

ASX ANNOUNCEMENT

DEVELOPING NORTHERN AUSTRALIA PRESENTATION

17 August 2021



Arafura Resources Limited (ASX:ARU) (“**Arafura**” or the “**Company**”) is pleased to attach a copy of its presentation delivered by Managing Director, Mr Gavin Locker, at the Developing Northern Australia Conference today. The Conference is held in Darwin, Northern Territory from 16 – 18 August 2021.

Mr Lockyer was to deliver the presentation ‘Nolans Project; A Critical Opportunity for Northern Australia’ in person and Arafura Resources had a booth at the event, however due to the 3-day snap lockdown announced by the NT Government on Monday 16 August, the conference will now be held virtually.

The Developing Northern Australia Conference is a platform to unite leaders, decision makers, industry representatives and community members to advance our northern regions and is closely aligned with the Australian Government’s ‘Our North, Our Future: White Paper on Developing Northern Australia’.

-ENDS-

For further information contact:

Gavin Lockyer
Managing Director
+61 8 6370 2800

Authorised by:

Catherine Huynh
Company Secretary

Media Enquiries:

Brent Fleeton
Clarity Communications
+61 481 993 543



“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.”

Arafura Resources Limited | ABN: 22 080 933 455

Level 6, 432 Murray St, Perth WA 6000
PO Box 5773, St Georges Terrace, Perth WA 6831
T: +61 8 6370 2800 | W: www.arultd.com | E: arafura@arultd.com

NdPr

Nolans Project

A critical opportunity for Northern Australia

17 August 2021





Disclaimer

This presentation has been prepared by Arafura Resources Limited (Arafura, Arafura Resources or the Company) and is of a summary form only and therefore contains general background information which may not be complete. It should be read in conjunction with, and full review made of Arafura Resources' disclosures and releases lodged with the Australian Securities Exchange (ASX) and available at www.asx.com.au.

This presentation contains certain statements which may constitute "forward-looking statements." Such statements are only expectations or beliefs and are subject to inherent risks and uncertainties which could cause actual values, results or performance achievements to differ materially from those expressed or implied in this presentation. No representation or warranty, express or implied is made by Arafura Resources that any forward-looking statement contained in this presentation will occur, be achieved or prove to be correct. You are cautioned against relying upon any forward-looking statement.

Except for statutory liability which cannot be excluded, each of Arafura Resources and its related body corporates and their officers, employees and advisers expressly disclaims any responsibility for the accuracy or completeness of the material contained in this presentation and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this presentation or any error in it or omission from it. Arafura Resources accepts no responsibility to update any person regarding any inaccuracy, omission or change in information in this presentation or any other information made available to a person, nor any obligation to furnish the person with any further information.

This presentation does not constitute an offer of any securities in Arafura Resources, in any jurisdiction, nor an invitation to apply for such securities, in any jurisdiction, and will not form part of any contract for the acquisition of Arafura shares. This presentation does not provide investment advice or financial product advice. You should obtain professional advice and carry out your own independent investigations and assessment of the information in this presentation (including any assumptions) before acting.

Information in this presentation which is attributed to a third-party source has not been checked or verified by Arafura Resources.

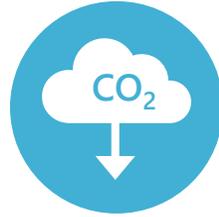
Mineral Resources and Ore Reserves

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 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 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 May 2021 (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 May 2021. 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 May 2021 (including any assumptions referred to in the Company's ASX announcement dated 11 May 2021 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.

A World in Transition



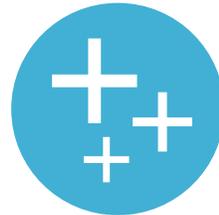
Two great revolutions are underway: **digitalisation** and **decarbonisation**



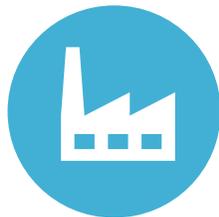
North Australia is poised to benefit: resources, energy, expertise, proximity to markets, environmental standards



Central to both revolutions are **critical minerals** such as rare earths



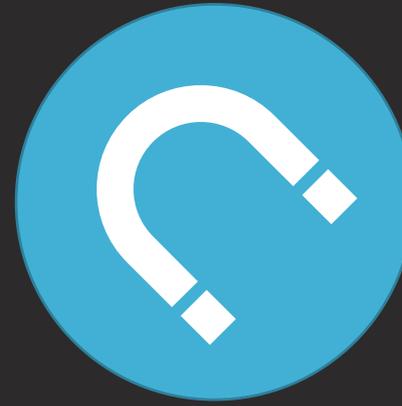
Realising their full value to Australia requires moving beyond the quarry, to **value-added processing**



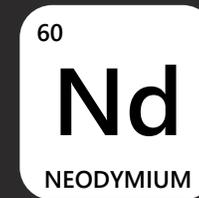
Nolans is a shovel-ready, long life rare earth mine and oxide processing facility, **the first of its kind in Australia**

Rare Earths

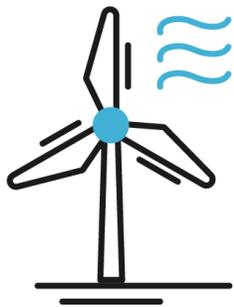
Rare Earths are Critical Minerals. They are essential to the digital and energy transformation and economic wellbeing of the world's major and emerging economies.



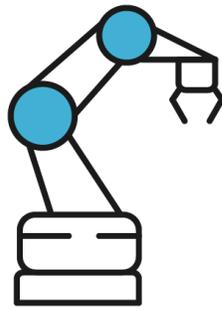
The Nolans Project contains all the Rare Earths but is particularly enriched in the 'Magnet Feed' Rare Earths NdPr



The fastest growing market for NdPr is in NdFeB Magnets. They are one of the reasons why everyday items have become smaller, lighter, mobile, more efficient and more affordable.



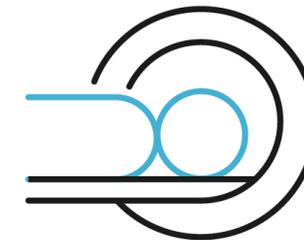
WIND
TURBINES



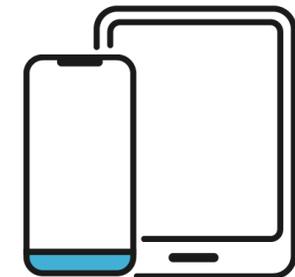
ROBOTS



ELECTRIC
VEHICLES



MRI
MACHINES



PHONES &
TABLETS



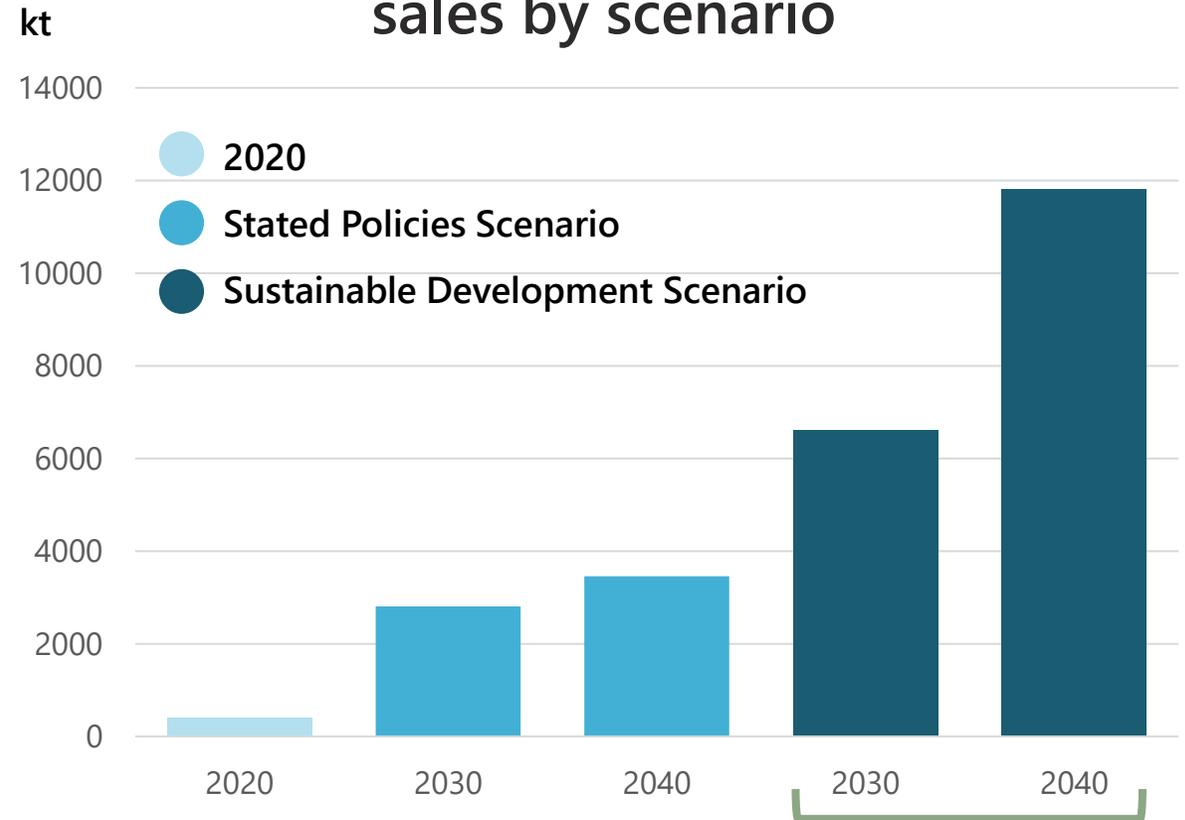
(ASX:ARU)

