

ASX ANNOUNCEMENT

ANU RARE EARTH CONFERENCE

1 November 2022



Arafura Rare Earths Limited (ASX: ARU) ("**Arafura**" or the "**Company**") is pleased to attach a copy of its presentation delivered by General Manager- Projects, Mr Stewart Watkins, at the Australian National University Rare Earth Conference held in Canberra. The conference brings together industry, government and academia to discuss the state of the Australian Rare Earth Industry with the goal to build and galvanize the Australian Rare Earth community, establish and disseminate the current state of knowledge on rare earth ore systems, and to define the path forward.

The conference is held in collaboration with the Australian Strategic Policy Institution (ASPI) Masterclass on Australia's Rare Earths Strategy.

-ENDS-

For further information contact:

Gavin Lockyer
Managing Director
+61 8 6370 2800

Media Enquiries:

Anthony Hasluck
Clarity Communications
+61 438 522 194

Authorised by:

Catherine Huynh
Company Secretary



"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."

Nolans NdPr Project

"Same Same but Different"

1 November 2022

Australian National University:

Rare Earth Conference

in collaboration with:

ASPI Masterclass: Australia's Rare Earths Strategy





Disclaimer

This presentation has been prepared by Arafura Rare Earths Limited (Arafura, Arafura Rare Earths 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 Rare Earths' 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 Rare Earths 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 Rare Earths 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 Rare Earths 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 Rare Earths, 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 Rare Earths.

Mineral Resources and Ore Reserves

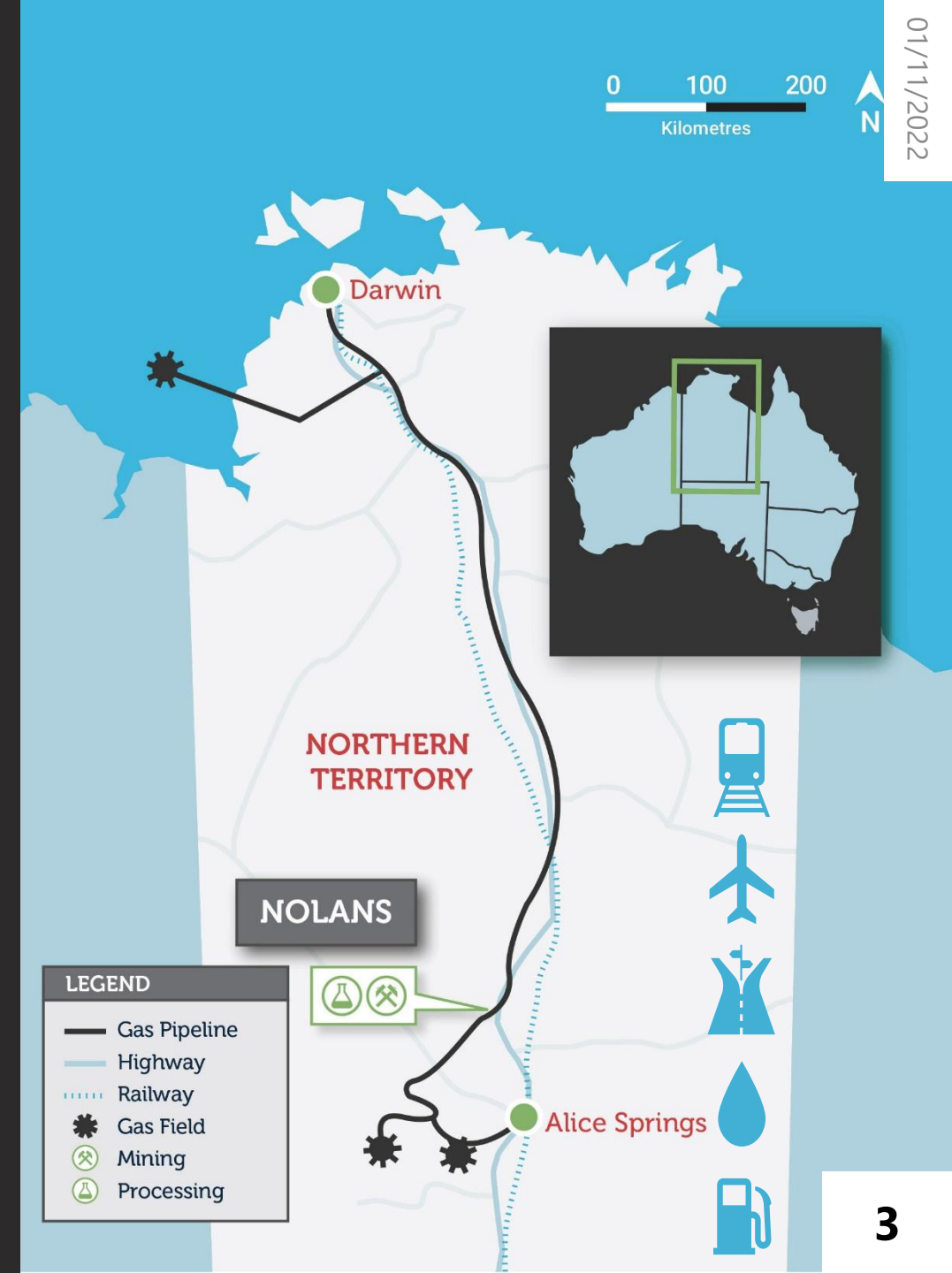
The information in this presentation that relates to Mineral Resources is extracted from the Company's ASX announcement dated 7 June 2017 (Detailed Resource Assessment Completed) and was completed in accordance with the guidelines of the JORC Code (2012). The information in this presentation that relates 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 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.

