Land

- Vacant Crown land.

## Power

- On site diesel-powered generators.

## Water

- The primary source of processing water will be from an historic process water dam onsite - Observation Hill Dam.
- Water will be pumped via pipeline approximately 5km to the mine site.
- No plans to rely on groundwater for processing.
- Water will be used for dust suppression and processing.



# 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>

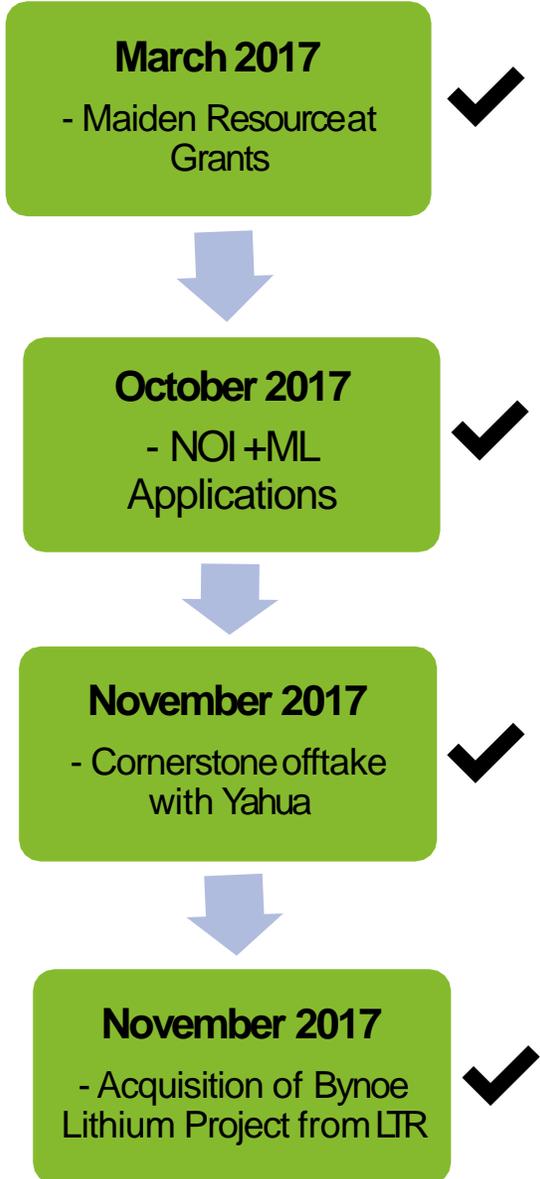
# OPERATING COSTS

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

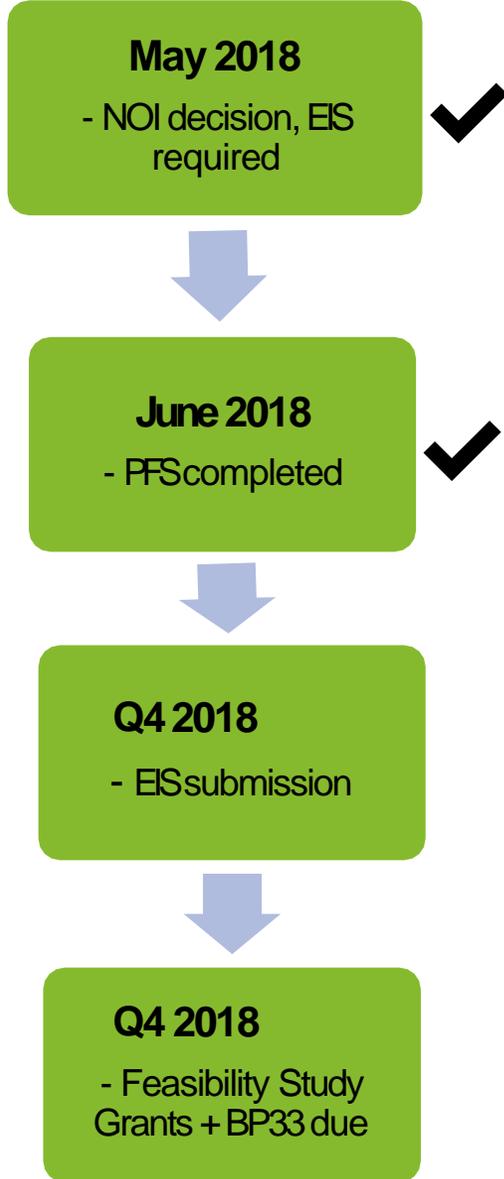
# EMPLOYMENT AND LOCAL PARTICIPATION

- The project is expected to create 50 – 100 jobs.
- Workers predominantly sourced locally. Minimal or no Fly-In-Fly-Out (FIFO) workforce.
- Workers travel to site daily from Darwin suburbs
- Workforce:
  - Tradespeople
  - Operators/technicians
  - Contractors
  - Supervisors
  - Professionals
  - Senior management.
- Local participation in service and supply opportunities.
- An Indigenous Employment opportunities will be explored.

