

ASX: ARU

19 October 23

Annual General Meeting



ARAFURA
RARE EARTHS LIMITED

NdPr Market Update

Market update

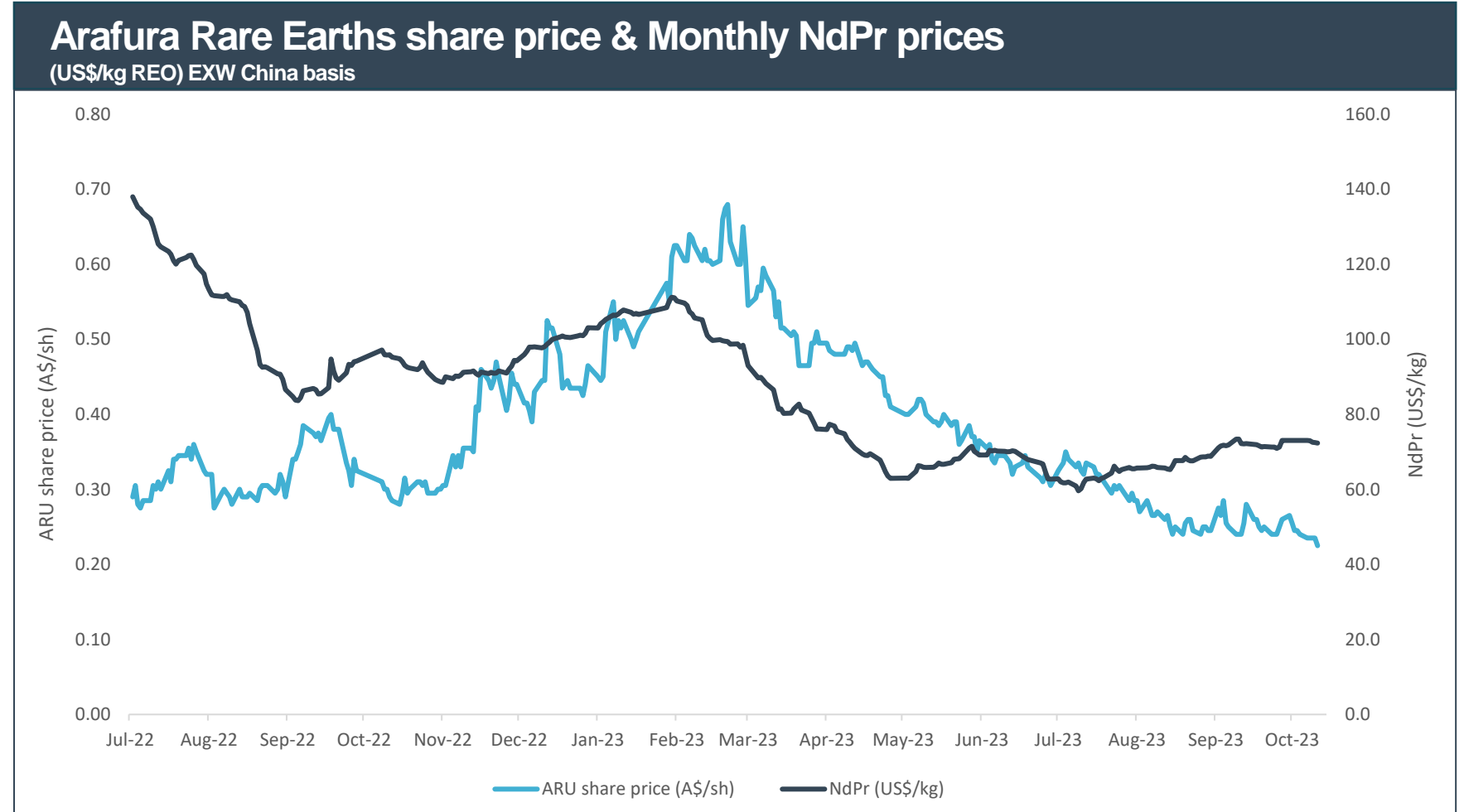


NdPr oxide prices have stabilised following marginal recovery in recent months.

Weakness in the Chinese domestic market saw limited purchasing activity, despite supporting economic policy.

Increased imports of material from Myanmar and the buildup of material from increased production in Northern China have maintained good feedstock availability for processors.

In China, major State-owned enterprises faced significant losses during H1 2023.



