### **ASX ANNOUNCEMENT**

### **SYDNEY MINING CLUB PRESENTATION**

5 October 2023



**Arafura Rare Earths Limited** (**ASX: ARU**) ("**Arafura**" or the "**Company**") is pleased to attach a copy of the presentation delivered by Managing Director Gavin Lockyer at the Sydney Mining Club in Sydney, New South Wales on 5 October 2023.

Mr Lockyer presented at the Sydney Mining Club luncheon event 'Investing in the rEVolution – The Critical Path to Rare Earths and Lithium Production'.

### -ENDS-

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"Our goal is to be a trusted global leader and supplier of choice for sustainably mined and processed rare earth products, helping our customers deliver clean and efficient technologies. We are committed to delivering positive intergenerational economic, environmental and social benefits to our stakeholders."



The Nolans Project: developing globally significant rare earths production in Australia

**Sydney Mining Club** 

5 October 2023









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### Mineral Resources and Ore Reserves

The information in this presentation that relates to Mineral Resources is extracted from the Company's 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 is extracted from the Company's 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 Rare Earths 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 Rare Earths confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

### **Production Targets and Forecast Financial Information**

The information in this presentation that relates to production targets and financial information is extracted from the Company's ASX announcement dated 11 November 2022 (Nolans Project Update). The production target is based on 12% Proved Reserves, 62% Probable Reserves and 26% inferred resources as reported in the Company's ASX announcement dated 11 November 2022. There is a low level of geological confidence associated with 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. Arafura confirms that all material assumptions underpinning the production target and forecast financial information derived from the production target set out in the Company's ASX announcement dated 11 November 2022 (including any assumptions referred to in the Company's ASX announcement dated 11 November 2022 that were used from the DFS as set out in the Company's ASX announcement dated 7 February 2019 (Nolans Project Definitive Feasibility Study) or from the Updated Mining Study as set out in the Company's ASX announcement dated 16 March 2020 (Major Increase in Mine Life for the Nolans Project)), continue to apply and have not materially changed.



(ASX:ARU)



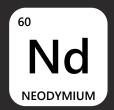
# Project Overview



# The Nolans Project

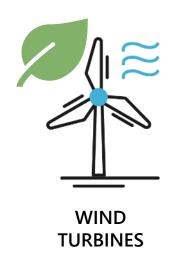
Australian based, NdPr focused and aligned with the global energy transition

Nolans contains all rare earths but is particularly enriched with the 'magnet feed' rare earths neodymium and praseodymium.



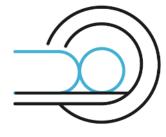


The dominant application for NdPr Oxide is in NdFeB Magnets, used in in a wide range of specialty applications and key to electric vehicles (EV), offshore wind and more broadly energy transition.













PHONES & TABLETS



# Geology of a Long Life Asset

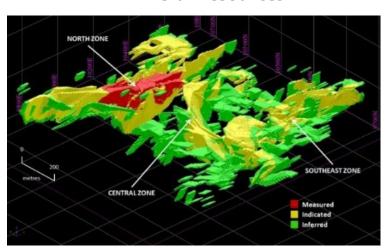
RESOURCES	TONNES (m)	RARE EARTHS TREO %	PHOSPHATE P <sub>2</sub> O <sub>5</sub> %	NdPr ENRICHMENT %
Measured	4.9	3.2	13	26.1
Indicated	30	2.7	12	26.4
Inferred	21	2.3	10	26.5
TOTAL	56	2.6	11	26.4

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  $Nd_2O_3$  and  $Pr_6O_{11}$ .

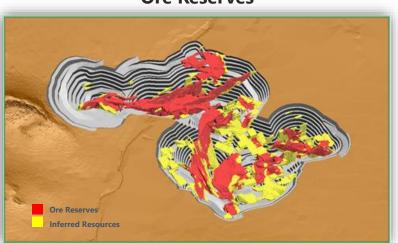
RESERVES	TONNES (m)	RARE EARTHS TREO %	PHOSPHATE P <sub>2</sub> O <sub>5</sub> %	NdPr ENRICHMENT %
Proved	5.0	3.0	13	26.2
Probable	24.6	2.8	13	26.5
TOTAL	29.5	2.9	13	26.4

As announced on 16 March 2020. Numbers may not compute exactly due to rounding. "NdPr enrichment" is the proportion of TREO comprising Nd<sub>2</sub>O<sub>3</sub> and Pr<sub>6</sub>O<sub>11</sub>.

