

PENSANA Plc

**Constructing one of the world's
largest rare earth mines**

**Corporate presentation
May 2025
LSE:PRE**



Constructing one of the world's largest magnet metal rare earth mines to meet rapidly growing demand

- **LSE main board listed** with 292 million shares on issue (LSE:PRE).
- On track to becoming the **third largest Western Neodymium-Praseodymium (NdPr) producer**.
- **Rare Earth prices expected to increase twofold¹** in the near-term future due to global supply shortage and geopolitical importance.
- Highly supportive major shareholders FSDEA, M&G and Chairman Paul Atherley have invested US\$70 million to date.
- Ultra low **Capex of US\$217 million²**, financed with equity from FSDEA & AFC and debt Financed by AFC & Absa at asset level.
- Commissioning to following **18-month construction program**.
- Cashflow highly leveraged to rare earth prices driven by demand growth for EV's, Wind turbines and Robotics.

US\$100+ million

Market capitalisation

**World class
deposit**

One of only three ore bodies
with >100kt NdPr reserve

**Financed and in
Construction**

US\$25 million of mine finance
drawn down and main
construction commenced

Notes

1. Morgan Stanley report "Humanoids: A \$5 Trillion Market" as published 14 May 2025, Adamas Q4 2023 intelligence report
2. Capital estimate as per most recent BFS completed for Stage 1 development of Longonjo mine.

Significant importance of Rare Earths in the global economy

US\$8 billion rare-earth industry enables US\$3.2 trillion industrial and domestic applications

- EV and Offshore wind turbines are the biggest demand drivers with a CAGR 15-18% with robotic demand growing fast
- China is 80% of the market demand and is SHORT of rare earths

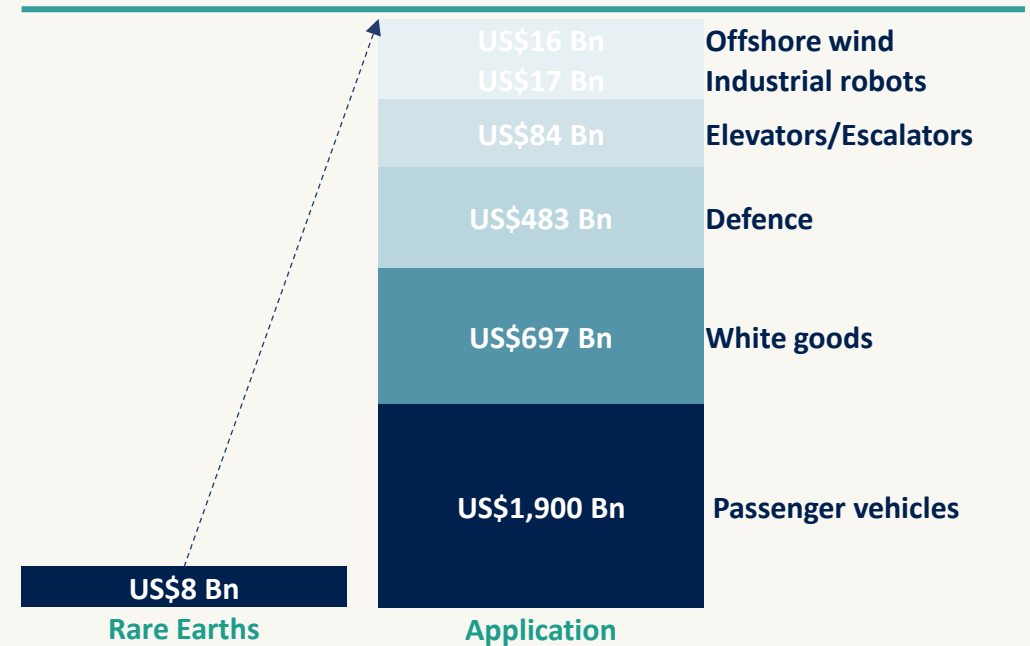
Electric Vehicles to increase 10-fold by 2030 amid 'unstoppable' net zero shift

- The transition to clean energy is happening worldwide and it's unstoppable.
- Electric vehicles are now expected to have a global market share of 38% of new sales by 2030.

