

# ASX ANNOUNCEMENT

## MINING THE TERRITORY PRESENTATION

27 October 2021

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**Arafura Resources Limited (ASX:ARU)** (“**Arafura**” or the “**Company**”) is pleased to attach a copy of its presentation delivered by Managing Director, Mr Gavin Lockyer, at the Mining the Territory Conference today held in Darwin, Northern Territory. Mr Lockyer will present the Nolans Project on the topic “Update on Nolans Rare Earths Project”.

The Mining the Territory Conference is Northern Australia’s leading Mining Industry Conference and is held as part of NT Resources Week. The conference is Northern Australia’s largest resources and construction industry-based conference.

**-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.”*

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**NdPr**

# Nolans Project Update Mining the Territory

28 October 2021





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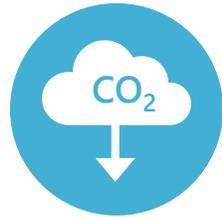
## Mineral Resources and Ore Reserves

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 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



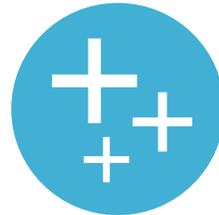
Two great revolutions are underway: **digitalisation** and **decarbonisation**



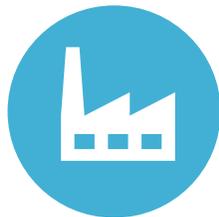
**NT is poised to benefit:** resources, energy, expertise, proximity to markets, environmental standards



Both rely on a secure and long-term supply of critical minerals including **rare earths**



Realising its full value 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**

# NT leading Australia's Critical Minerals Revolution

Critical minerals are strategic for governments and will enable **energy transition**



- Australian Government leveraging critical mineral reserves to provide **Australia with a place in the value chain** for processing and supply of critical materials
- Government recently added **\$2 billion** to the Critical Minerals Facility



**Arafura has secured conditional letters of support<sup>1</sup> for \$300m from NAIF & EFA**



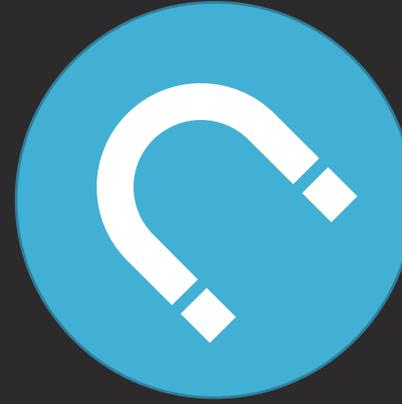
(ASX:ARU)

*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).*

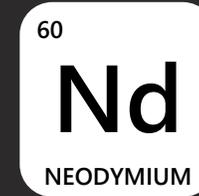
NAIF = Northern Australia Infrastructure Facility | EFA = Export Finance Australia

# Critical Minerals: Rare Earths

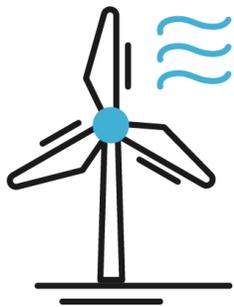
Rare Earths are essential to building a clean energy future.



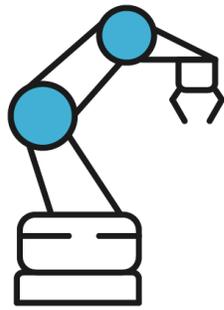
The Nolans Project contains all the Rare Earths but is particularly enriched in the 'Magnet Feed' Rare Earths NdPr



The fastest growing market for NdPr is in NdFeB Magnets.