Source: Asian Metals

Magnet Demand

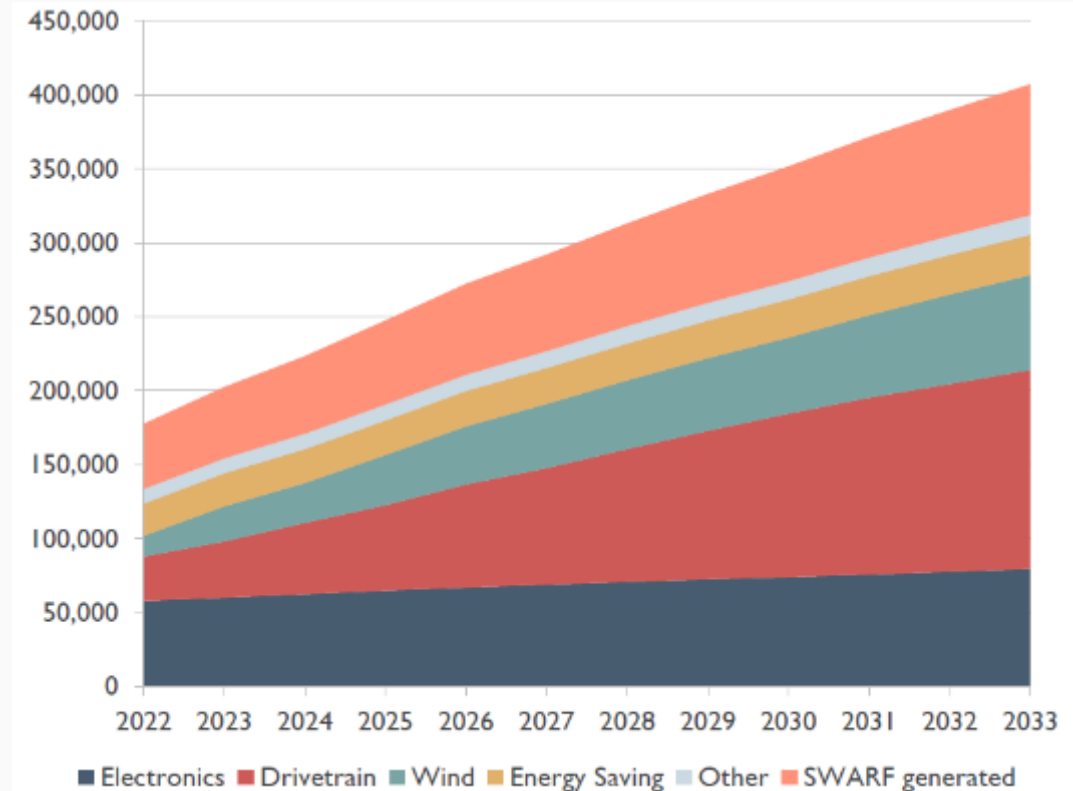
Favourable NdFeB demand driven by clean energy transition

Rare earth permanent magnet demand is forecast to increase at a **CAGR of 7.2% in the period to 2033**, doubling market size to more than 400kt NdFeB magnet materials.

The use of NdFeB magnets in **EV motors** is the main driving force for demand growth, with consumption in EV drivetrains forecast to increase at a CAGR of 13.9% to 2033, to form 42% of magnet material in end-uses.

NdFeB magnets used in permanent magnet synchronous generators in **wind turbines** is forecast to show significant growth, increasing at a CAGR of 10.4% 2033.

NdFeB demand by end-use sector (kt NdFeB)



Source: Project Blue

Market Outlook: Electric Vehicles

Electric Vehicles

China EV subsidies were cut at the end of 2022, leading to a sharp slowing in EV sales growth.