# 2017



# 2018



# 2019



# Beyond Grants



# A Sustainable Operation is Established

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

## Core has signed a 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 220,000t of lithium concentrate (equivalent of 1 million tonnes of DSO) from Finniss Lithium Project over 5 years
- 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 late 2019



# US\$35 MILLION PRE-PAYMENT AND CONCENTRATE OFFTAKE



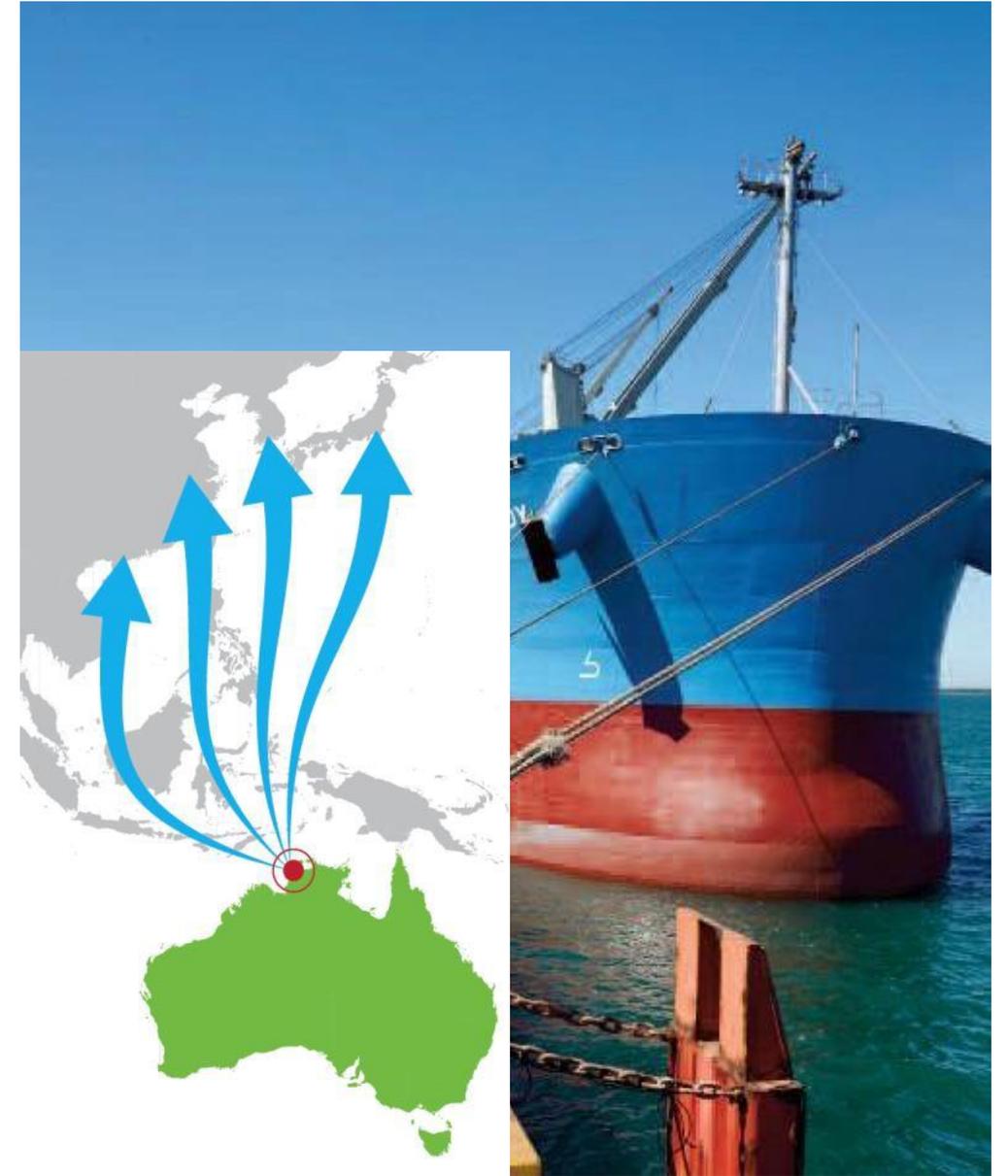
## Core has signed a non-binding Term Sheet with Shandong Ruifu Lithium Co Ltd

