

ASX ANNOUNCEMENT

INVESTOR PRESENTATION- PROACTIVE INVESTORS CRITICAL MINERALS WEBINAR

8 September 2020



Arafura Resources Limited (ASX:ARU) ("**Arafura**" or the "**Company**") is pleased to attach a copy of the presentation which was used as the basis of the Critical Minerals webinar hosted by Proactive Investors. Arafura will be one of four companies presenting, which also includes Lithium Australia NL, Australian Vanadium Ltd and Ioneer Ltd.

Mr Gavin Lockyer, Arafura's Managing Director will be presenting live at the webinar today. Subscribers to the Company's announcements have been sent a link to the webinar. For future webinar invitations, please subscribe to the Company's announcements at www.arultd.com.

-ENDS-

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NdPr

Proactive Webinar Presentation

8 September 2020



08/09/2020



(ASX:ARU)



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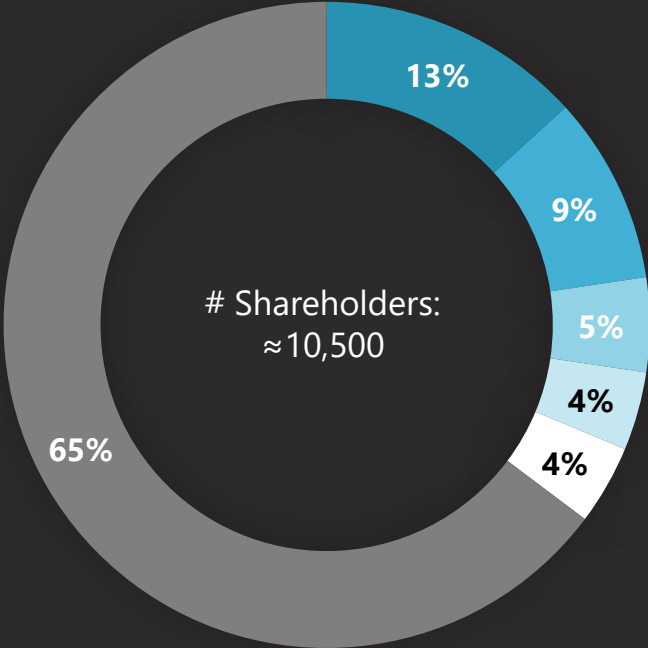
Mineral Resources and Ore Reserves

The information in this presentation that relates to Mineral Resources was released in an ASX announcement dated 7 June 2017 (Detailed Resource Assessment Completed) and was completed in accordance with the guidelines of the JORC Code (2012). The information in this presentation that relates to Ore Reserves was released in an ASX announcement dated 16 March 2020 (Major Increase in Mine Life for the Nolans Project) and was completed in accordance with the guidelines of the JORC Code (2012). Arafura Resources confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the original market announcements continue to apply and have not materially changed. Arafura Resources confirms that the form and context in which the Competent Person's findings are represented have not been materially modified from the original market announcement.

Production Targets and Forecast Financial Information

The information in this presentation that relates to production targets and financial information included in this presentation is extracted from ASX announcement dated 16 March 2020 (Major Increase in Mine Life for the Nolans Project). Arafura confirms that all material assumptions underpinning the production target and forecast financial information derived from production targets set out in the announcement released on 16 March 2020 (including the cost and pricing assumptions referred to in the Company's 16 March 2020 announcement that were used in the DFS and which are set out in the Company's ASX Announcement 7 February 2019 (Nolans Project Definitive Feasibility Study)), continue to apply and have not materially changed.

Corporate Snapshot



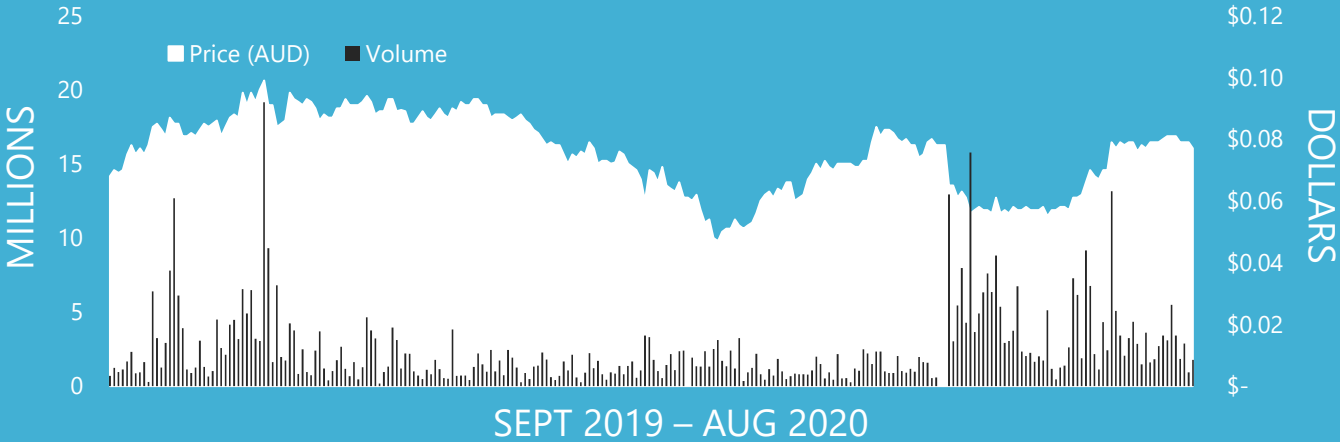
| |
|---------------------------------------|
| JP Morgan Nominees Australia Pty Ltd |
| ECE Nolans Investment Company |
| Talaxis Ltd |
| Citicorp Nominees Pty Ltd |
| HSBC Custody Nominees (Australia) Ltd |
| Other |