Introduction

- ✓ Long development history, like the majority of rare earths projects
- ✓ Every rare earth project is different so there is no cookie-cutter approach
- ✓ Located in the middle of the country, but not in the middle of nowhere but with single-site focus to manage ESG requirements
- ✓ Rigorous structured development over the 7 years has set Nolans up to be the next NdPr Oxide producer in the world



Long Life Asset

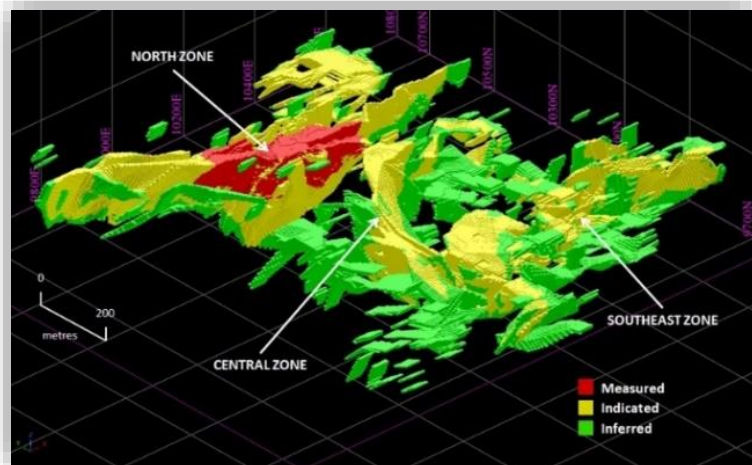
RESOURCES	TONNES (m)	RARE EARTHS TREO %	PHOSPHATE P ₂ O ₅ %	NdPr ENRICHMENT %
Measured	4.9	3.2	13	26.1
Indicated	30	2.7	12	26.4
Inferred	21	2.3	10	26.5
TOTAL	56	2.6	11	26.4

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.

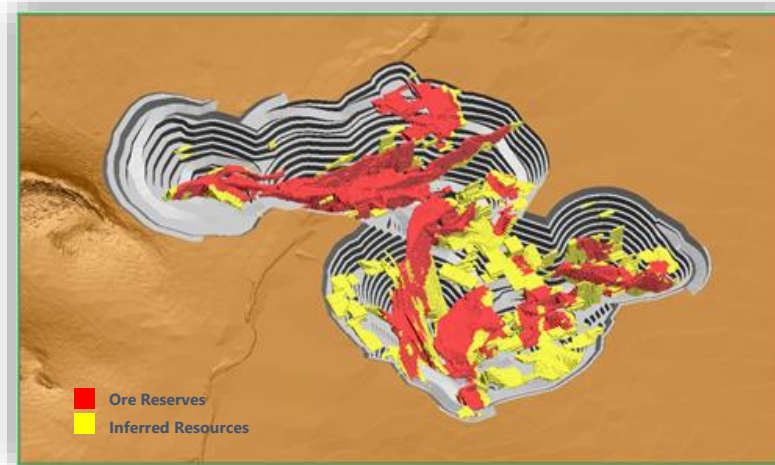
RESERVES	TONNES (m)	RARE EARTHS TREO %	PHOSPHATE P ₂ O ₅ %	NdPr ENRICHMENT %
Proved	5.0	3.0	13	26.2
Probable	24.6	2.8	13	26.5
TOTAL	29.5	2.9	13	26.4