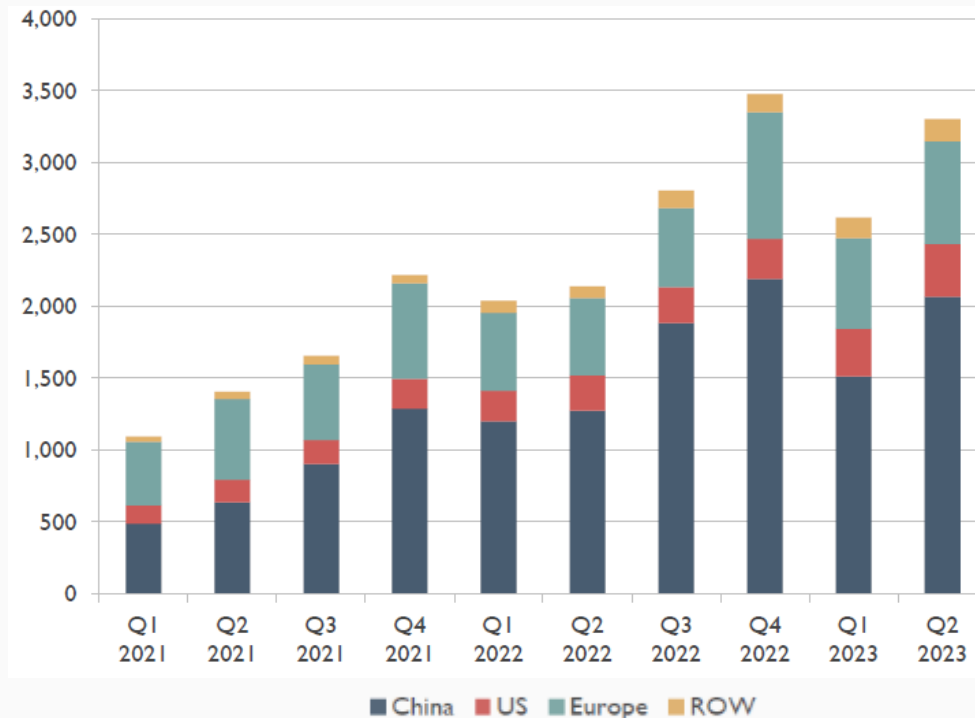
China's Q2 sales point towards a potential return to the high levels of EV sales growth associated with a market that accounted for nearly 63% of 2022 global EV sales.

EV sales in the US were up 50% year on year, reflecting Inflation Reduction Act incentives beginning to stimulate domestic demand.

In Europe, EV sales growth continued with a year-on-year increase of 33%.

Passenger EV sales

Q1 2021 - Q2 2023 (thousands)



Source: Project Blue

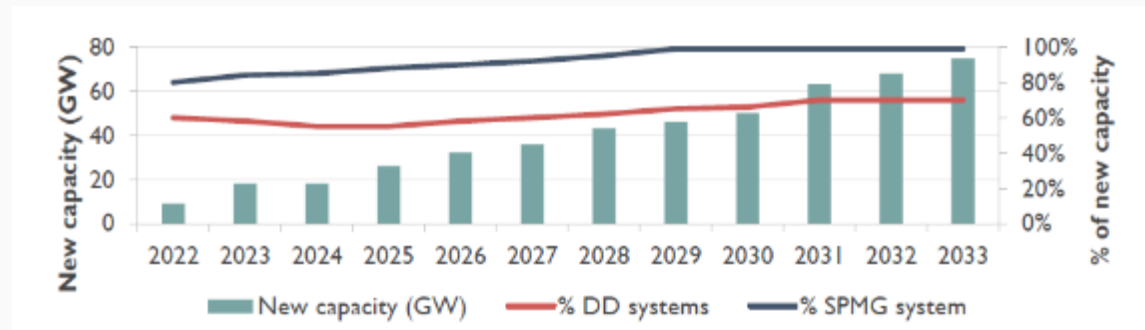
Market Outlook: Wind Energy

Wind Energy

Significant recovery in new wind energy capacity in 2023 after a weak 2022.

Continued increase in direct drive usage for offshore wind, particularly in regions with high wind speeds and challenging offshore geology – resulting in higher NdPr usage.

New offshore wind energy & technology



Source: Project Blue, GWEC, Brinckman

Recent developments

China has extended its influence over existing or potential suppliers of rare earths via direct investment in development projects, offtake agreements and the construction of new facilities.

Traditional financing routes still risk averse and there remains a lack of a sizeable downstream market outside of China for key REE products.

An increasing number of global projects target concentrate production, requiring refining in China.

Significant opportunity for Arafura to create an independent, traceable and ESG-focused supply chain.

China controls ~87% of global rare earths refining capacity



Source: Project Blue

Favourable Supply-Demand Profile

DEMAND

Automotive sector is forecast to be the primary consumer of NdFeB magnet supply.

2032 forecast assumes ~ 51 million EVs sold(1).

Achieving supply-demand balance over the next 10 years would require a cumulative annual growth rate (CAGR) in NdPr supply of ~6.9%.

SUPPLY

Forecast supply gap represents ~ 88% of global supply today – more than 12 Nolans projects.

Tighter regulatory and policy controls are expected to constrain China’s ability to expand at pace and open new mines.