- ✓ Nolans world class NdPr project – DFS completed February 2019
- ✓ NdPr is the key input for high performance NdFeB permanent magnets
- ✓ NdPr is a critical input for the manufacture of energy efficient electric motors
- ✓ NdPr central to many clean energy applications including EVs and wind turbines

| Capital Structure | |
|-----------------------------|----------|
| ASX Code | ARU |
| ASX Share Price (31 August) | \$0.077 |
| Shares on Issue | 1,168m |
| Market Capitalisation* | \$89.92m |
| 12 Month Liquidity | \$46.00m |
| Cash* | \$22.80m |
| Debt | Nil |
| Enterprise Value* | \$67.12m |

* Data based on 30 June 2020 Quarterly Report

12 Month Share Price Performance



Nolans Project



Long Life Asset

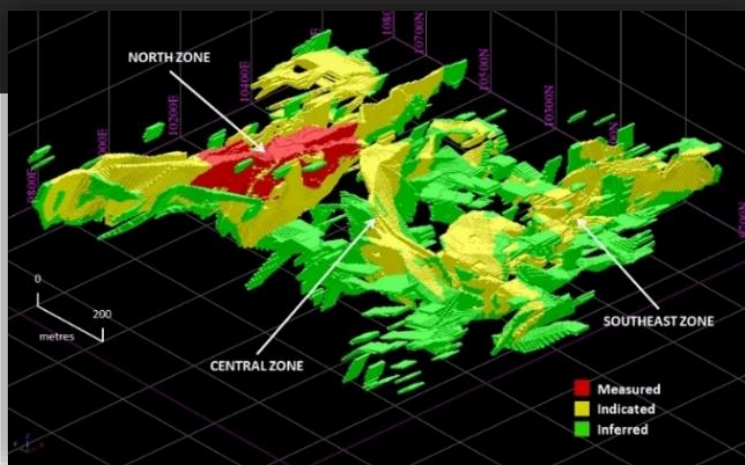
| RESOURCES | TONNES (m) | RARE EARTHS TREO % | PHOSPHATE P ₂ O ₅ % | NdPr ENRICHMENT % |
|--------------|------------|--------------------|---|-------------------|
| Measured | 4.9 | 3.2 | 13 | 26.1 |
| Indicated | 30 | 2.7 | 12 | 26.4 |
| Inferred | 21 | 2.3 | 10 | 26.5 |
| TOTAL | 56 | 2.6 | 11 | 26.4 |

As announced on 7 June 2017. 1% TREO cut-off grade. Numbers may not compute exactly due to rounding. "NdPr enrichment" is the proportion of TREO comprising Nd₂O₃ and Pr₆O₁₁.

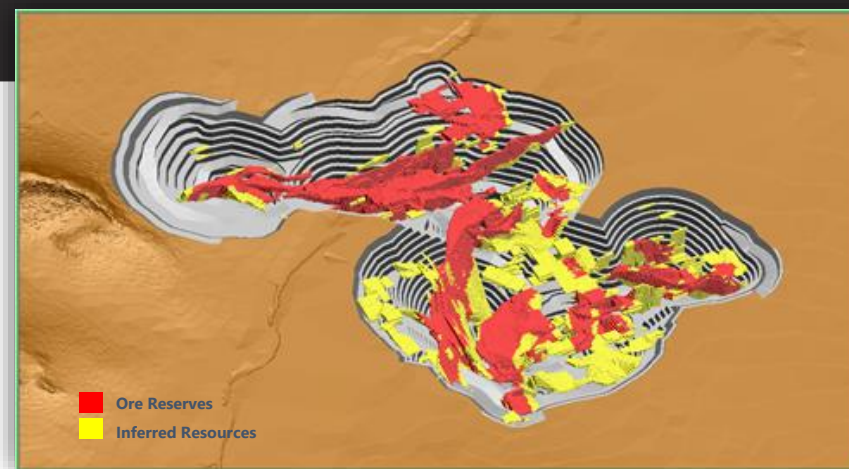
| RESERVES | TONNES (m) | RARE EARTHS TREO % | PHOSPHATE P ₂ O ₅ % | NdPr ENRICHMENT % |
|--------------|-------------|--------------------|---|-------------------|
| Proved | 5.0 | 3.0 | 13 | 26.2 |
| Probable | 24.6 | 2.8 | 13 | 26.5 |
| TOTAL | 29.5 | 2.9 | 13 | 26.4 |

As announced on 16 March 2020. Numbers may not compute exactly due to rounding. "NdPr enrichment" is the proportion of TREO comprising Nd₂O₃ and Pr₆O₁₁.