### **Mineral Resources**



### **Ore Reserves**



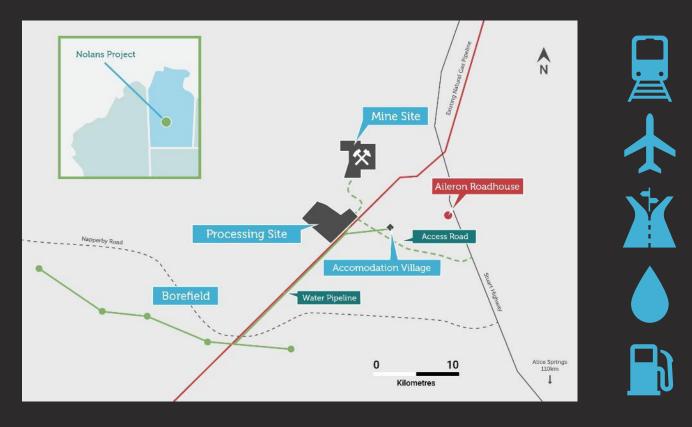
### NdPr Rich and Open at Depth

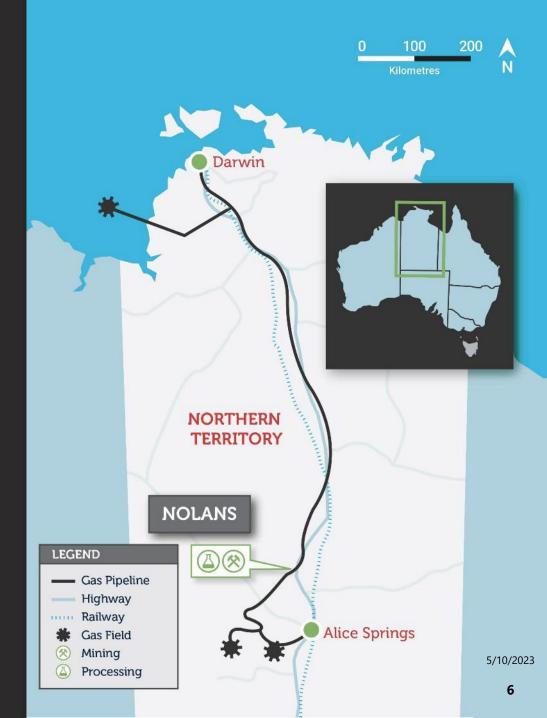
- Over 90km drilled to define and classify material types
- 33-year ore reserves
- 39-year mining inventory
- Single pit
- **Expansion potential**



### **Project Location**

- ✓ Stuart Highway 10km east
- ✓ Water supply 25km southwest
- Alice Springs railyard, airport and other services 135km south
- Amadeus natural gas pipeline adjacent to site
- Tailings and waste management at site
- Deep water port and associated infrastructure at Darwin





# The Nolans Project – September 2023



# Delivering to a Changing World

The Nolans Project's ore to oxide, single site processing solution is strongly aligned with a rapidly escalating global focus on responsible mining and ESG performance.



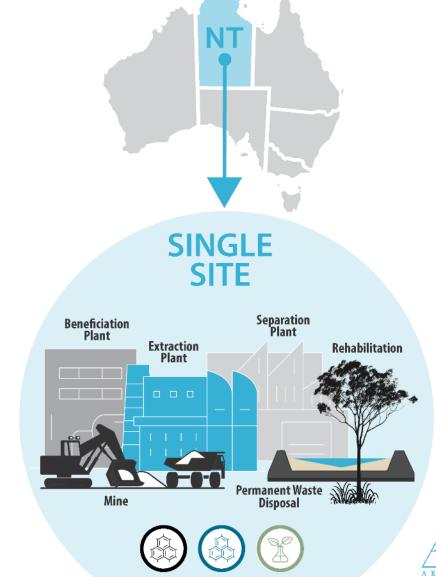
In today's global market, a focus on environmental and social responsibility and performance is paramount.



**Single site processing** provides traceable product and waste management certainty which is aligned with customers' ESG expectations.