Rare Earths

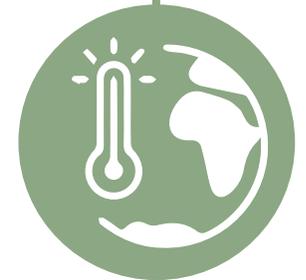
A Vital Cog in the Electric Vehicle Revolution

- ✓ EV market growth is exponential: **10 to 40 times** in the next 20 years
- ✓ This will require **6-15 times more rare earth elements**
- ✓ Most EVs need about **1kg** of rare earths for their motor magnets
- ✓ Just 0.05% of the vehicle cost: **but it can't run without it**
- ✓ The current semiconductor shortage highlights how a **tiny cog in the supply chain can disrupt the global market**

Total mineral demand from new EV sales by scenario

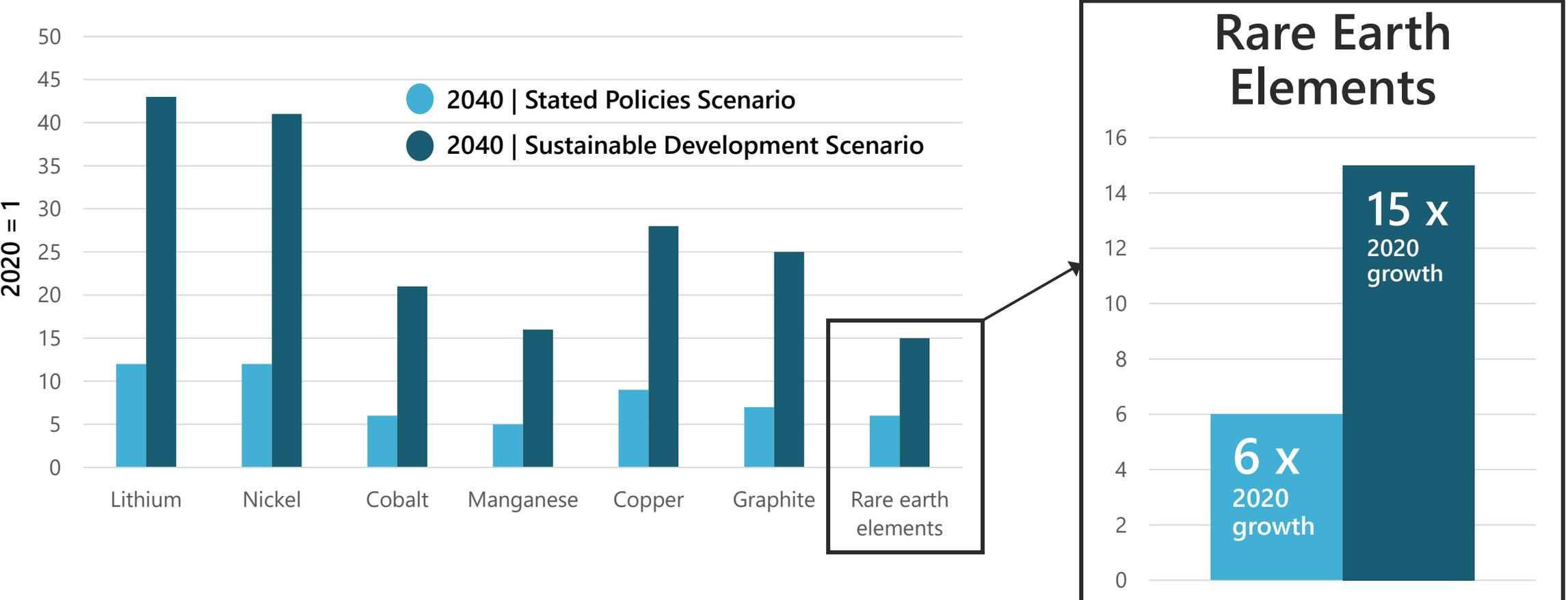


Sustainable Development Scenario is where the Paris Agreement goals on climate change are met



(ASX:ARU)

Mineral demand growth from new EV sales by scenario, 2040 compared to 2020



Source: IEA, Mineral demand growth from new EV sales by scenario, 2040 compared to 2020, IEA, Paris

Nolans Project Overview



Key Facts



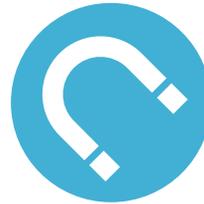
Advanced manufacturing onsite
– Ore to oxide at Single Site –
First of its kind in Australia



Nolans aims to supply
5-10% of global demand
for NdPr oxide



Nolans is a shovel-ready world class NdPr project



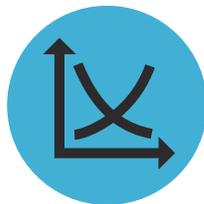
NdPr is the key input for high performance NdFeB permanent magnets



NdPr is central to many clean energy applications including EVs and wind turbines