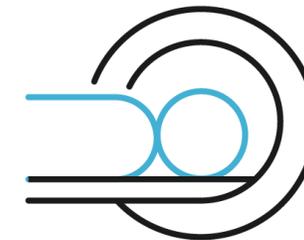
WIND  
TURBINES



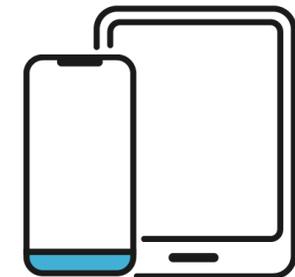
ROBOTS



ELECTRIC  
VEHICLES



MRI  
MACHINES



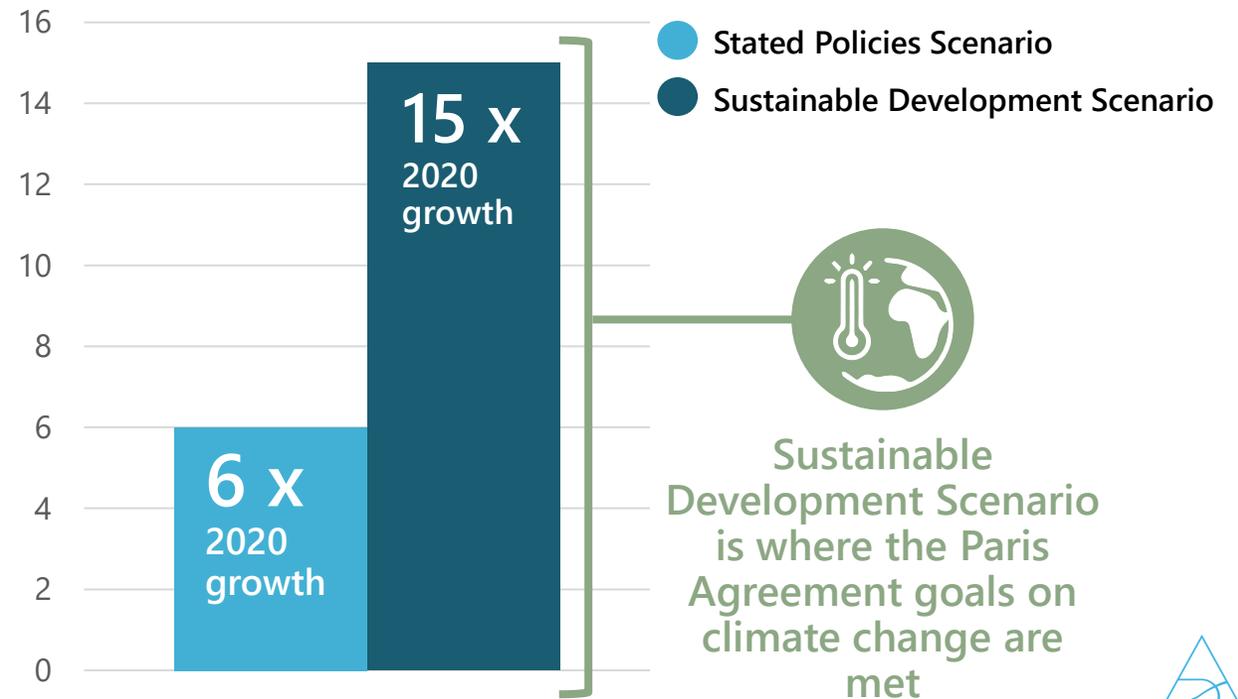
PHONES &  
TABLETS

# Rare Earths

## A Vital Cog in the Electric Vehicle Revolution

- ✓ EV market growth is exponential: **10 to 40 times** in the next 20 years which will require **6-15 times more rare earth elements**
- ✓ EV traction motors can use **upwards of 1kg of Rare Earth Elements**
- ✓ Just 0.05% of the vehicle cost: **but it can't run without it**