All NT environmental approvals granted, Mining Authorisation secured and waste management and site rehabilitation fully costed.





SEG-HRE





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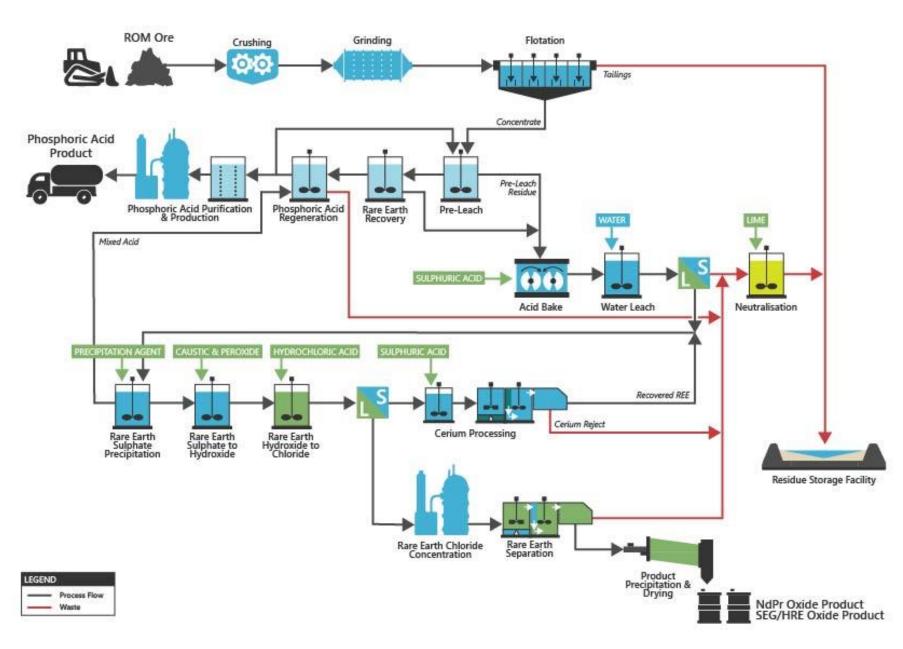
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Processing



## Process Flow Sheet



# **Beneficiation Plant** Polishing Filters

# Hydrometallurgical plant

A full flythrough of the plant (in render) can be viewed by scanning the QR code below:







Offtake and Funding



(ASX:ARU)

# **Strong Project Economics**

Key Project Information					
Mining and Production					
Mine Life (years)	38				
NdPr Oxide (tpa)	4,440				
SEG/HRE Oxide (tpa)	474				
Phosphoric Acid (tpa 54% P <sub>2</sub> O <sub>5</sub> MGA)	144,393				
Product Pricing					
US\$/kg NdPr Oxide price – offtake period	125.50				
US\$/kg NdPr Oxide price – LOM	NdPr Oxide price – LOM 130.10				
Financial	US\$	A\$			
Capital Cost					
Pre-production Capital (\$m)	995	1,394			
Contingency (\$m)	140	196			
Total (\$m)	1,135	1,590			
Revenue					
Rare Earth Sales Revenue (\$m/annum)	587	822			
Phosphoric Acid Sales Revenue (\$m/annum)	65	91			
Operating Costs					
Mining Costs (\$m/annum)	(31)	(44)			
Processing Costs (\$m/annum)	(138)	(193)			
General and Administration Costs (\$m/annum)	(26)	(36)			
EBITDA (\$m/annum)	409	573			
KPI Analysis	US\$	A\$			
Operating Cost \$/kg NdPr	43.95	61.60			
Operating Cost \$/kg NdPr net of P <sub>2</sub> O <sub>5</sub> credit	34.64	48.52			
NPV <sub>8</sub> after tax (\$m)	1,693	2,358			
IRR after tax (%)	19.	19.3%			

The Project Economics table is based on the assumptions and estimates set out in the Nolans Project Update (refer to ASX Announcement dated 11 November 2022). Numbers may not compute because of rounding. Product prices during the offtake period refer to the first seven years of production when offtake agreements will include discounts and other contract mechanisms put in place to underpin project finance for up to approximately 85% of NdPr oxide production with averages calculated as the weighted average over the specified period. Average revenue, costs and EBITDA are calculated as the arithmetic annual average following the anticipated two year ramp up period and excluding the final years of production from low grade stockpiles.