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

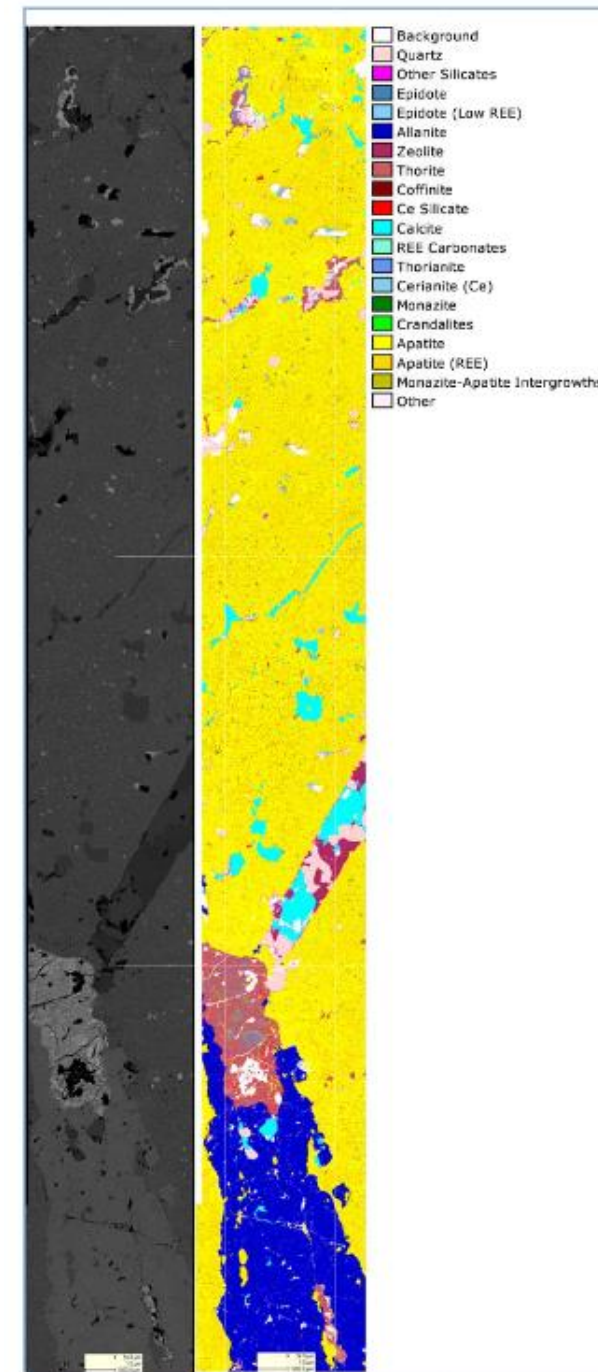


Geology

- ✓ Apatite hosted and not bastnaesite, carbonatite or monazite
- ✓ Apatite and micro inclusions of monazite is the key mineralisation
- ✓ Discovered through airborne radiometrics
- ✓ 90km of drilling to develop 29 yrs of reserves and 38 yrs LOM
- ✓ Open at depth