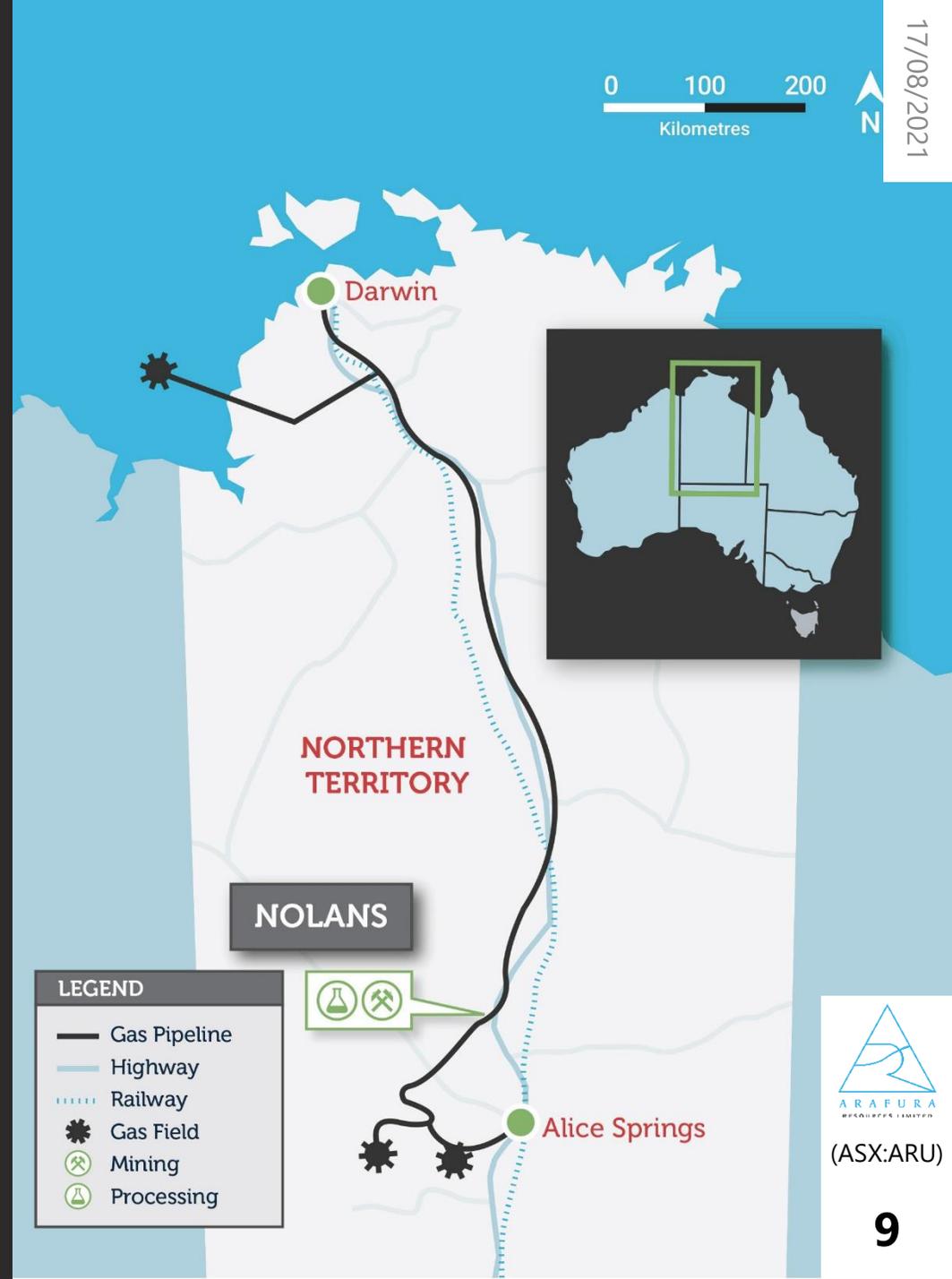
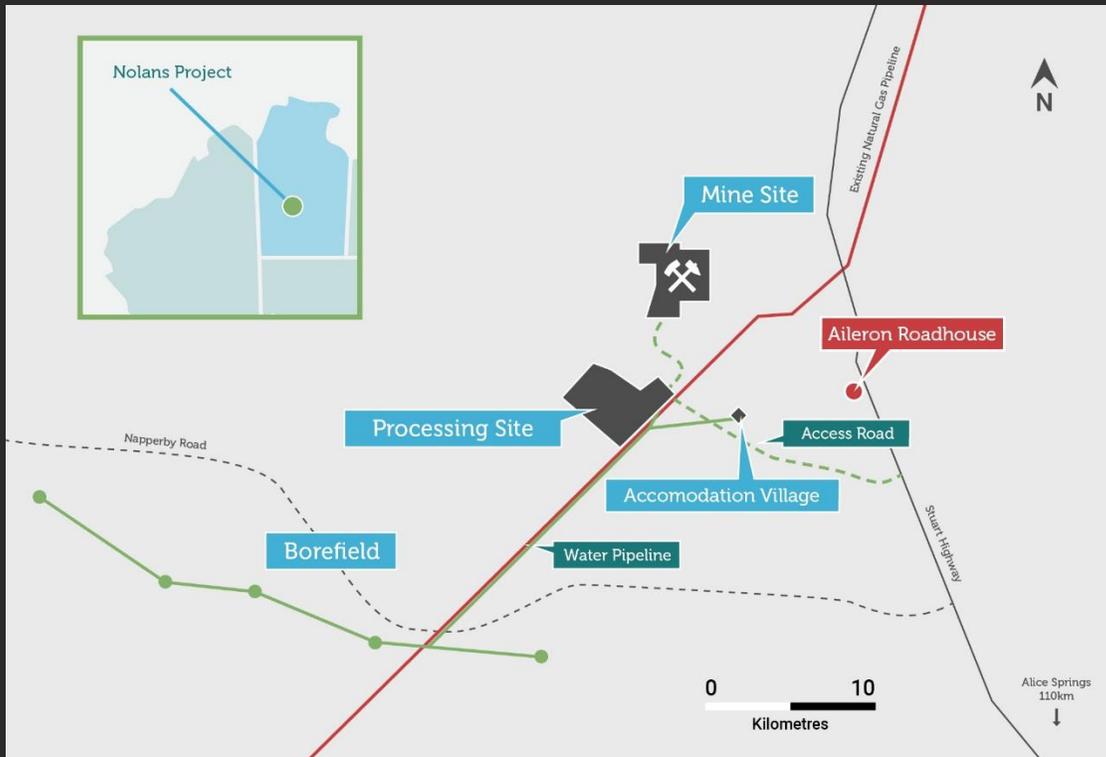
Arafura is aiming to be a trusted global leader for sustainably mined and processed rare earth products



Production is aligned with forecast supply shortage

Close to existing key infrastructure

- ✓ Stuart Highway 10 km east
- ✓ Water supply 25km southwest
- ✓ Alice Springs railyard, airport and other services 135km south
- ✓ Amadeus natural gas pipeline- adjacent to project site
- ✓ Tailings and process wastes at site



Nolans NdPr Shovel Ready



Regulatory

- ✓ Federal & NT Environmental Approvals secured
- ✓ Government and Minister support for senior debt facility



Security of Tenure & Social License to Operate

- ✓ Native Title Agreement
- ✓ Mineral License Granted
- ✓ Federal Major Project Status
- ✓ Indigenous Engagement Strategy



Technical

- ✓ DFS and Project Update complete
- ✓ Extensive piloting of ore to oxides flowsheet
- ✓ Appointment of KBR & Wave to in-house team
- ✓ **Front End Engineering & Design commencing 2H 2021**



Commercial

- ✓ Customer verification of oxide products
- ✓ **Australian Government provide conditional letters of support for \$300M in debt**
- ✓ **\$45.5M Successful capital raising to be complete 20/08/2021 to begin FEED**
- Offtake engagement (advanced discussions underway)
- Project funding (commenced senior debt process)

Shovel Ready for Rising Rare Earth Demand

Nolans Key Development Milestones*

**Milestone targets are indicative and subject to change and are contingent upon funding, offtake activities and general market conditions*

1. FID and First Production are both subject to outcomes with offtake and financing.

2. Conditional letters of support are non-binding and conditional upon internal credit approval, negotiation of lender agreements and further due diligence enquiries (among other conditions).



Ore to Oxide at Single Site

Nolans is the **only** NdPr focused project in Australia that plans to **mine and process ore to oxide at a single site.**



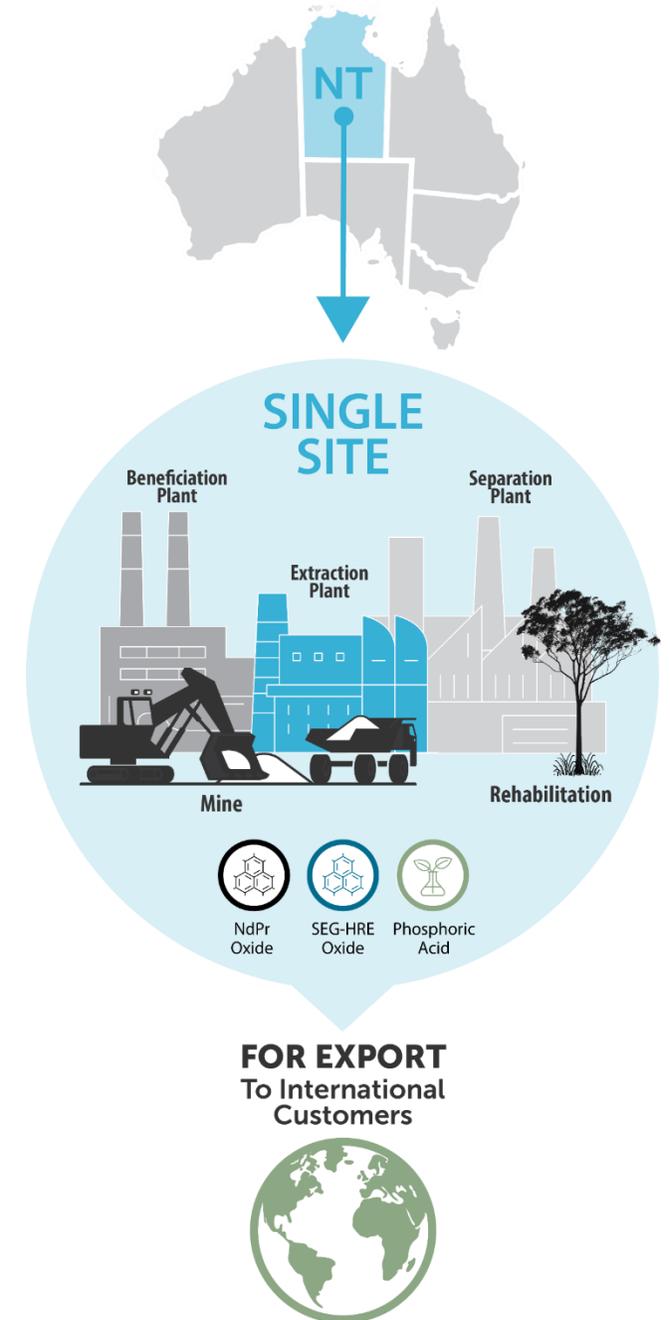
Nolans aims to be a **non-Chinese supplier of choice for sustainably mined NdPr oxide.**



All environmental approvals have been secured and waste management & site rehabilitation fully costed.