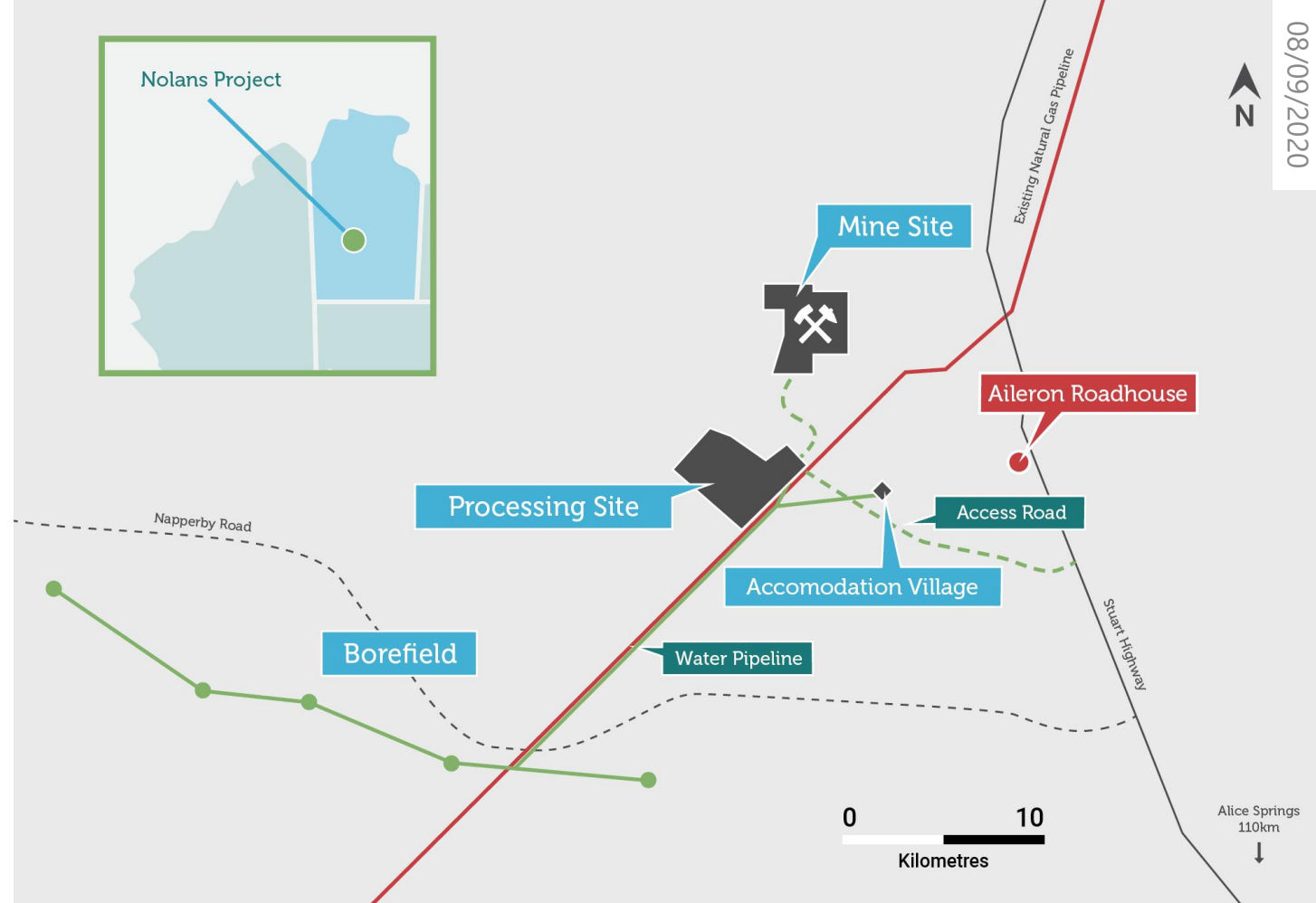
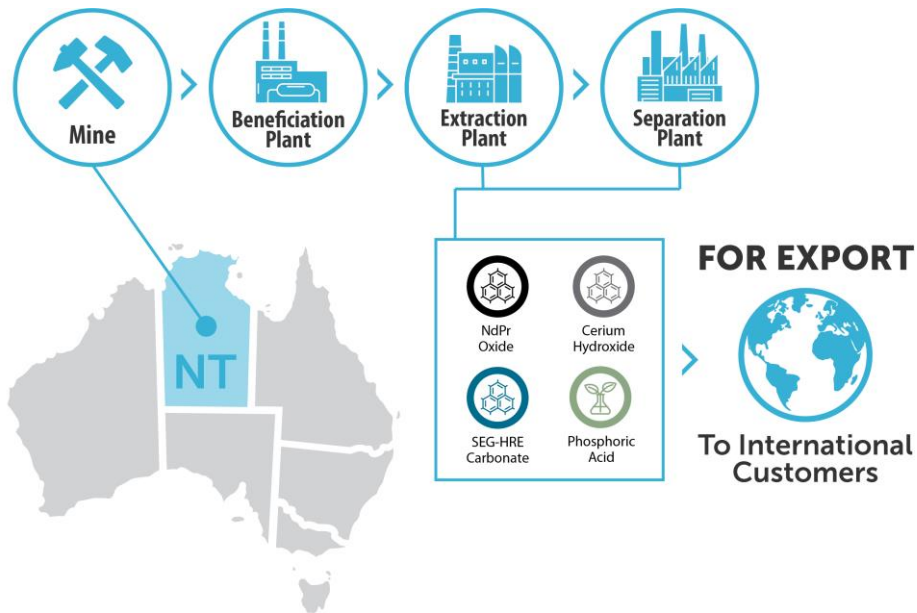
Mineral Resources



Ore Reserves



100% Australian Domiciled



08/09/2020

1

Mining and value-add chemical processing at a single site in the NT – ore to oxide

2

Long life with low operating costs

3

DFS completed, flowsheet de-risked, native title agreement executed, development leases granted

4

Environmental approvals secured, progressive rehabilitation of residue storage facility, cost included in DFS

Robust Economics

| | Ore Reserves | Mining Inventory |
|---|--------------|------------------|
| Mining & Processing | | |
| Project Life (years) | 33 | 39 |
| Production | | |
| NdPr Oxide (tpa) | 3,923 | 4,325 |
| Financial | | |
| Capital Cost (A\$m) | 1,003 | 1,026 |
| KPI Analysis | | |
| Operating Cost (US\$/kg NdPr with Phosphoric Acid credit) | \$27.02 | \$23.71 |
| NPV10 after tax (A\$m) | 782 | 968 |
| IRR after tax (%) | 17.29% | 17.97% |
| After tax payback | Year 5 | Year 5 |

As announced on 16 March 2020. Average production and costs are calculated as the arithmetic annual average following the anticipated three year ramp up and excluding the partial final year of production.