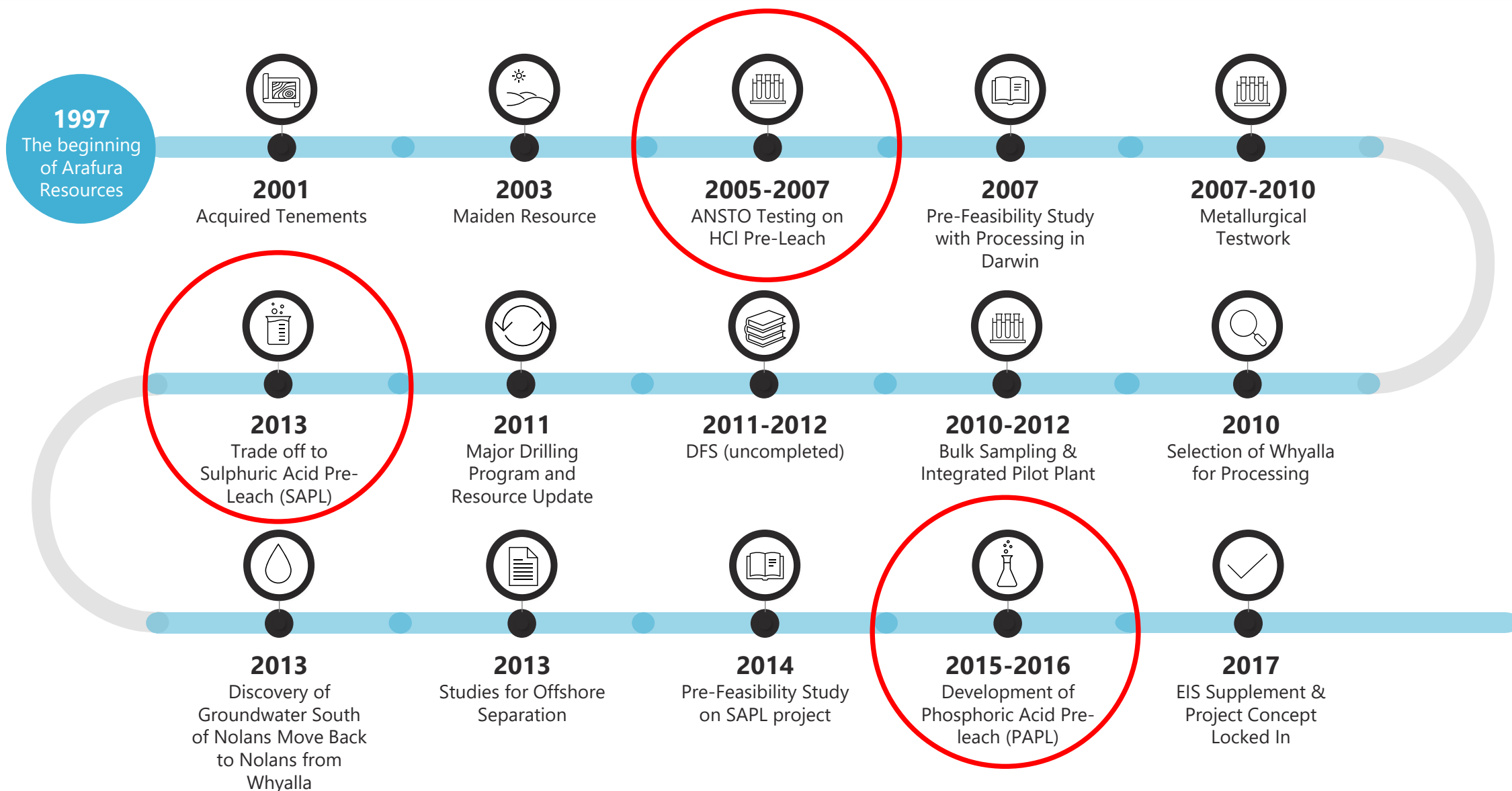
Metallurgy – Driven by Geology

- ✓ Main RE mineralisation
 - ✓ Apatite (50%)
 - ✓ Sub-micron monazite inclusion in apatite (25%)
 - ✓ 5µm to 45µm monazite & allanite
- ✓ Cannot physically separate RE from host apatite
- ✓ Simple flotation for a high phosphate concentrate followed by chemical separation is the only option