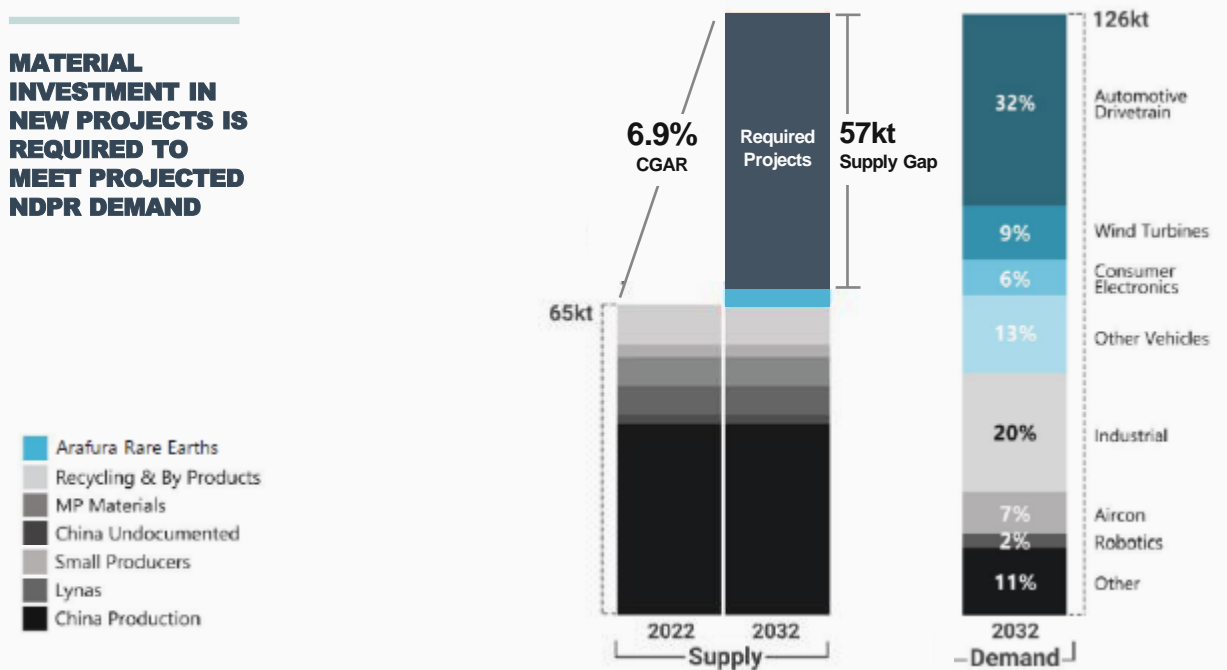
Few non-China NdPr projects are anticipated to be in production in the next five years.

Emerging supply gap has additional significance for companies not aligned with the Made in China 2025 strategy.

NdPr Supply & Demand

Based on end-use demand from magnets

MATERIAL INVESTMENT IN NEW PROJECTS IS REQUIRED TO MEET PROJECTED NDPR DEMAND



Sources: Arafura internal Supply Demand Forecast referencing Wood Mackenzie – Rare Earth Market Study July 2022; Wood Mackenzie Rare Earth Markets 2022 Outlook to 2050 (September 2022); General Administration of Customs of China via Baiinfo, January 2022; Roskill 2021. Supply is primary supply and excludes secondary sources of NdPr supply from waste magnet production.

Notes: (1) Growth to 2032 calculated off a base of 10.5 million EVs sold in 2022 and forecast production based on implied EVs produced given NdFeB alloy demand from automotive drivetrains and assuming 2kg of NdFeB alloy is used per EV sold. EVs include battery electric vehicles (BEVs), hybrid electric vehicles (HEV) and plug-in hybrid electric vehicles (PHEV).

Project Delivery

**FLY CAMP AND
CONSTRUCTION
CAMP**

**WATER
INFRASTRUCTURE
DEVELOPMENT**

**WATER
INFRASTRUCTURE
DEVELOPMENT**

**WATER
INFRASTRUCTURE
DEVELOPMENT**

**PROCESS PLANT
LAYDOWN AREA
EARTHWORKS**



CAMP FACILITIES



HYDRO-METALLURGICAL PLANT

A full flythrough of the Nolans process plant can be viewed by scanning the QR code to the right.



Toward Net Zero 2050

Arafura is committed to becoming a net zero rare earths producer



Sustainability 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.