- ✓ DFS in 2019 and Ore Reserves updated 2020
- ✓ Capital cost **A\$1006m**
- ✓ Low cost producer at **US\$23.71/kg NdPr** (current price US\$49.70/kg)
- ✓ **39-year** mining inventory with expansion potential
- ✓ Only Australian NdPr-focused project that is **shovel ready**

Job Creation during Construction & Operations

- ✓ **Territory Benefit Plan** being developed
 - ✓ Local and indigenous business involvement and support
 - ✓ Employing Territorians
 - ✓ Building community capacity
 - ✓ Promises open and transparent communication with stakeholders
- ✓ **30-month** construction period
 - ✓ \$1 billion initial capital spend
 - ✓ **Peak workforce of 620***
 - ✓ Meeting Arafura's commitments will be contractually mandated
- ✓ **Minimum 39-year** operational life
 - ✓ \$225 million annual spend
 - ✓ **280* direct permanent jobs** across the Territory
 - ✓ Jobs in mining, complex chemical processing, laboratory, maintenance, logistics, HSEC, commercial, administration, accommodation
 - ✓ Support for career development and progression
 - ✓ Sponsorship in education and community projects planned
 - ✓ **Targeting locals as a priority**

** 25% initially expected to be sourced from the NT*



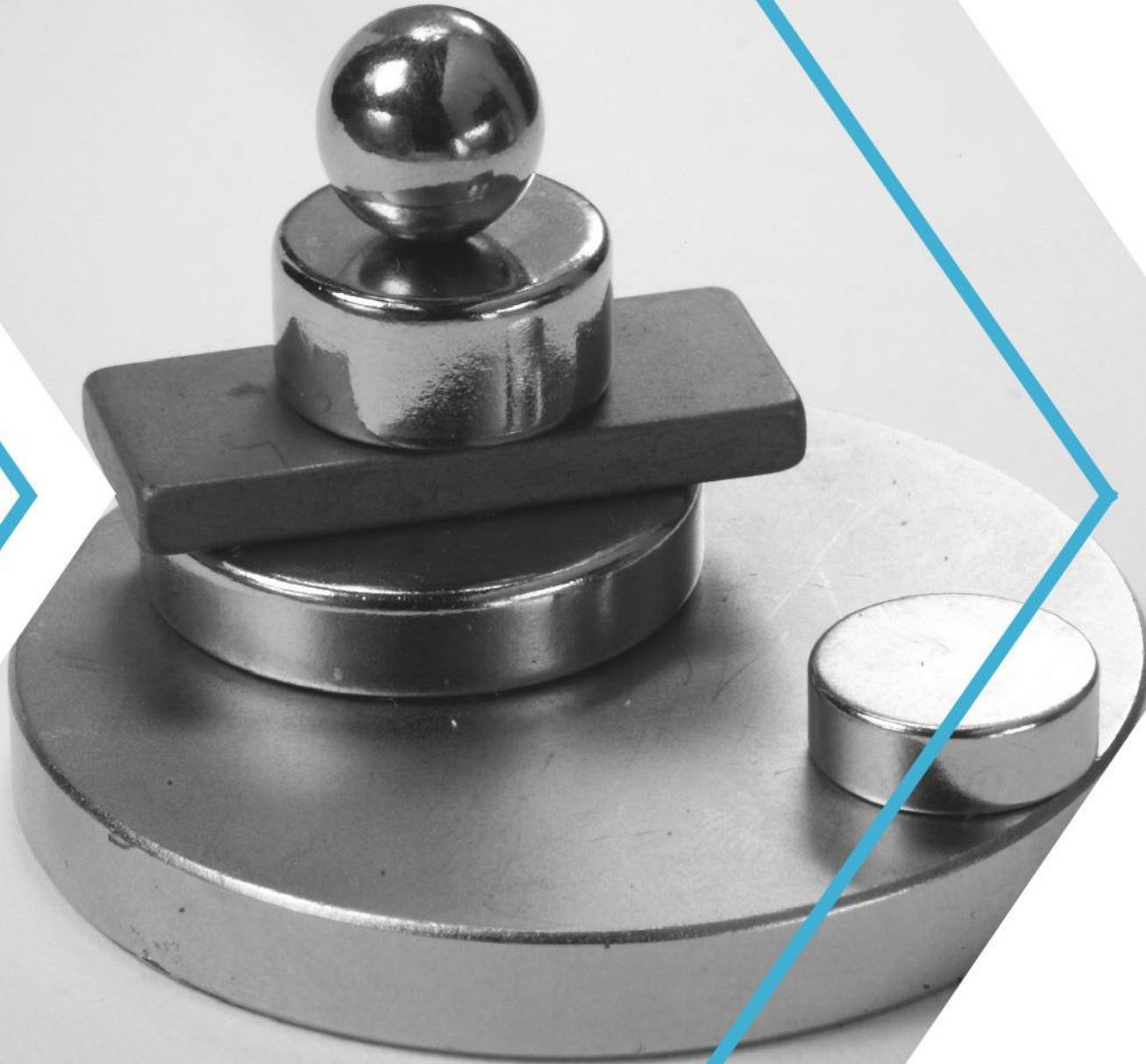
What we have achieved in the last year



Pictured from left, Archie Glenn, Tony Scrutton and James Glenn signing the Native Title Agreement.