Long Life Development

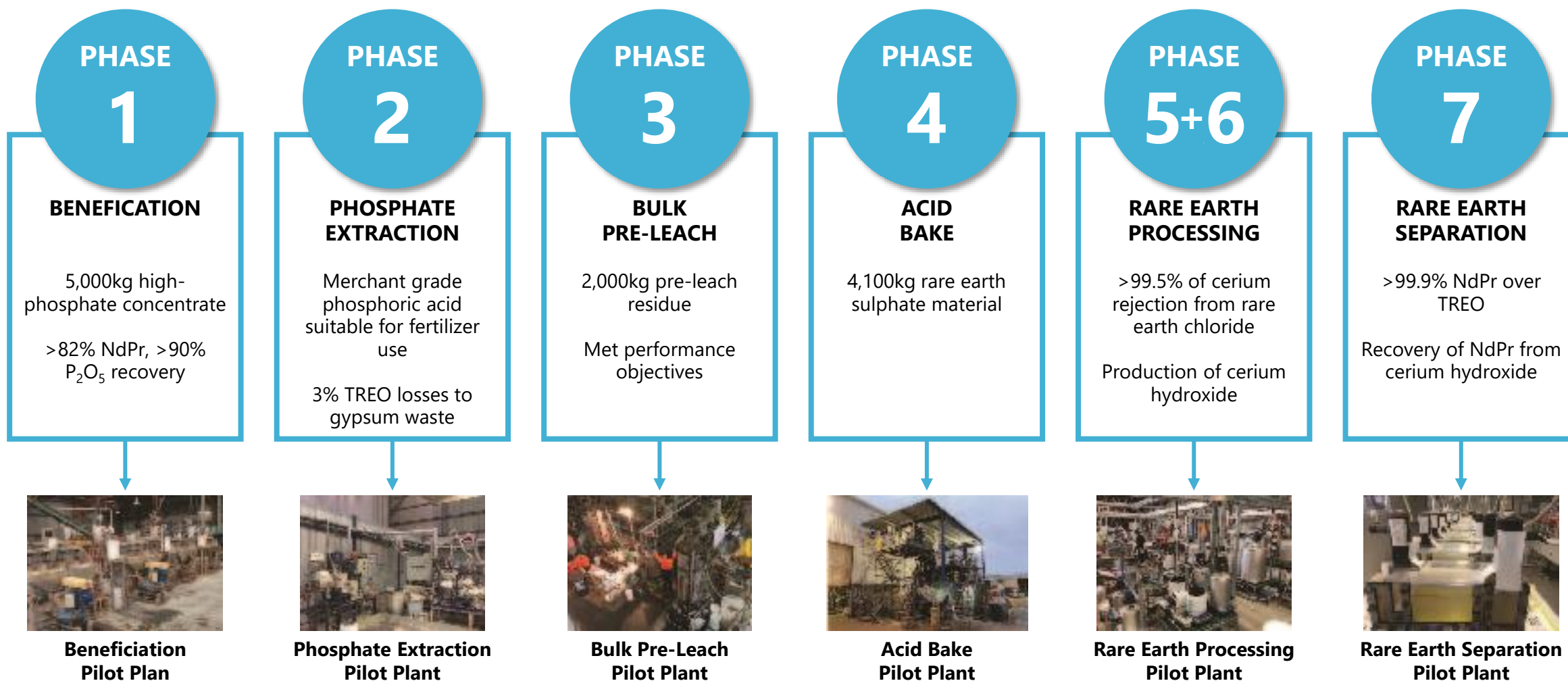
01/11/2022

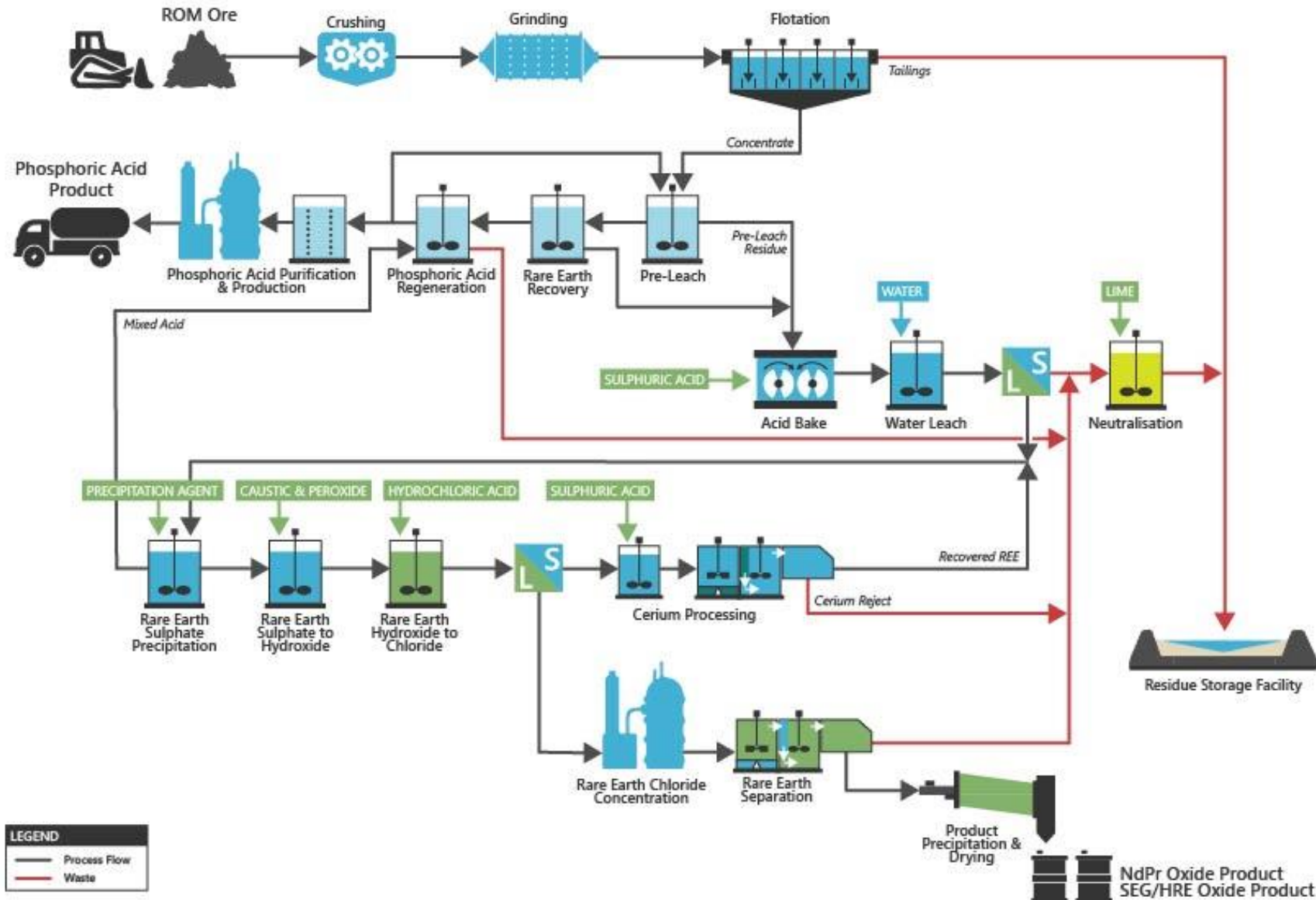


Technology Program Complete

01/11/2022

Flowsheet Pilot





Process Flowsheet

- ✓ Simple beneficiation process
- ✓ Modified wet phosphoric acid process to produce high RE residue
- ✓ Precipitation of RE Sulphate without neutralising acid allows excess acid to be recycled to pre-leach
- ✓ Ce removal before solvent extraction
- ✓ Separation of RE oxides