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



ESG - Current activities and initiatives

"Arafura's ESG commitment 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."



Prioritise GHG Emissions and Water Management

- Water reduction strategy
- GHG Emissions Audit and reduction study
- Renewable energy – Solar power initiative, Commitment to Net Zero GHG



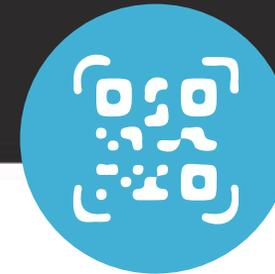
Finalise Update of Sustainability Report

- Signatory of the UN Global Compact
- Comprehensive report that satisfies requirements of global ESG ratings agencies and reporting standards
- Due 2H 2021



Pending Member in IRMA

- Arafura will complete the IRMA Ready assessment standard as soon as it is launched



Traceability – Blockchain Technology

- Aligned with customers' ESG expectations
- Will allow tracing of Nolans sustainably produced products through entire supply chain to customers



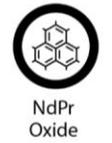
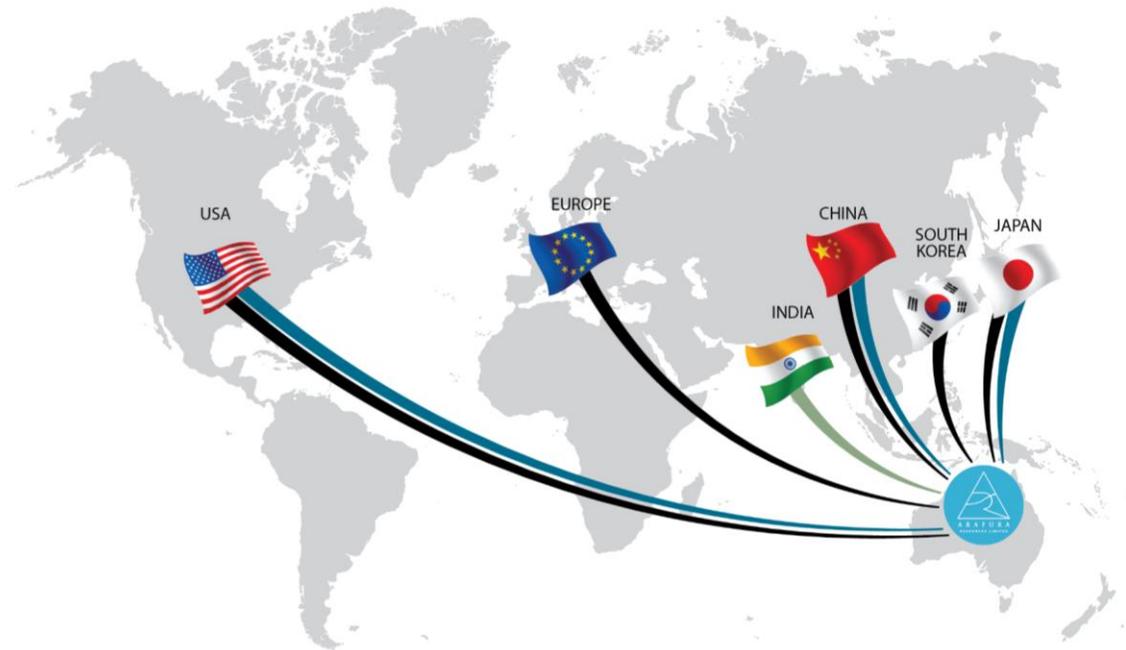
Innovation and Technology

- Downstream value add opportunities
- Ongoing R&D, low carbon metallisation process
- Options for hydrogen or other energy storage solutions

Offtake Strategy

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

- ✓ Progressing Offtake agreements with customers seeking supply security with a sustainable NdPr producer
- ✓ Prices rising materially as supply tightens
- ✓ Arafura is in discussions with 9 parties for over 120% of Planned Production with a view to secure 85% as binding offtake
- ✓ Key markets for NdPr are E-Motors, Wind Turbines



EUROPE
JAPAN
SOUTH KORE
USA
CHINA



JAPAN
USA
CHINA



INDIA



Nolans aims to supply **5-10% of global demand** for NdPr oxide



(ASX:ARU)

Critical Minerals Supply – a Global Issue



NdPr Market Opportunity

DEMAND



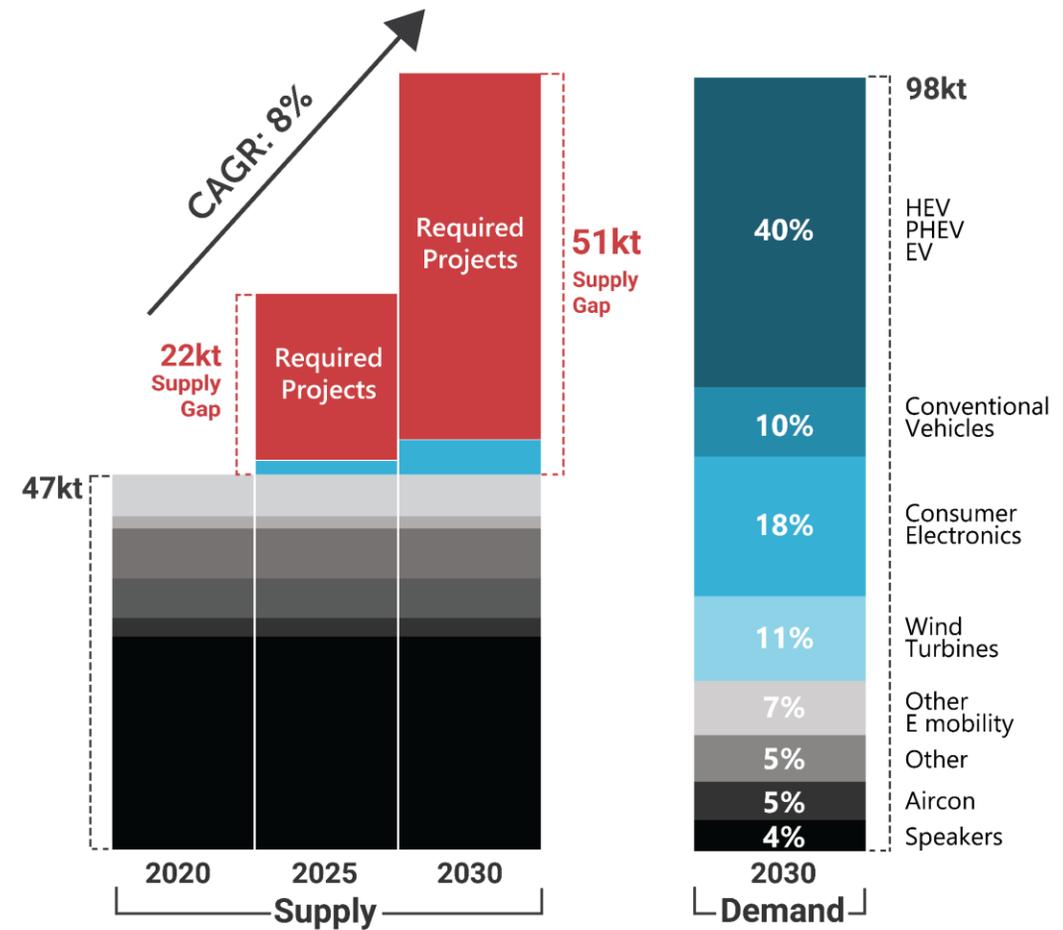
- ✓ Automotive sector is forecast to consume nearly 50% of NdFeB supply
- ✓ Supply gap is growing at a cumulative annual growth rate (CAGR) of 8%
- ✓ 2030 forecast assumes ~34 million EVs
- ✓ 2021 demand is forecast to increase by 14%