- Up to 150,000 tonnes lithium concentrate offtake per year from Core's Finniss Lithium Project
- Ruifu is one of China's largest lithium hydroxide and carbonate producers
- US\$35 million conditional pre-payment facility to be provided by Ruifu
- Placement to Ruifu for approximately \$3 million at 5 cents per share, resulting in Ruifu holding a 10% interest in Core
- Binding agreements to come in weeks ahead



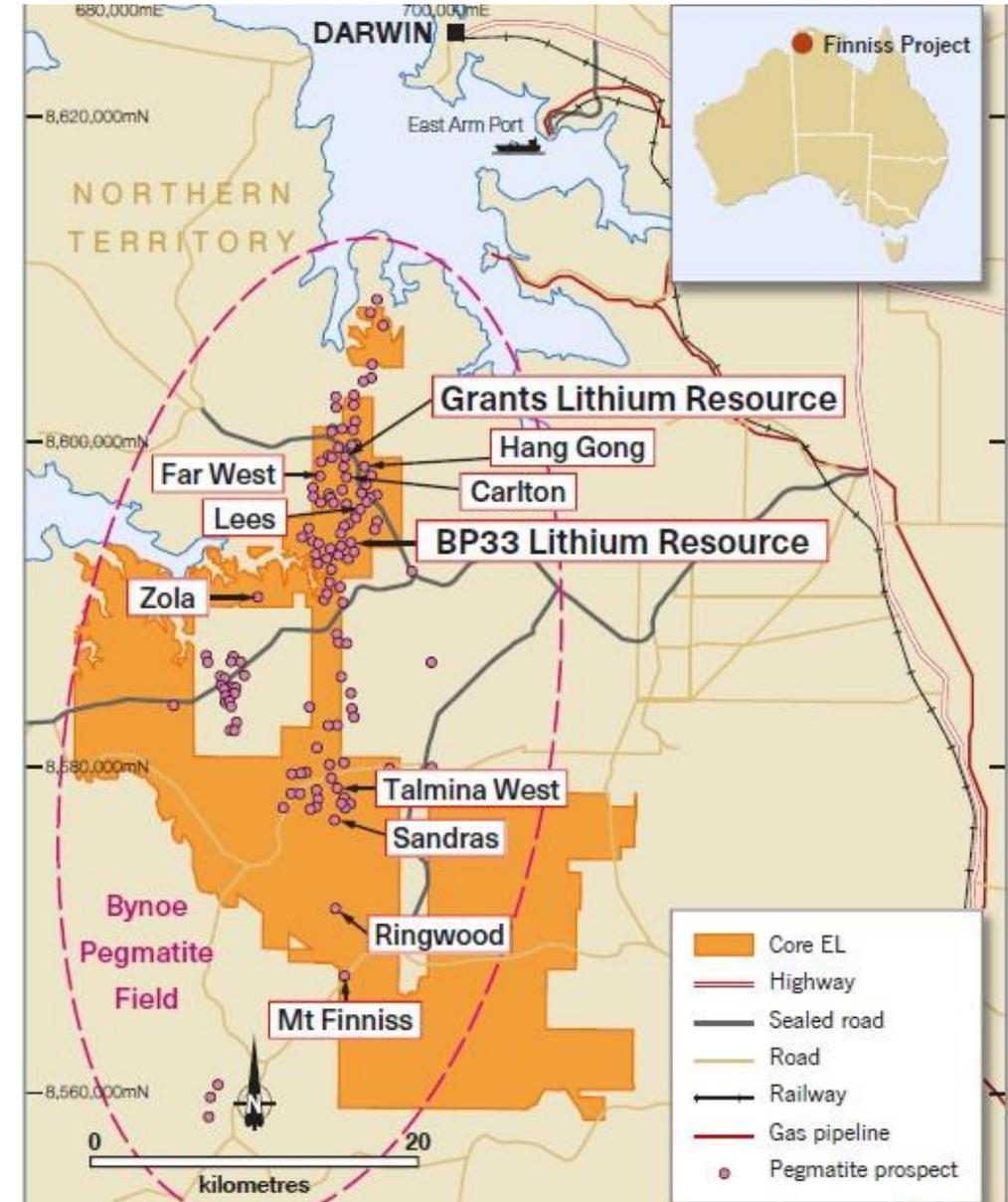
# DARWIN PORT AGREEMENT CORE HAS AGREEMENT WITH DARWIN PORT TO SHIP 1MTPA OF SPODUMENE