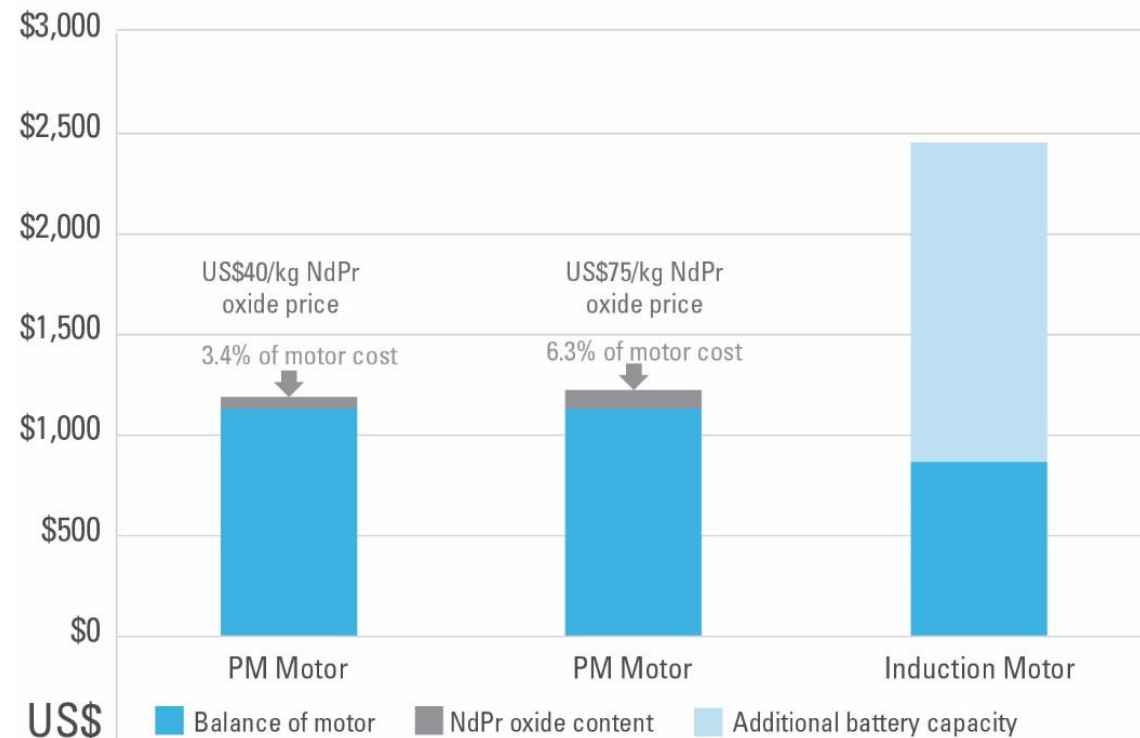
- 1 DFS completed 2019
- 2 Federal & NT environment approvals secured
- 3 Native Title Agreement executed
- 4 Mining Licence granted
- 5 Federal Major Project Status renewed
- 6 Updated Ore Reserves & Life of Mine
- 7 Completion of Indigenous Engagement Strategy
- 8 Clough Worley joint venture
- 9 Appointment of KBR as the IPMT for Nolans
- 10 Key ongoing programs execution readiness, **Offtake and Project Funding**

Offtake Strategy



NdPr Critical to EV Sector – Magnet Efficiency & Deprival Value

Modelled effect of increase in NdPr price, Permanent Magnet (PM) vs Induction Motor and incremental Li-ion Battery Pack



- ✓ Chevrolet Bolt: 150 kW permanent magnet (PM) motor with 60 kWh lithium-ion battery pack.¹
- ✓ PM motor cost based on US\$8 per kW.²
- ✓ Estimate of 1 kilogram of NdPr metal per PM motor.²
- ✓ Induction motor cost calculated as 76% of PM motor.³
- ✓ Efficiency of induction motor 15% less than PM motor.⁴ To compensate, an extra 6 kWh of battery capacity has been allowed for.
- ✓ Lithium-ion battery pack costs of US\$176 per kWh applied.⁵

¹ www.chevrolet.com

² UBS, "UBS Evidence Lab Electric Car Teardown – Disruption Ahead?", www.ubs.com/investmentresearch, May 2017.

³ Parker Hannifin, "Comparing AC Induction with Permanent Magnet motors in hybrid vehicles and the impact on the value proposition", 2013.

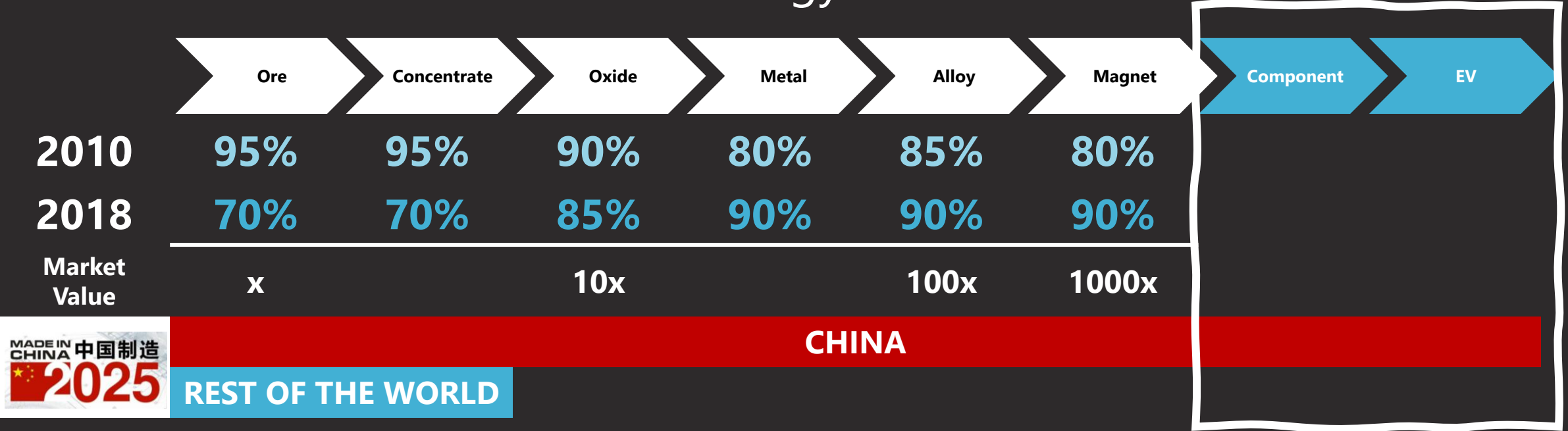
⁴ Adamas Intelligence, "Spotlight on Dysprosium", www.adamasintel.com/spotlight-on-dysprosium/, April 2018.