Link to video

Delivering to an ESG World

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



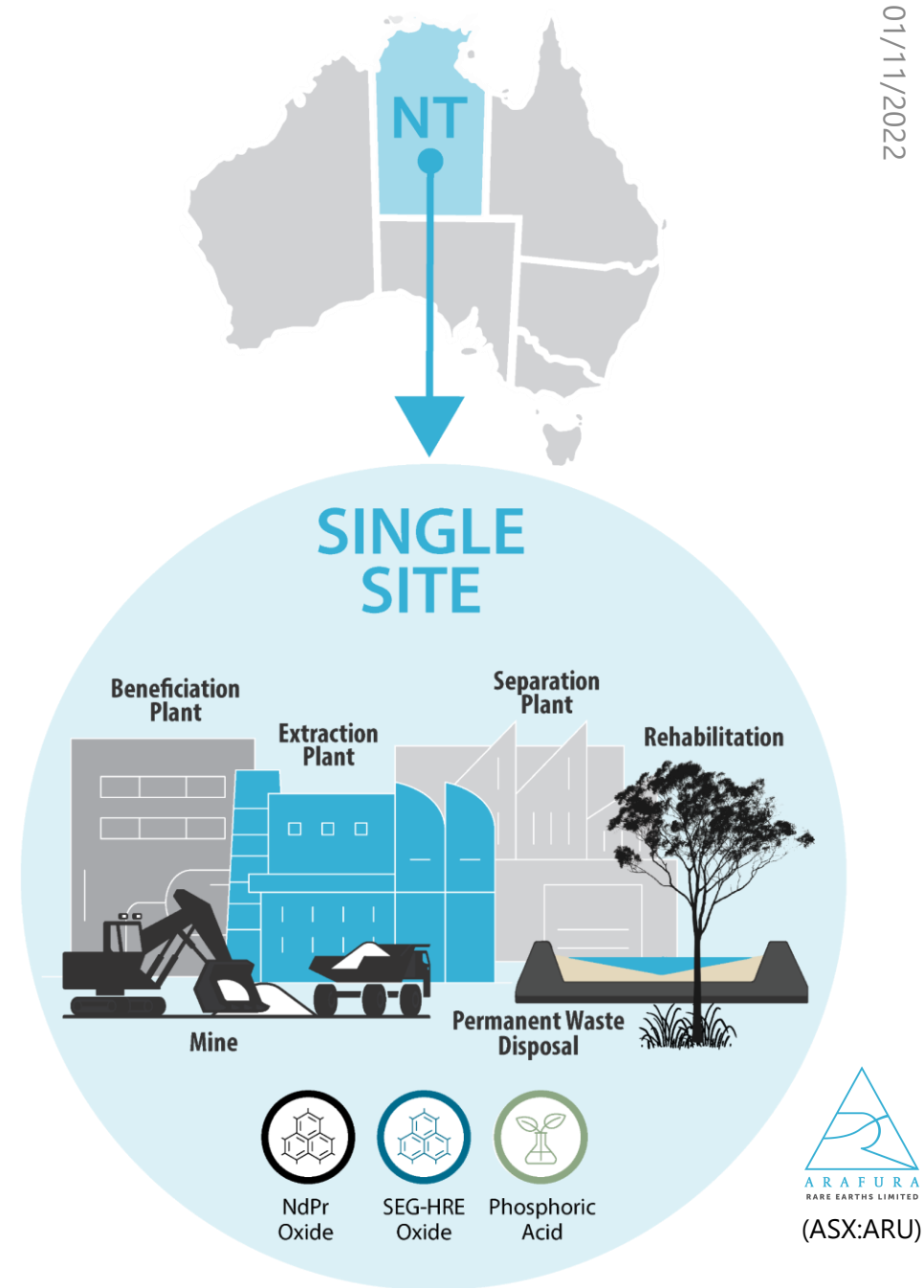
In a changing world a focus on environmental responsibility has become paramount