### Rare Earth demand growth from new EV sales by scenario 2040 compared to 2020



# A Lesson in the Auto Semiconductor Shortage

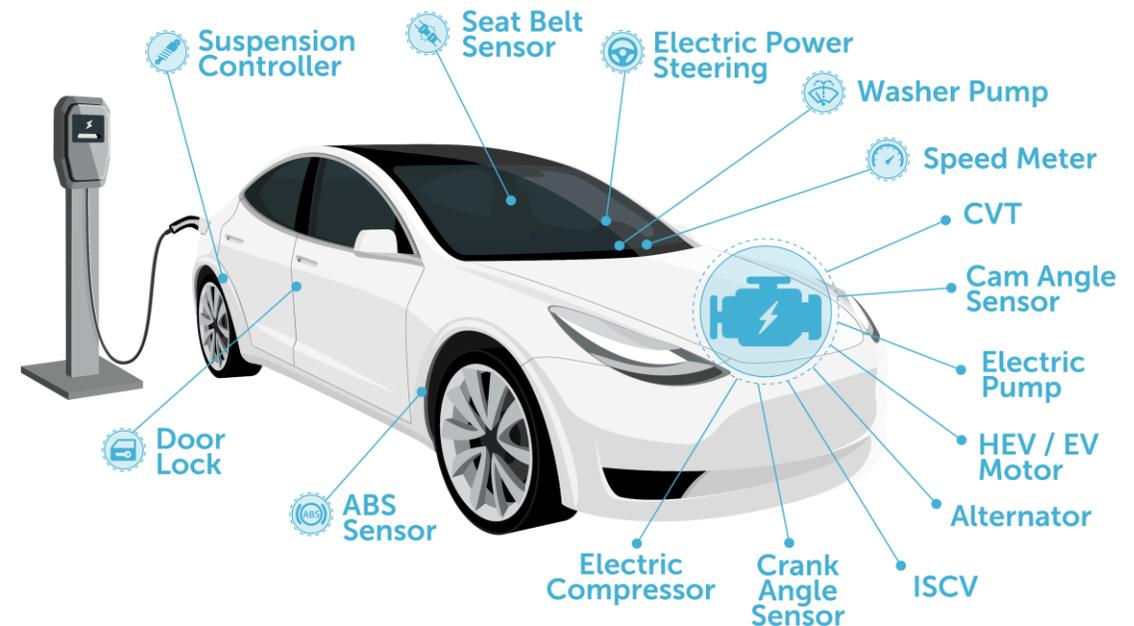
- The shortage has caused **billions of dollars in lost revenue** for the Auto industry
- It highlights how a **tiny cog in the supply chain can disrupt the global market**

## The Looming NdPr Shortage

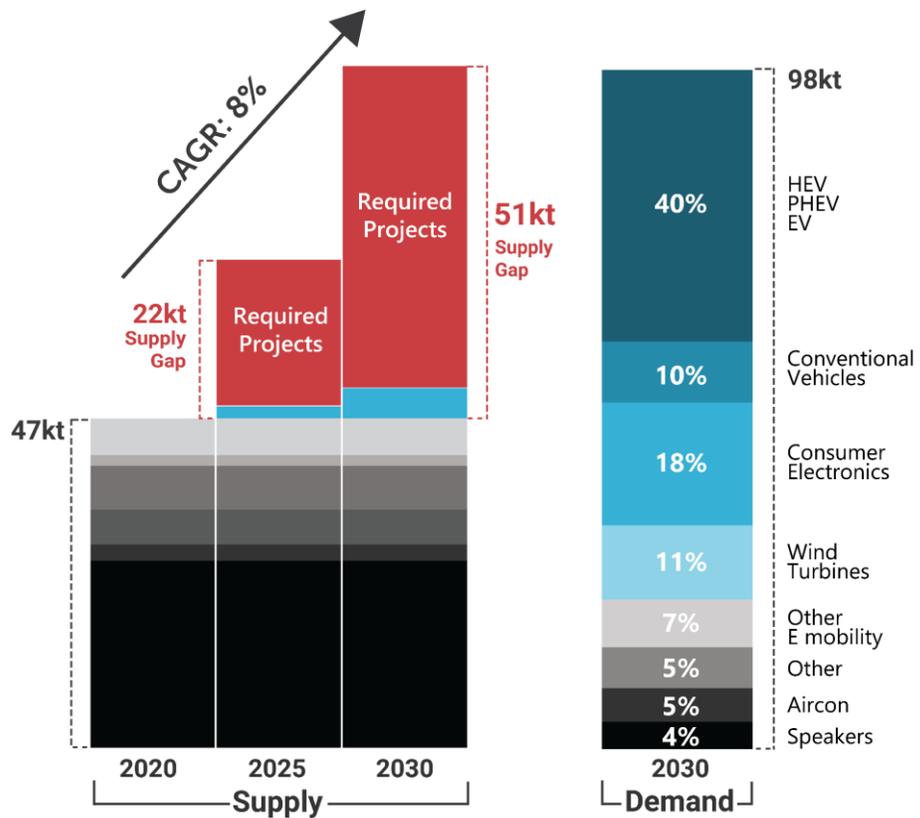
- **China is the only country in the world to have a domestic supply chain solution** (Mine to EV)
- Global industry is heavily reliant on **China who produce ~85% of NdPr and consume 60%**