⁵ Bloomberg New Energy Finance, "A Behind the Scenes Take on Lithium-ion Battery Prices", March 2019.

⁶ Average NdPr oxide EXW China price for April 2019. www.asianmetal.com

China's Evolving Integrated NdPr Supply Chain

– Enables *Made In China 2025* Strategy



1

More recently China has **increased its reliance** on concentrate and oxide from non-China sources

2

Access to capital and increased environmental constraints means ore, concentrate and oxide production from China **will be less reactive to world demand**

3

Capital deployed down the value chain focused on enabling China's ***Made In China 2025* strategy**

4

China is the only country with a fully integrated **Mine to Motor** supply chain



(ASX:ARU)

Product Offtake

| Customer / Target Region | Amount (tonnes p.a.) | Offtake Status | Proportion of Revenue |
|--|----------------------------|----------------|--------------------------|
| NdPr Oxide – targeting contract with NdFeB magnet companies &/or end users | | | |
| JingCi Material Science | 900 | MoU | 96% |
| Baotou Tianhe Magnetics | 900 | MoU | |
| Japan | 2,557 | In progress | |
| South Korea | | | |
| Europe | | | |
| USA | | | |
| SEG-HRE Carbonate – targeting contract with rare earth processors | | | |
| China | 606 (TREO equivalent) | In progress | 1% |
| Japan | | | |
| Cerium Hydroxide – targeting contracts with rare earth processors | | | |
| Baotou Xinyuan Rare Earth Hi-tech | 8,383 (TREO equivalent) | MoU | 3% |

Offtake Strategy

FOR EXPORT TO INTERNATIONAL CUSTOMERS



1

Customer Engagement targeted at NdPr users not aligned with *Made in China 2025* strategy

- Japan – NdFeB magnet manufacturers
- Europe & Korea – automotive component makers and OEMs, and wind turbine makers
- China – Tier 1 NdFeB magnet manufacturers with significant export markets

2

U.S. emerging as an offtake opportunity

3

India – vertically integrated fertilizer producers

Offtake Process

- ✓ Customers at varying levels of engagement – MOUs & Terms Sheets
- ✓ Japan, Europe and Korea buyers may prefer NdPr metal to oxide
- ✓ Arafura has MOU for toll NdPr oxide to metal conversion in Thailand and Vietnam
- ✓ NdPr oxide to NdFeB magnet qualification in progress
- ✓ Offtake model aligned with Export Credit Agency (ECA) requirement to tie offtake to home jurisdiction