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

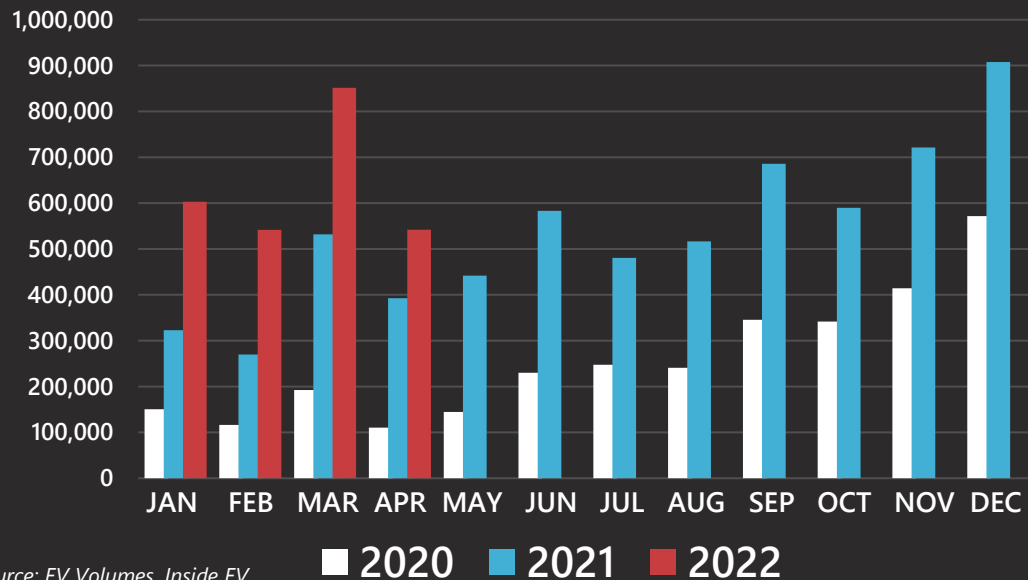


Single site processing provides traceable product, waste management certainty and an ability to drive GHG reduction which is **aligned with customers' ESG expectations.**



Global EV Sales (BEV+PHEV)

EV sales increased from 3.2 million in 2020 to 6.4 million in 2021 with 2022 showing even more growth.

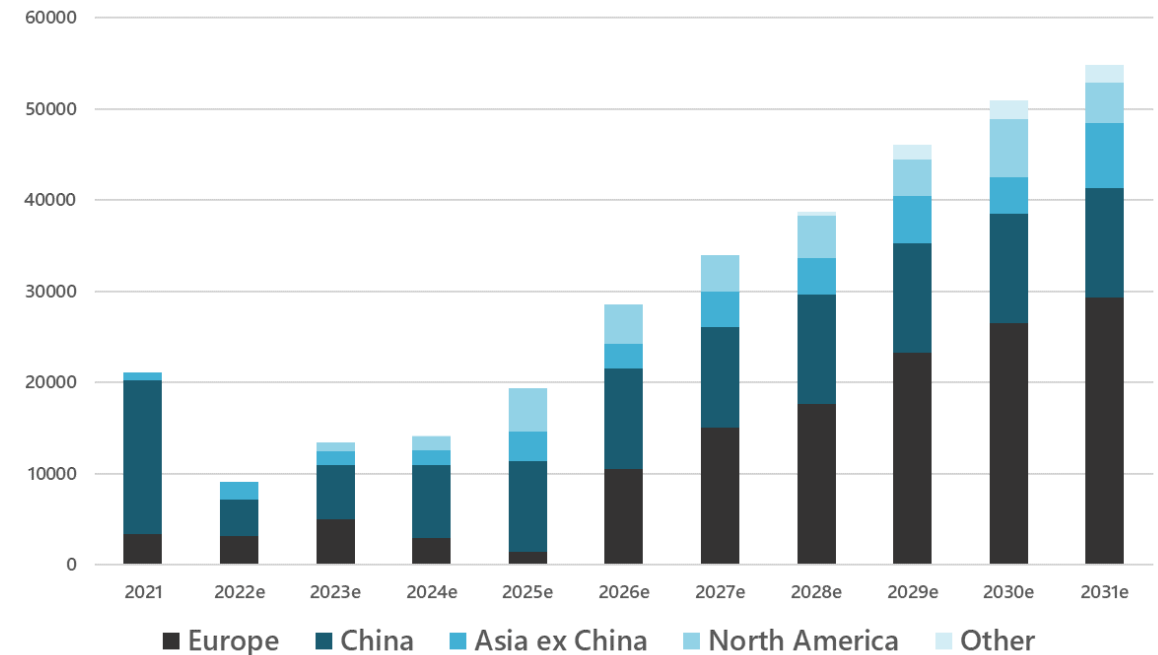


Source: EV Volumes, Inside EV

International Energy Agency (IEA) estimates **EV market growth** will require **6-15 times more rare earths elements** over the next 20 years.

Global Offshore Wind Outlook to 2031

2030 wind offshore installations will account for 30% of total wind installations.