- Project Update released to market in November 2022
- ✓ Post-tax NPV<sub>8</sub> of A\$2.4 billion and IRR of 19.3%
- Capital cost A\$1,394m plus **A\$196m** contingency
- Annual average EBITDA of A\$573m
- NdPr pricing based on average over LOM of **US\$130 per kg**



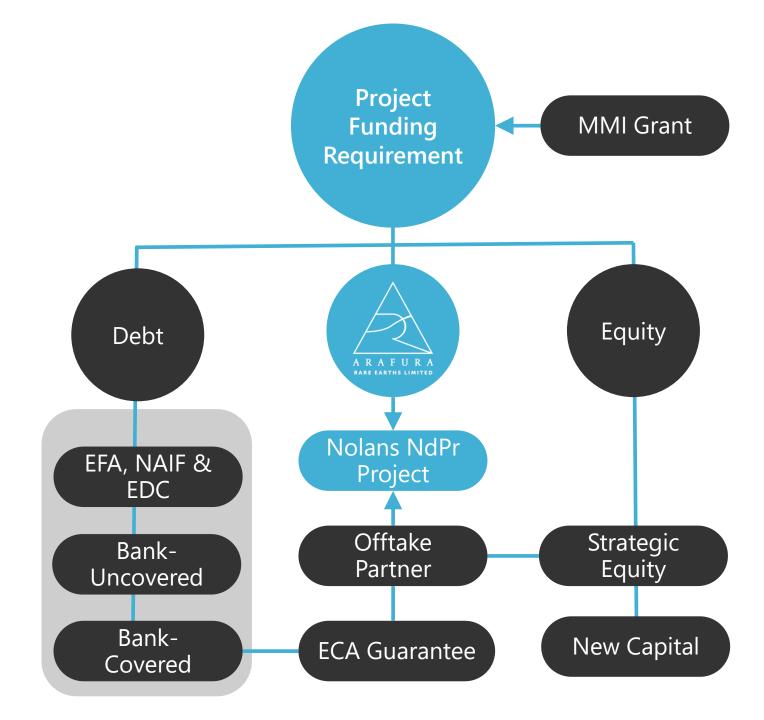
# Funding Structure

### Debt

- Société Générale and KfW appointed MLAs.
- KfW appointed Export Credit Agency (ECA) structuring bank.
- Offtake drives the participation of untied ECA funding and creates debt liquidity.
- MLA financing will have a covered (ECA guarantee supported) and uncovered portion.
- NAIF and EFA letters of support A\$350m of debt, subject to further DD and credit approval.
- Euler Hermes letter of support for up to US\$600m untied loan guarantee subject to offtake with German companies and credit approval.
- Letter of Interest from Export Development Canada for up to US\$300 million debt financing, subject to further DD, facilitated via MoU with GE.

### **Equity**

- Potential strategic investment being negotiated in conjunction with offtake through HoA with Hyundai.
- Other strategic equity linked to potential offtake.
- A\$30m MMI Grant for construction of separation plant reduces equity requirement.



5/10/2023

# Offtake



Offtake strategy aligned with NdFeB users who need a diversified supply chain

Binding offtake agreements with Hyundai and Kia and Siemens Gamesa for up to 2,020 tpa oxide (or metal equivalent)

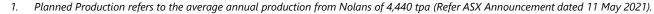
Three other companies including GE in contract negotiations representing 50% of Binding Offtake Target



# Arafura is targeting 85% of Planned Production<sup>1</sup> as binding offtake (Binding Offtake Target).

Offtake Discussion Group	Location	NdPr Oxide (tpa) <sup>2</sup>	% of Binding Offtake Target			
Secured Offtake (binding agreement)						
Hyundai & Kia	Korea	1,500	40%			
Siemens Gamesa RE	Germany	520	13%			
Offtake under discussion <sup>3</sup>						
Contract negotiations	Japan & Europe	1,855	50%			
Advanced offtake discussions	Europe & US	2,600	69%			
	Total	6,475	172%			

Targeting NdPr users not aligned with *Made in China 2025* Strategy



Product may be supplied as NdPr Oxide or Metal equivalent.



The Company, at this stage, has no certainty as to the timing and likelihood of successfully concluding binding agreements being entered into.

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