GHG Emissions and Water Management

Water reduction strategy underway

GHG Emissions Audit completed and reduction study underway

Renewable energy – solar power initiative and commitment to Net Zero

Traceability: Blockchain Technology

Aligned with customers' ESG expectations

Will allow tracing of Nolans sustainably produced products through entire supply chain to customers

Annual Update of Sustainability Report

Signatory of the UN Global Compact

Comprehensive report that satisfies requirements of global ESG ratings agencies and reporting standards

Annual sustainability reporting

Innovation and Technology

Downstream value add opportunities

Ongoing R&D exploring low carbon metallisation process

Options for hydrogen or other energy storage solutions

Pending IRMA Member

Arafura has completed the IRMA Ready assessment and awaiting feedback

Offtake

Offtake



Arafura is targeting 85% of planned production¹ as binding offtake (Binding Offtake Target).

Offtake strategy aligned with NdFeB users seeking a diversified supply chain.

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

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

OFFTAKE DISCUSSION GROUP 10%	LOCATION	NDPR OXIDE (TPA) ²	% OF BINDING OFFTAKE TARGET
SECURED OFFTAKE (BINDING AGREEMENT)			
Hyundai & Kia	Korea	1,500	40%
Siemens Gamesa RE	Germany	520	13%
OFFTAKE UNDER DISCUSSION³			
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

1. Planned Production refers to the average annual production from Nolans of 4,440 tpa (Refer ASX Announcement dated 11 May 2021).
 2. Product may be supplied as NdPr Oxide or Metal equivalent.
 3. The Company, at this stage, has no certainty as to the timing and likelihood of successfully concluding binding agreements being entered into.