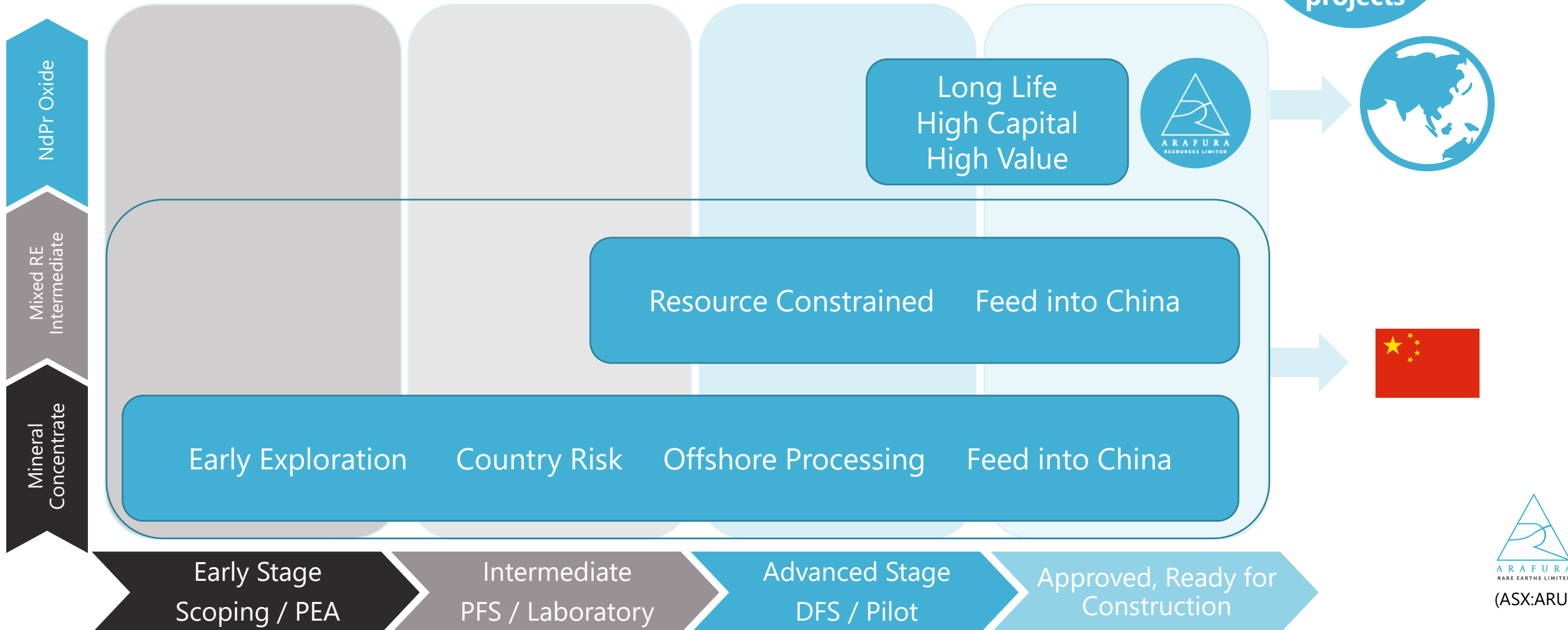
New European commission targets require **20-fold increase in offshore wind from 16 - 300 GW.**

Wind Turbine and EV Markets competing for NdPr

NdPr Resource Project Pipeline

01/11/2022

Extra NdPr demand by 2030 of 50,000¹ tonnes pa equivalent to 11 Nolans projects



¹Source: Arafura internal Supply Demand forecast referencing Wood Mackenzie- Rare earth market Outlook to 2050, 2021; CRU – Rare Earth Market Study, 2020; General Administration of Customs of China via Baiinfo January 2022. Supply is primary supply and excludes secondary source of NdPr supply from waste magnet production

Offtake



Arafura focused on partnerships with **End Users** to underpin the project funding

MoU's signed:



Hyundai Motor Corporation

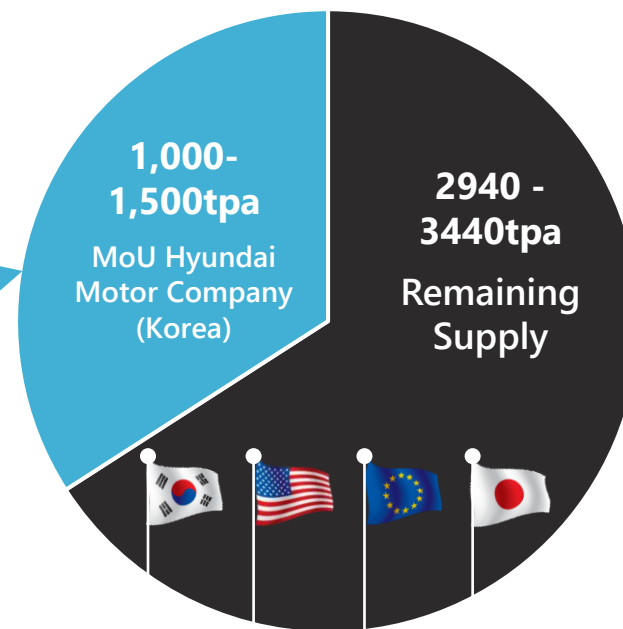


GE Renewable Energy

1/3 Planned Production¹ under MoU with Hyundai

Foundation Customer

Non binding MoU with Hyundai for 1,000tpa NdPr oxide with ability to secure additional 500 tonnes



Arafura's NdPr Oxide Planned Production 4,440tpa

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

1. Planned Production refers to the average annual production from Nolans of 4,440 tpa (Refer ASX Announcement dated 11 May 2021).

Targeted Funding Structure

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