SUPPLY



- ✓ Market analysts forecast a supply gap that represents 109% of global supply today and is in excess of 11 Nolans Projects
- ✓ NdFeB magnets will move to the best value in use
- ✓ The emerging supply gap has extra significance for companies not aligned with the China 2025 strategy
- ✓ **China's import of rare earth metal ores jumped 84.1% in June 2021.**

NdPr Supply & Demand

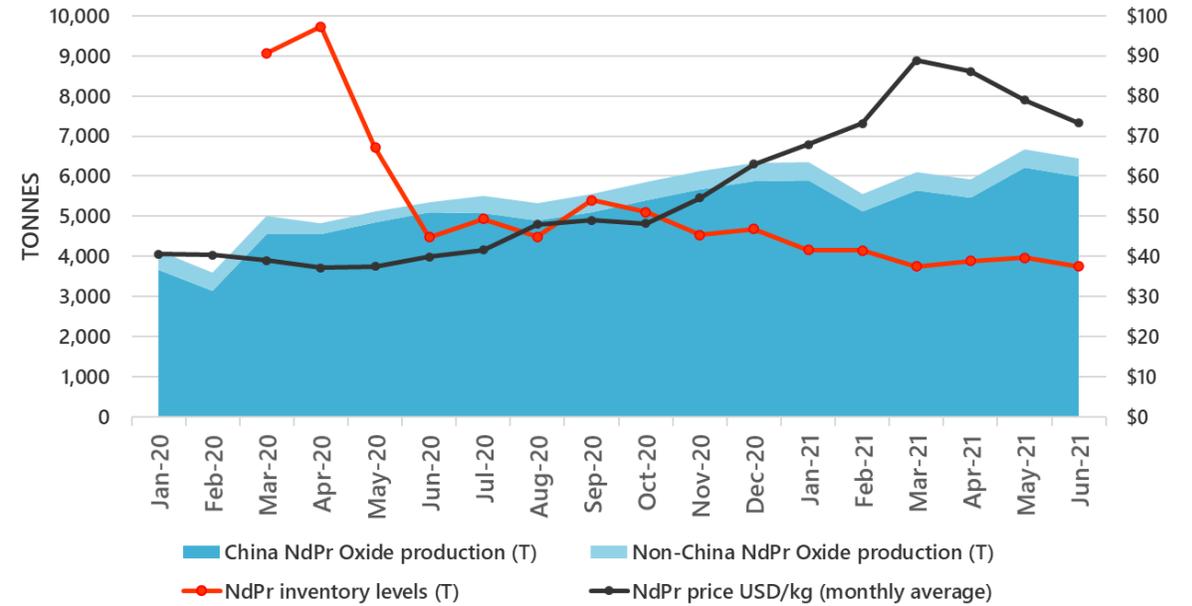


Source: Arafura internal Supply Demand forecast referencing against data from CRU, Rare Earth Market Study 2020; Roskill, Rare Earth Market Analysis 2018, Adamas Intelligence, Rare Earth Market Outlook to 2030.

NdPr Price Rise

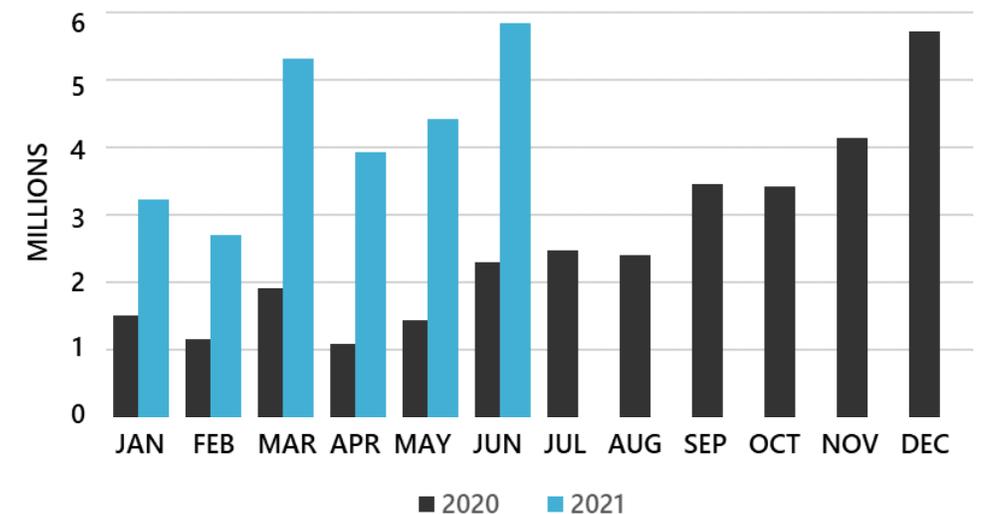
- ✓ Chinese inventory stockpiles down by ~60% since mid-2020
- ✓ Chinese producers near full capacity
- ✓ Supply chain issues highlighted by growing EV sales
- ✓ Critical Minerals Initiatives and supply chain de-risking required to facilitate government policies and targets for E-mobility and renewables