Arafura rare earth products from Nolans flowsheet piloting

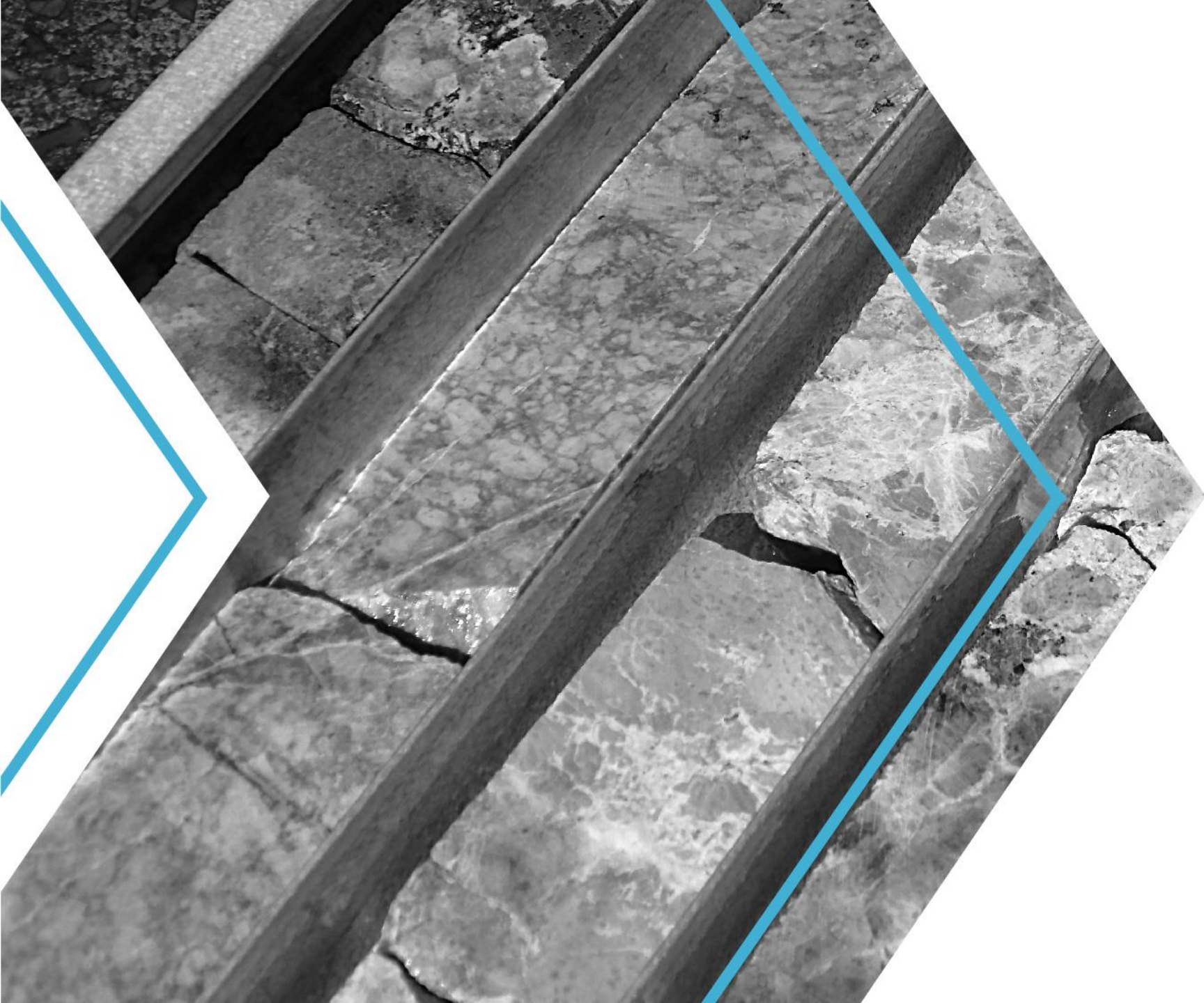
SEG/HRE

Nd/Pr

Cerium

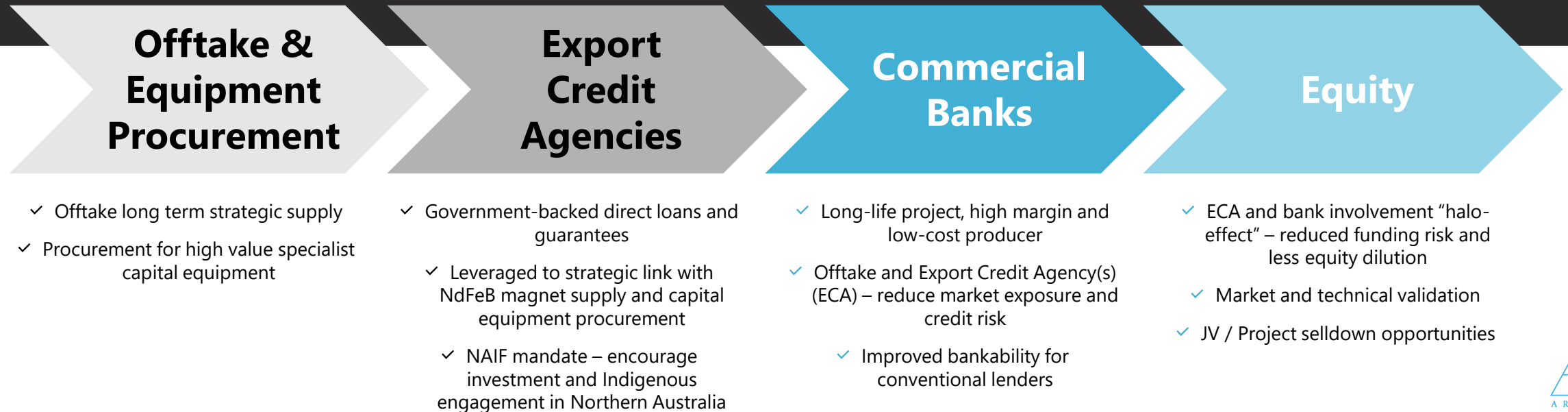


Project Funding Strategy



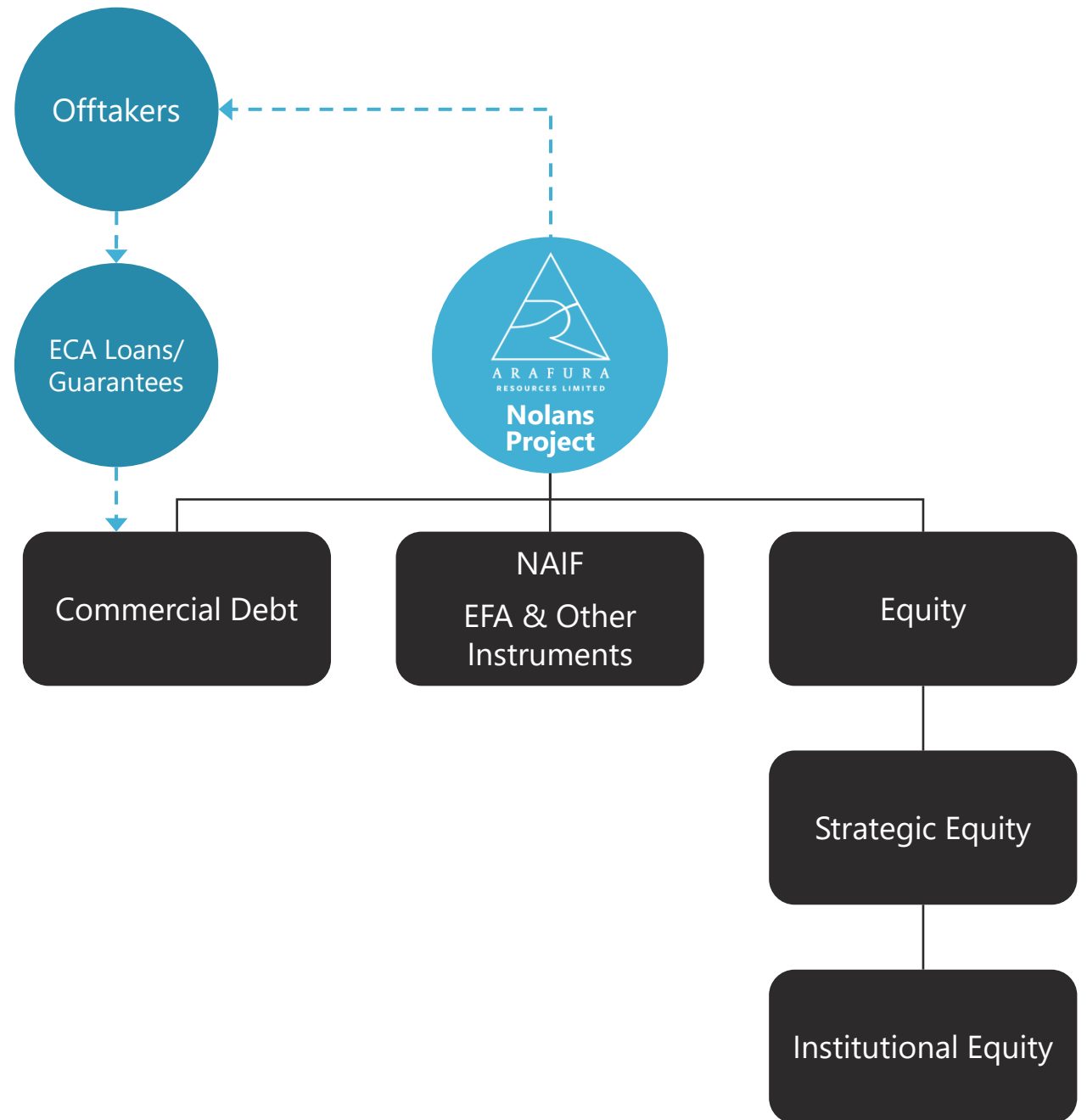
Project Funding Strategy

- ✓ Arafura looking to secure A\$1,006m to meet initial CAPEX requirements for the Nolans project
- ✓ Potential sources of funding include equity, debt, JV and/or project selldown with a strategic investor
- ✓ Completion of DFS and regulatory approvals are critical enablers for engagement with funding partners
- ✓ Critical mineral supply and NdPr supply diversification strategies are topical with industry, ECAs and governments