There is **high urgency** for the non-chinese auto sector to **secure future supply of NdPr** otherwise [global shortages are imminent](#)

### NdFeB Magnet Components in an EV



## NdPr Supply & Demand



- Arafura Resources
- Recycling & By Products
- MP Materials
- China Undocumented
- Small Producers
- Lynas
- China Production

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.

# Increasing DEMAND

- Automotive sector is forecast to **consume nearly 50% of NdFeB supply**
- 2030 demand forecast assumes **~34 million EVs**
- 24 million EVs at risk in 2025** if new supply isn't secured

## SUPPLY Shortage

Forecasted **supply gap in 2030** represents **109% of current global production**

**> 11 Nolans Projects**



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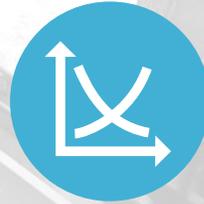
# The Territory's Rare Opportunity



Nolans is positioned to supply  
**~5% of global demand** for  
NdPr oxide by 2027



**Shovel-ready world class NdPr project**



**Production is aligned with forecast supply shortage**



**All environmental approvals secured**



**Traceable and ethically produced to meet global sustainability requirements**



**The Territory to benefit long term from advanced manufacturing component**

# An Australian First

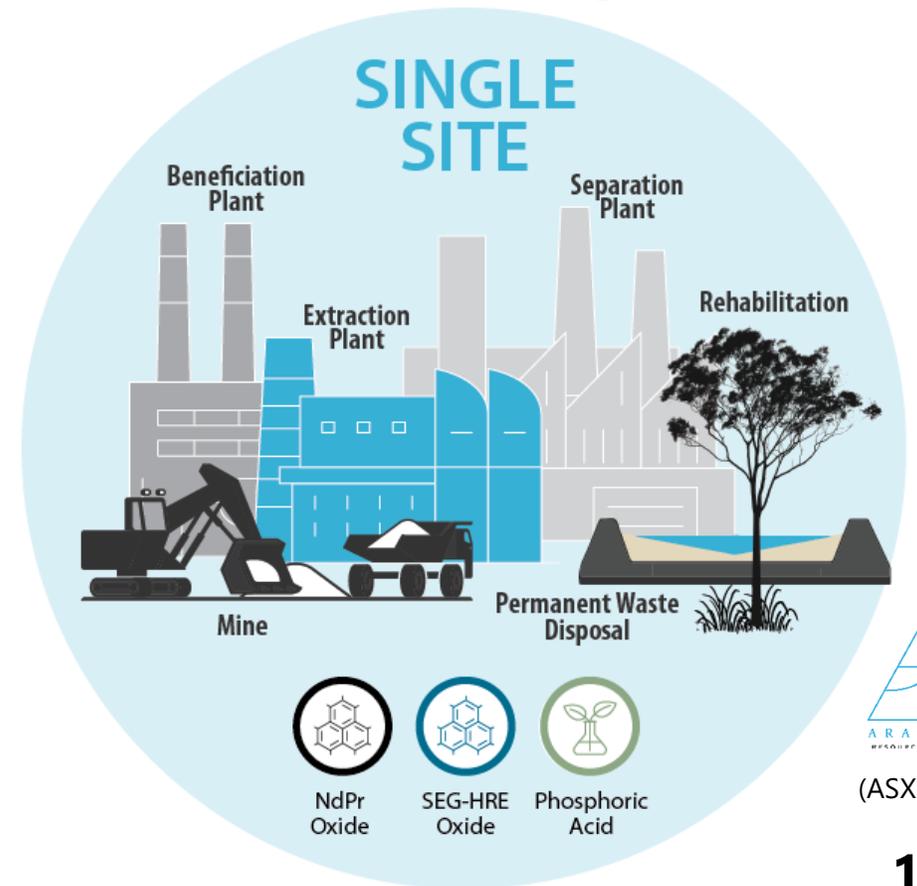
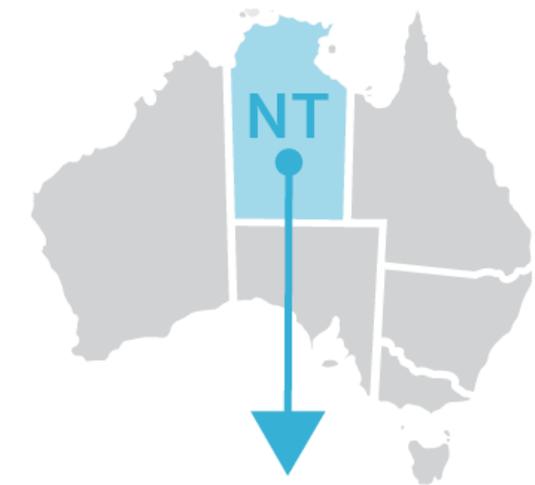
Nolans is the **only** NdPr focused project in Australia that plans to **mine and process ore to oxide at a single site.**

ESG

Traceable product and waste management certainty which is **aligned with customers' ESG expectations.**