NdPr Oxide Output & Price EXW China



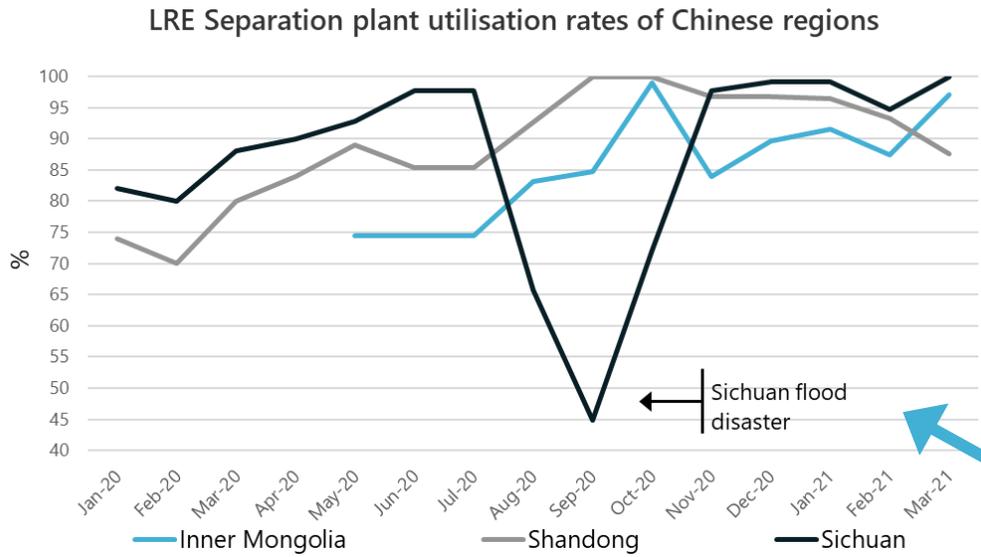
Source: Lynas, BAINFO, Asian Metals

Global EV Sales (BEV & PHEV) by Month

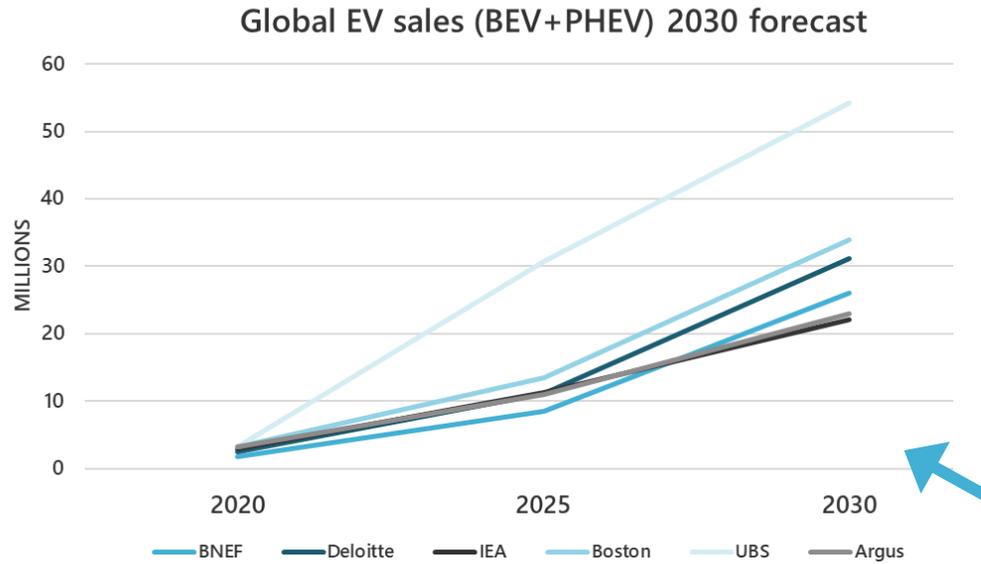


Source: EV Volumes, Inside EV

Supply expansion challenge



Source: Baiinfo and Argus



Source: BNEF / Deloitte / IEA / Boston / UBS / Argus (Global EV Sales Forecast)

- 1
- 2
- 3
- 4
- 5

Tighter environmental and regulatory controls in China have resulted in production volumes contracting

China Northern Rare Earths (largest producer) will increase production but will require plant expansion to significantly improve capacity

New capacity will have higher capital and operating costs to meet new ESG standards

China production expansion and imported semi-finished materials required to meet growing domestic demand driven by EV and renewables objectives

Other global NdPr users will require alternative supply chain solutions to satisfy their procurement needs

Local Processing: More Jobs, Secure Supply Chains



Imported feedstock will be the main source of NdPr supply expansion in China.

Creating environmental stewardship issue from exporting raw materials for processing without transparency of waste stream management.

Export of China RE oxide separation technology is illegal, this could extend to exporting toll processed material.

Since December 2020, Beijing's export control policy applies to regulate the export of sensitive materials and technologies.

NdPr procurement will be central to China's 2025 EV and renewable objectives.

Supply diversification critical to provide supply security that will meet sustainability objectives.



(ASX:ARU)

What's in it for the NT?



To date Arafura has:



Territory benefits plan – Federal & NT approvals

\$3.5m water exploration & ongoing monitoring to ensure sustainability.



Water drilling at Nolans Site

Discovery of new aquifer allowed permanent water to be available to Alyuen community



Employing local contractors for ongoing water monitoring

In excess of \$50m of on ground exploration. Exploration agreement with traditional owners provides funds for community development projects



Laundry at Alyuen

Indigenous engagement such as Karen Sheldon workshops



Karen Sheldon Workshop

Nolans National Benefits



An average increase of
A\$344 m
each year to the real incomes of all Australians

INCLUDING



A\$13 m
each year to people living in the **Northern Territory**



An annual average of
A\$173 m
to total taxation revenue in Australia which benefits all Australians

OF WHICH



53 %
is directly paid by the Nolans Project

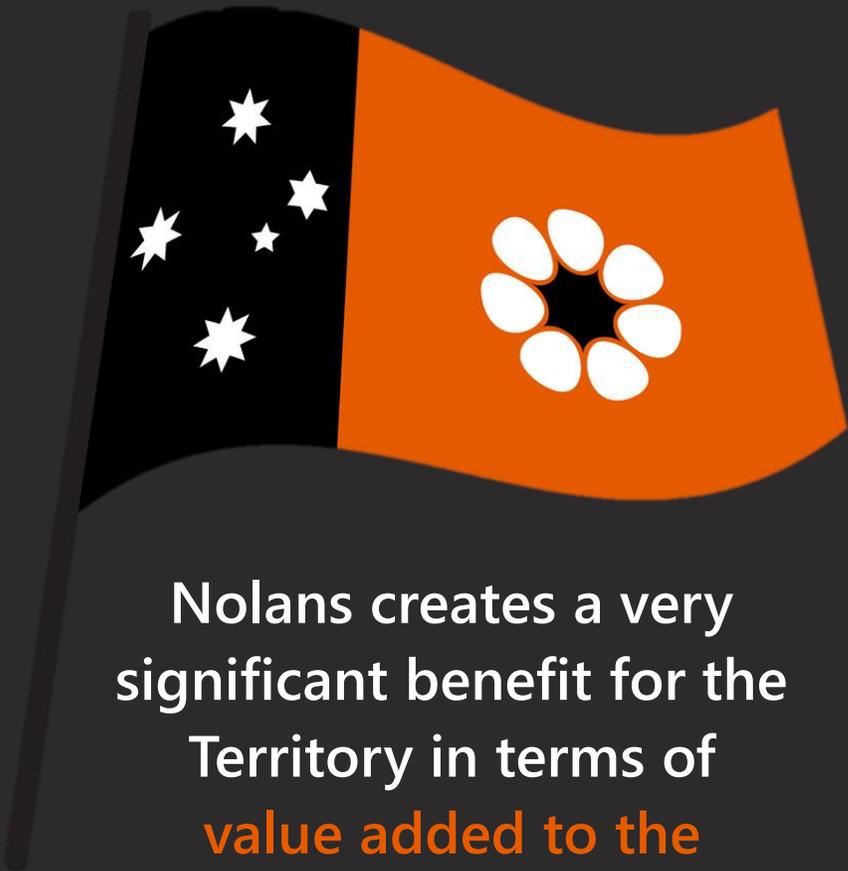


An average contribution of
A\$328 m
each year to the Gross Regional Product of the **Alice Springs** region

EQUATING TO A



47 %
increase to the contribution made by the mining industry**



Nolans creates a very significant benefit for the Territory in terms of **value added to the economy, boost to incomes of Territorians and job creation**

Nolans returns a benefit to cost ratio of 1.5-1.8



(ASX:ARU)

** Economic regional profile data from economy.id.com.au for 2018/2019 financial year.

All values expressed in real 2018 Australian dollars, and results presented in financial years and based on data supplied by Arafura from the February 2019 Definitive Feasibility Study that describes the construction, operation and closure phases of the project over a 26-year period.

Source: Acil Allen (April 2020) – Economic Analysis of the Nolans Project

Job Creation during Construction & Operations



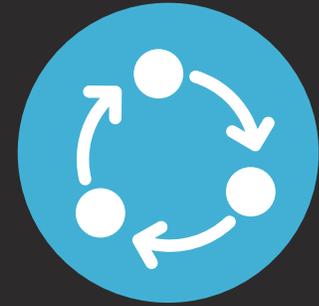
Territory Benefit Plan approved

- Local 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 38-year operational life

- \$225 million annual spend
- **280* direct permanent jobs across the Territory**
- Large range of job types
- 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

Socio-Economic Impact Assessment (ESIA)



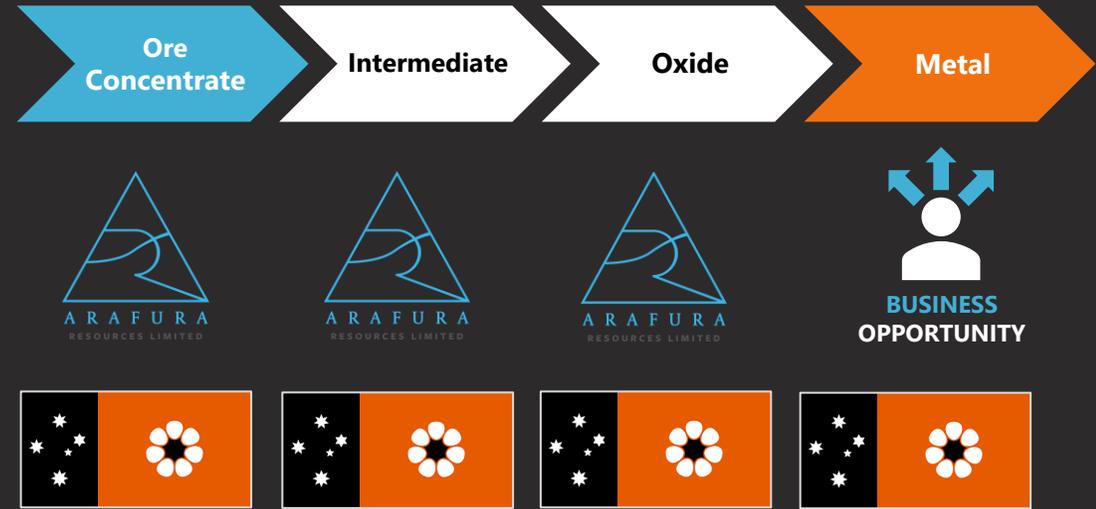
Socio-Economic Impact

- Extensive **Social Studies** conducted
- Community and stakeholder engagement
 - Engagement with local community and business
 - **Indigenous people and Traditional Owners**
 - All levels of government
 - Employment strategy developed
- **Health and Safety** to workforce and general public