- ✓ Nolans a key critical minerals project identified for potential financing support through Australian Government's Export Finance Australia (EFA – administering the Defence Export Facility) and Northern Australia Infrastructure Facility (NAIF)



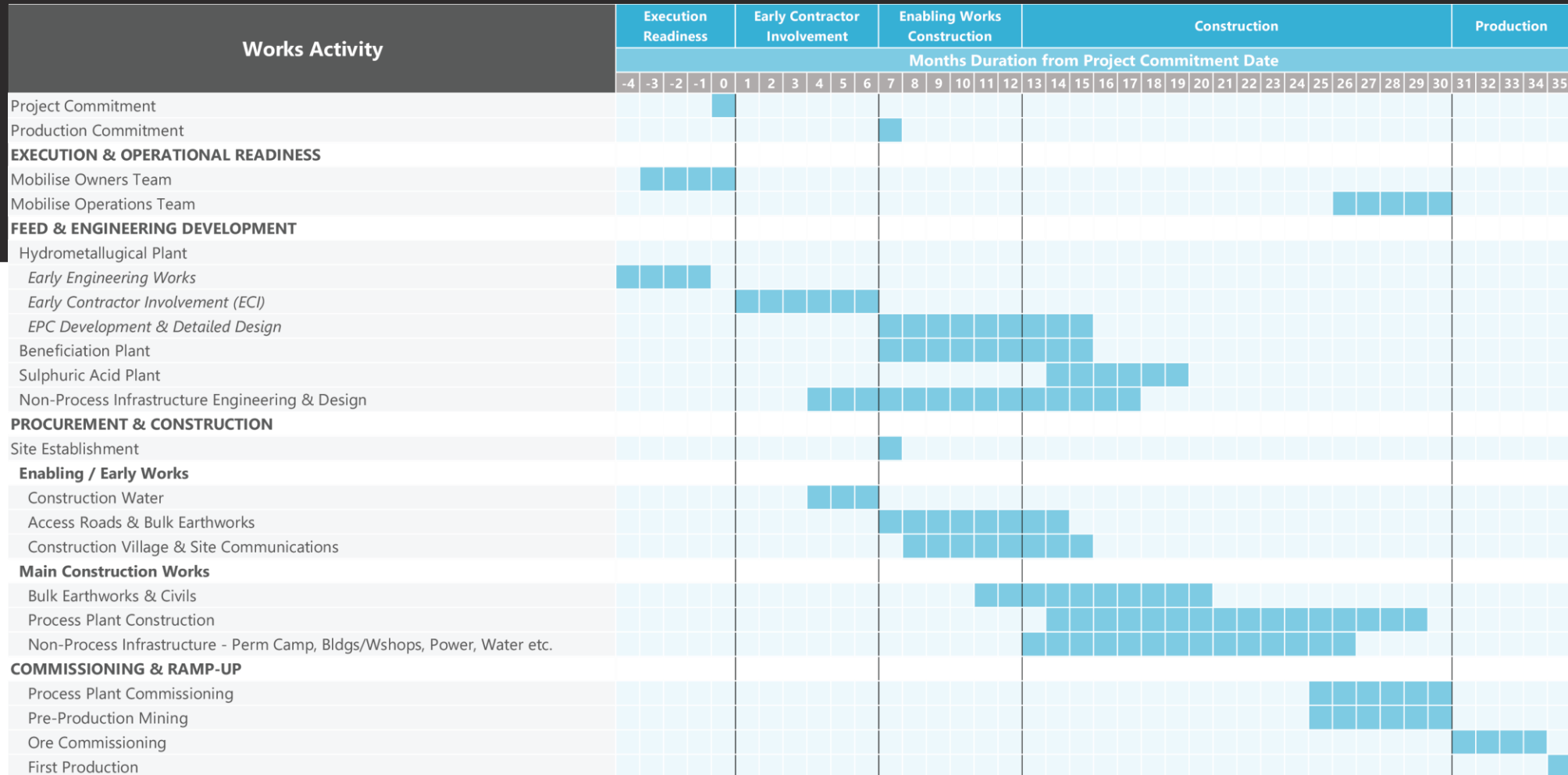
Targeted Funding Structure

- ✓ ECA debt will be critical but not the entire funding solution
- ✓ Portfolio of funding sources
- ✓ Offtake, debt and strategic equity all interlinked and driving schedule



Indicative Production Timeline

- ✓ Targeting Front-End Engineering & Design (FEED) to be fully funded prior to commencement
- ✓ Timeline subject to change due to impact by COVID-19 on funding and offtake activities



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