- 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

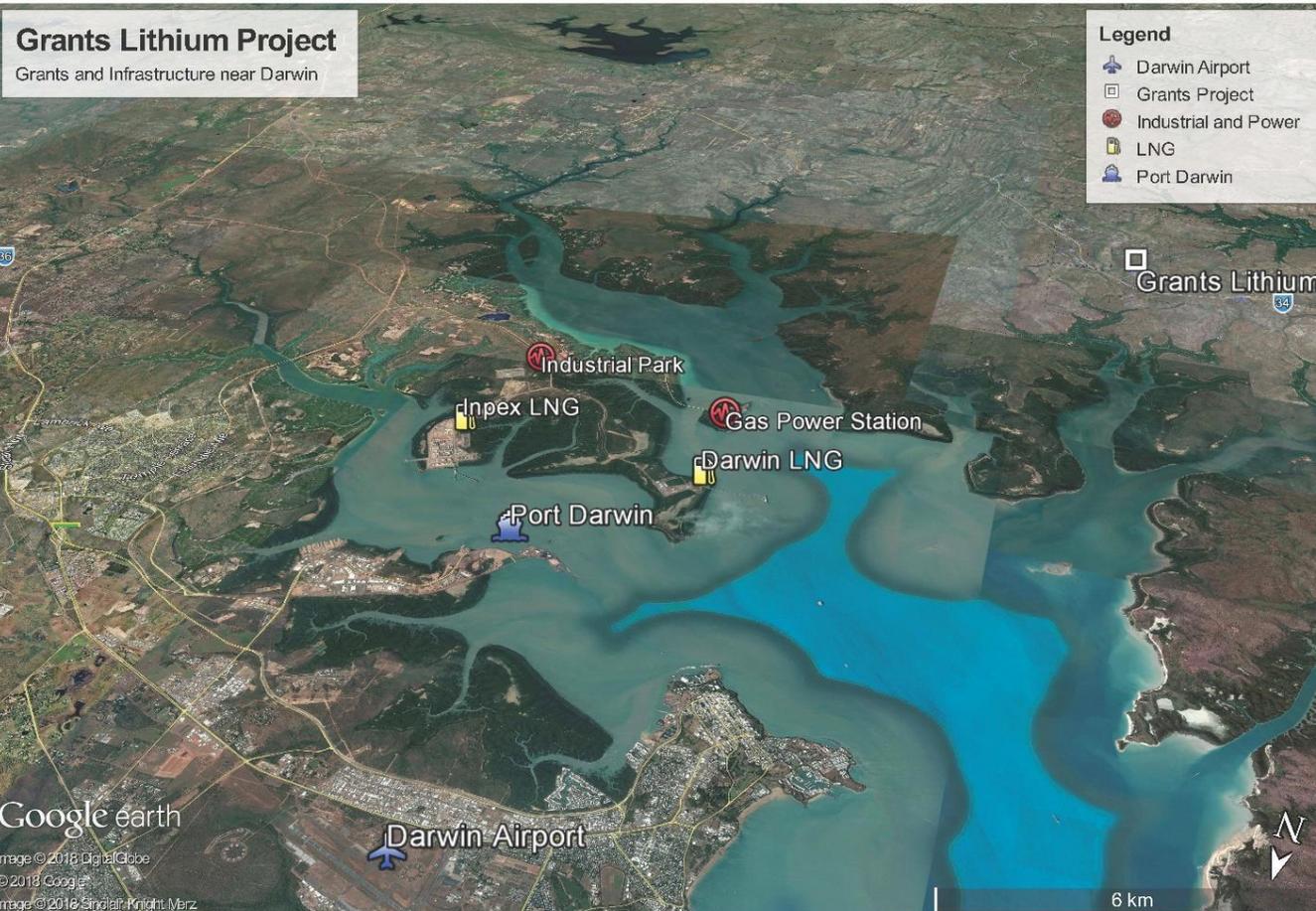


# 2018 DRILLING TARGETING SUBSTANTIAL RESOURCE GROWTH

- Upcoming exploration and aggressive drill programs in 2018 to target growth in the resource base to support a long-life lithium production hub at Finniss Project
- 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 Finniss with 40,000m of drilling to be conducted over next 12-months
- Drilling results over coming weeks and months leading to Resource increases and upgrades



# NORTHERN TERRITORY'S LITHIUM VALLEY



## Existing Infrastructure for “Lithium Valley” in NT

- High Quality Lithium Resources
- Gas
- Power
- Skills
- Heavy Industry
- Port
- Pro-active Government

Ideal for further down-stream processing of lithium and other battery mineral products for batteries and EVs

Potential to leverage Asian logistics hub toward high tech manufacturing in the NT

# Finniss Lithium Project on Pathway 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 Definitive Feasibility Study (DFS) 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, while combined with US\$35 million pre-payment facility with RiuFu would fully fund the project
- Enterprise Value of approximately A\$24 million provides very significant upside exposure relative to NPV of A\$140 million
- And DFS expected later this year aiming to include:
  - Increased resources
  - Increased concentrate grade and optimised recovery
  - Increased offtake commitment
  - Increased prepayment (customer) finance

# THANK YOU



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