- ✓ An agreement has been signed with the three native title holder groups over the Project through the Central Land Council (CLC)
- ✓ Local and Indigenous Procurement Plan in place



The Territory's Opportunity – Beyond Nolans



Multiple rare earth-rich ore concentrates from across Australia



NdPr and heavy rare earth processing hub at Nolans



Rare earth metals manufacturing in Darwin



Rare earth metals for export or to unlock **additional domestic advanced manufacturing**



(ASX:ARU)

Appendices



Arafura's Debt Funding Strategy

Global Government Initiatives Creating Momentum

- ➔ Morrison launches the Resources Technology and Critical Minerals Processing road map
- ➔ Most countries targeting net-zero emissions
- ➔ Europe initiatives for a low carbon economy
- ➔ Made in China 2025 Strategy focused on e-mobility and renewables
- ➔ Korea to reshore production and create downstream processing
- ➔ Japan to reshore production and diversify supply chains
- ➔ Biden pledges to slash greenhouse gas emissions in half by 2030



Strategy Leverages Global Focus on Critical Materials Supply Chains

- ✓ Conditional letters of support¹ for senior debt facility:
 - ✓ Export Finance Australia (EFA) for a 15-year facility for \$200m
 - ✓ Northern Australia Infrastructure Facility (NAIF) for a 15-year facility for \$100m
- ✓ Aligned with Australian Government's critical minerals strategy to create ethical value chains for critical minerals
- ✓ Foreign ECAs seeking well structured projects for the supply of critical materials for the manufacturing of EVs and renewable technologies

1. Conditional letters of support are non-binding and conditional upon internal credit approval, negotiation of lender agreements and further due diligence enquiries (among other conditions).

Nolans Project Highlights



**Long life asset
enriched in
NdPr**



**Extensive &
successful
large-scale pilot
completed**



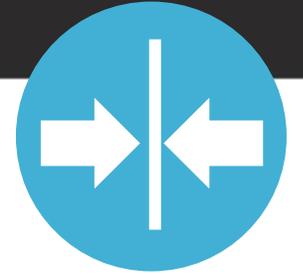
**Definitive
Feasibility
Study
completed,
fully costed
from Ore to
Oxide to
Rehabilitation**



**Only single site
Australian NdPr
focused project
with all
approvals**



**Low-cost
operation**



**Production of
NdPr oxide
aligned with
Government &
customers'
critical raw
material
diversification
plans**

Attractive Project Economics

Mining and Production		
Mine Life (years)	38	
NdPr Oxide (tpa)	4,440	
SEG/HRE Oxide (tpa)	474	
Phosphoric Acid (tpa 54% P ₂ O ₅ MGA)	144,393	
Financial	US\$	A\$
Capital Cost (\$m)	768	1,056
NdPr Oxide (US\$/kg)	87	120
Rare Earth Sales Revenue (\$m/pa)	388	534
Phosphoric Acid Sales Revenue (\$m/pa)	58	79
Mining Costs (\$m/pa)	(30)	(42)
Processing Costs (\$m/pa)	(105)	(145)
General and Administration Costs (\$m/pa)	(15)	(21)
EBITDA (\$m/pa)	257	354
KPI Analysis	US\$	A\$
Operating Cost \$/kg NdPr	33.91	46.60
Operating Cost \$/kg NdPr net of P ₂ O ₅ credit	24.76	34.06
NPV ₈ after tax (\$m)	1,011	1,402
IRR after tax (%)	18.1%	

Refer to ASX Announcement Nolans Project Update dated 11 May 2021 which assumes a long-term NdPr oxide price of US\$87/kg. Average production and costs are calculated as the arithmetic annual average following the anticipated two year ramp up and excluding the final years of production from low grade stockpiles.

- ✓ Definitive Feasibility Study (DFS) update released in May 2021
- ✓ **Post-tax NPV₈ of A\$1.4 billion** and IRR of 18.1%
- ✓ Capital cost **A\$1,056m**
- ✓ **Annual average EBITDA of A\$354m**
- ✓ Low-cost producer at **US\$24.76/kg NdPr**
- ✓ Robust economics at current NdPr oxide price **US\$88/kg***

* Asian Metals (1 July – 11 August 2021 average price).

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.

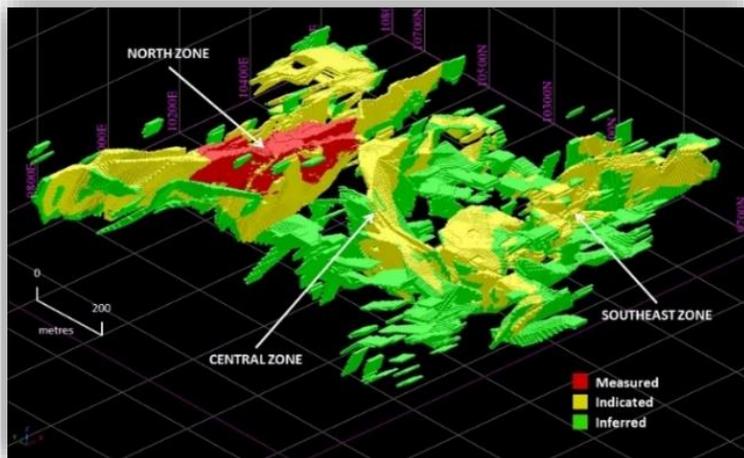
RESERVES	TONNES (m)	RARE EARTHS TREO %	PHOSPHATE P ₂ O ₅ %	NdPr ENRICHMENT %
Proved	5.0	3.0	13	26.2
Probable	24.6	2.8	13	26.5
TOTAL	29.5	2.9	13	26.4

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.

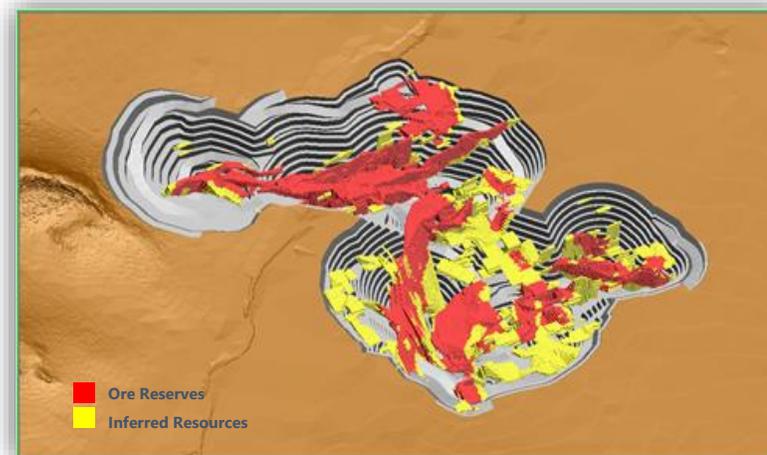
NdPr rich & open at depth

- ✓ Over 90km drilled to define and classify material types
- ✓ 29 year Ore Reserves
- ✓ 38 year Mining Inventory
- ✓ Single pit
- ✓ Expansion potential

Mineral Resources



Ore Reserves



Rehabilitation & Waste Management

- ✓ Waste rock dumps designed to “encapsulate” naturally occurring radioactive materials (NORM) rock at mine site
- ✓ Mine area surface water management captures sediment
- ✓ Residue storage facility (RSF) with two cells
- ✓ Progressive rehabilitation



Environmental Approval and Project Costing includes all costs for Waste Management System and Rehabilitation.



ESG/Sustainability Program Plan



Ambition

Arafura Sustainability Goal

"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."