More **employment & local business opportunities** for Territorians



# Nolans Benefits for Territorians



## Territory Benefit Plan approved

1. Local business involvement & support
2. Employing Territorians
3. Sponsorship in education and community projects



**30-month  
construction  
period**

- ➔ \$1 billion initial capital spend
- ➔ Peak workforce of 620\*



**Minimum  
38-year  
operational  
life**

- ➔ \$225 million annual spend
- ➔ 280\* direct permanent jobs across the Territory



**Local  
Content**

- ➔ Targeting locals as a priority
- ➔ 20% Indigenous Employment Target

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

# Shovel Ready



## Commercial

- ✓ **Aust. Govt. provide conditional letters of support for \$300M in debt**
- ✓ **\$45.5M Successful capital raising completed to begin FEED**
- Offtake engagement (advanced discussions underway)
- Project funding (commenced senior debt process & strategic equity)

Progress  
Towards  
**Construction**



Hydrometallurgical  
Plant FEED commenced  
August



Non-Process Infrastructure  
FEED early works  
progressing



Arafura's Owners' team  
including personnel from KBR  
and Wave ramping up



# 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).



NAIF & EFA provide conditional letters of support for \$300M in debt<sup>2</sup>



Cap raise complete & FEED commenced in 2H 2021

WE ARE HERE



Conclude agreements with offtakers, Export Credit Agencies & project funding



Targeting Final Investment Decision (FID) by 2H 2022<sup>1</sup> to start production (targeting first production late 2024<sup>1</sup>)

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