Project Funding

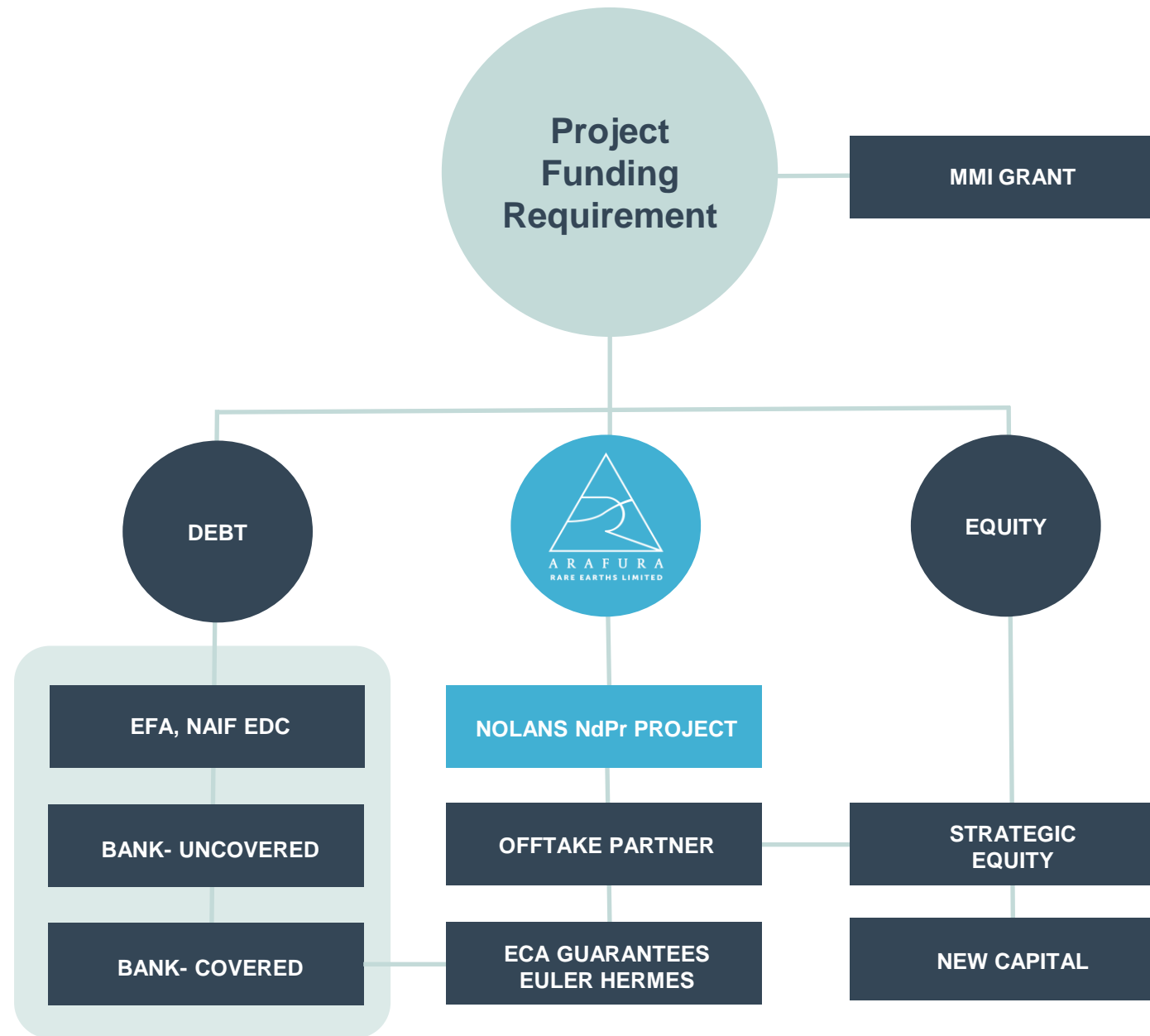
Funding Structure

Société Générale and KfW appointed MLAs.

KfW appointed as Export Credit Agency (ECA) structuring bank.

Offtake drives participation of untied ECA funding and creates debt liquidity.

MLA financing will have a covered (supported by ECA guarantee) and uncovered portion.



Funding Structure

DEBT

Euler Hermes letter of support for up to US\$600m untied loan guarantee subject to offtake with German companies and credit approval.

NAIF and EFA letters of support A\$350m of debt subject to further DD and credit approval.

Export Development Canada letter of support US\$300m

EQUITY

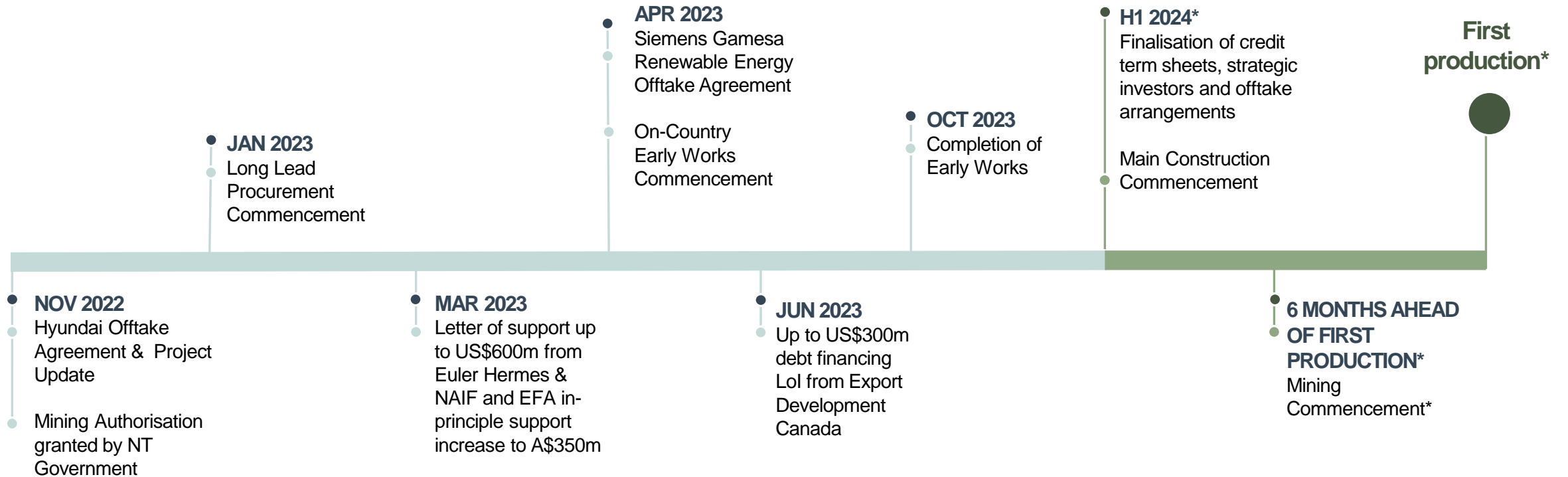
Potential strategic investment being negotiated in conjunction with final offtake through a HoA with Hyundai.

Strategic equity linked to other potential offtake partners.

A\$30m MMI Grant for construction of separation plant reduces equity requirement.



Indicative Project Development Timeline



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

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 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.

Contact

Level 6, 432 Murray St
Perth WA 6000

PO Box 5773
St Georges Terrace
Perth WA 6831

T: +61 8 6370 2800

E: arafura@arultd.com
(All corporate and general enquiries)

E: nolansproject@arultd.com
(Nolans Project enquiries only)