Prioritisation

1. Mapped the Arafura stakeholder mix
2. Materiality assessment assessing ESG topics for their importance to both Arafura and our stakeholders
3. Exploration of the external environment and global landscape



Action



Signatory of the **UN Global Compact**



Registered to complete **IRMA Ready assessment standard**



Commitment to achieve **net-zero by 2050**



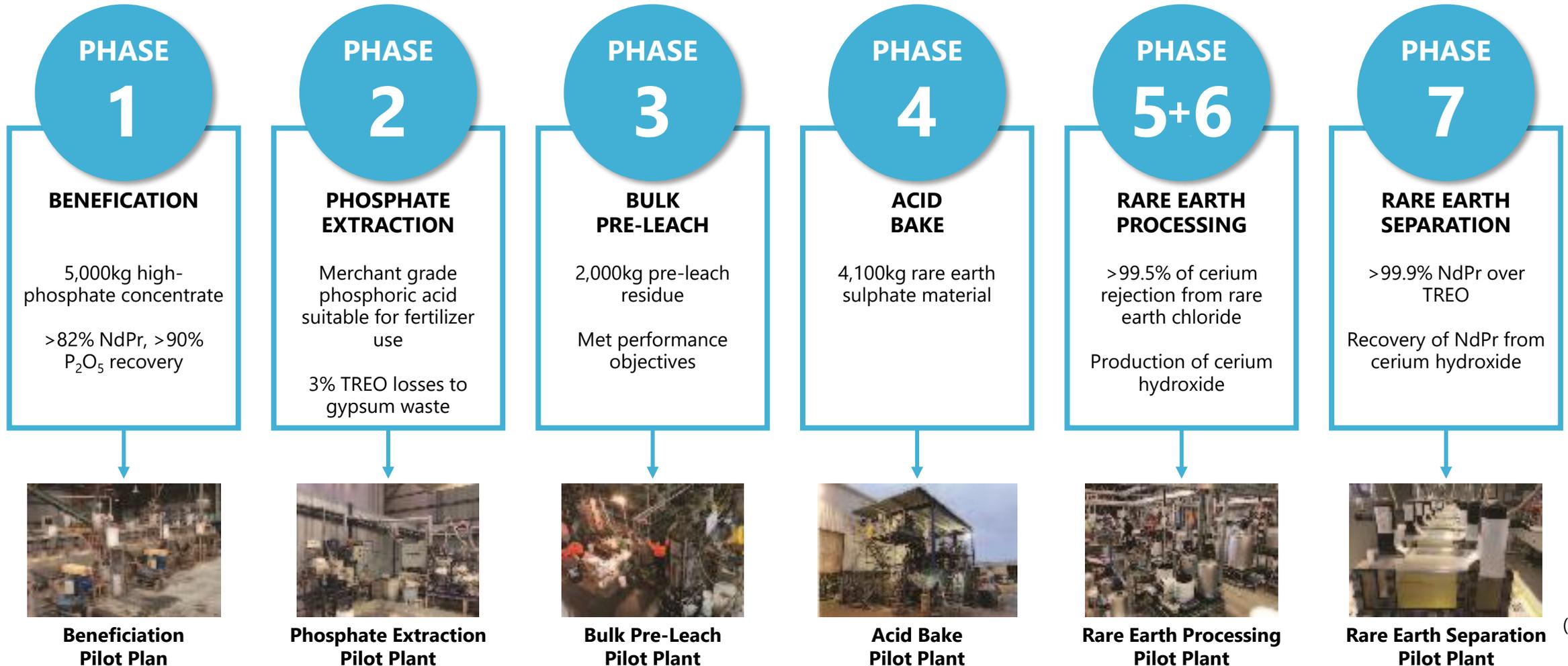
Comprehensive **Sustainability Report** to be released mid-2021



(ASX:ARU)

Technology Program Complete

Flowsheet Pilot



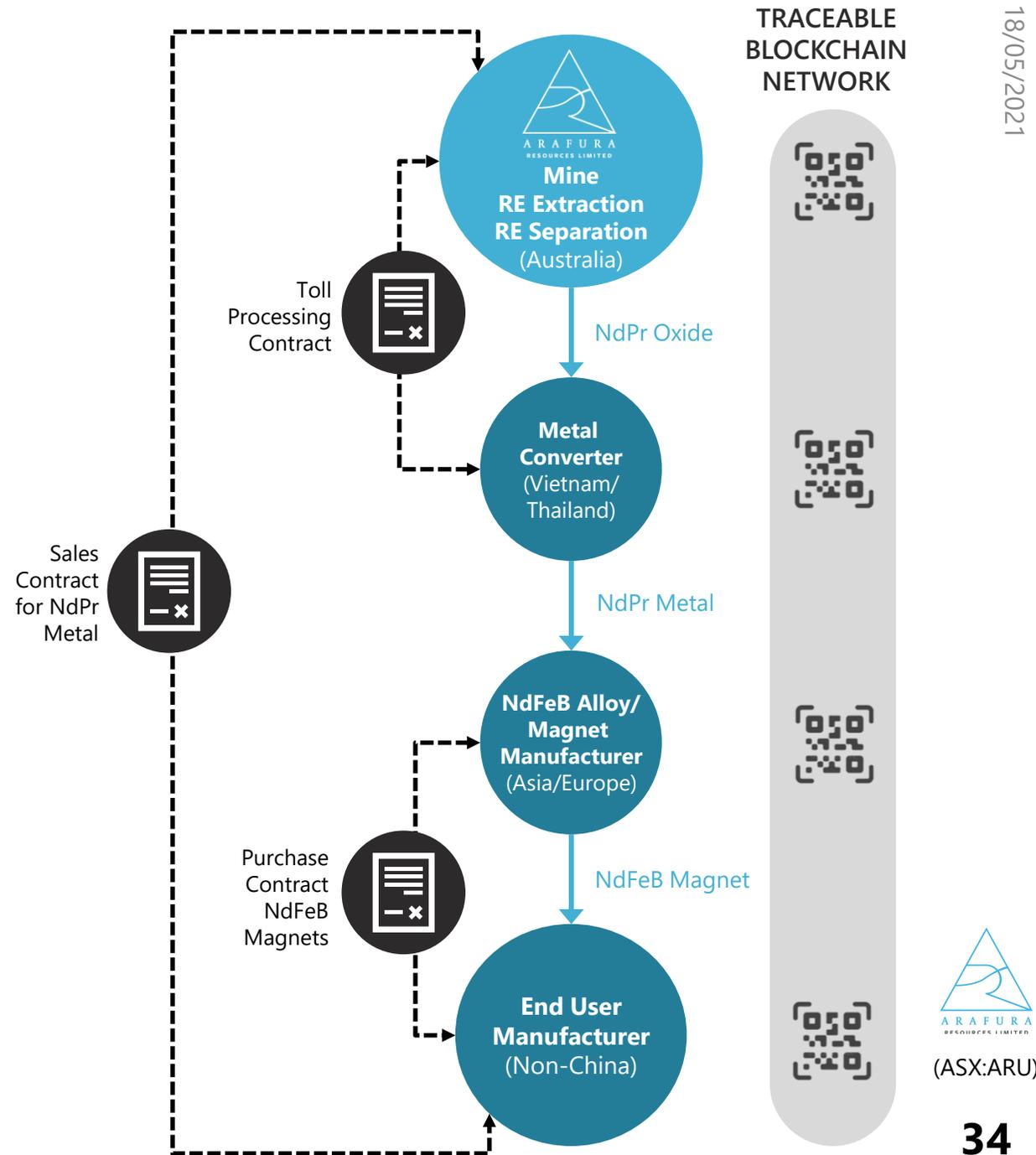
(ASX:ARU)

Nolans Supply Chain Model

Sustainable producer of NdPr to align to “green procurement” strategy

- 1** Offtake Model proposes ‘Toll Processing’ of metal providing a complete traceable and verified supply chain solution to satisfy end users sustainability requirements
- 2** Offtake Model proposes delivery of NdPr metal into End Users existing supply chain
- 3** Provides customers with security of NdPr supply, verified traceable supply and optionality to direct material to a chosen magnet maker

ARU has an MoU with SE Asia based toll metal converter and aiming to execute a tolling agreement



Contact Information



Level 6, 432 Murray St, Perth WA 6000
34/119 Reichardt Rd, Winnellie NT 0820



+61 8 6370 2800



arafura@arultd.com



www.arultd.com