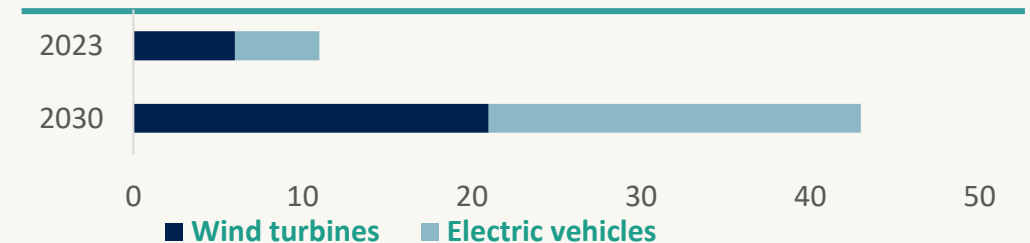
Humanoid Robotics to match EV sales by 2030 with matching demand in Rare earths

- By 2030 it is predicted the rise in humanoid robots will equal the demand from EV industry
- Elon Musk predicts 10 billion humanoid robots by 2040

Rare Earth industry

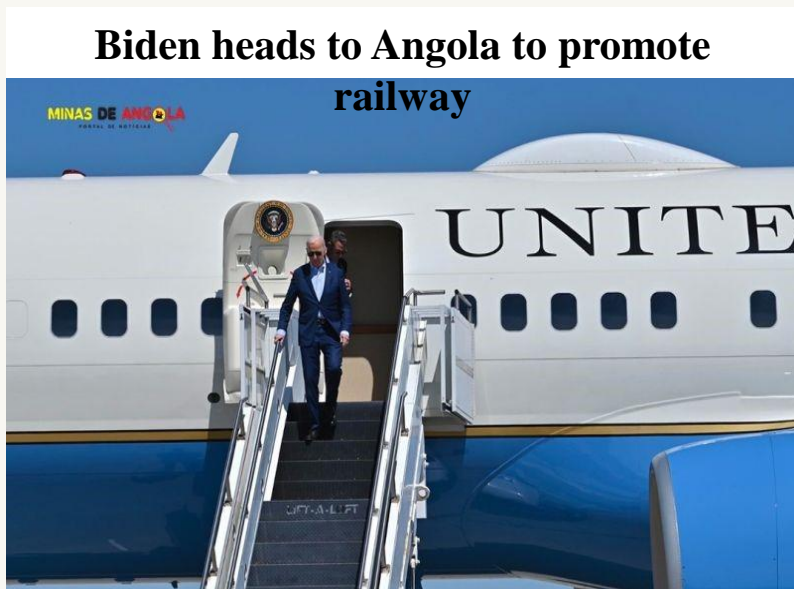


Growing demand (Rare Earth Kt)



Lobito Corridor attracting global attention

- Angola recognised by the Fraser Institute¹ as Africa's second most improved jurisdiction for mining investment.
- US\$1.7bn of investment into Lobito corridor, with support from US government and African multilateral agencies.
- Ivanhoe invest US\$455m in developing copper along Lobito railway, Rio Tinto and Anglo American also investing into country.
- Angola was admitted as an EITI implementing country in June 2022.



Angola and AFC invest US\$150M in infrastructure and energy



US backs Angola plan to process critical minerals, export power

Bloomberg News | June 19, 2024 | 4:22 pm Energy Intelligence Africa USA Copper Specialty Minerals

Lobito Corridor Investment Promotion Authority · Feb 15

DFC Approves \$250 Million Loan for Lobito Corridor Expansion

On February 8, at the Lobito Corridor Investor Forum in Lusaka, Zambia, the DFC announced the approval of a \$250 million loan to fund the continued expansion and improvement of rail infrastructure along the Lobito Corridor. Congressional approval is required because it exceeds thresholds and further scrutiny has been triggered, otherwise investments are normally dispersed once authorized by the DFC board.

Angola has jumped from third bottom in 2022 to around halfway in this year's Fraser Institute Investment Attractiveness Index.

Trafigura consortium to invest over \$555m in Angola-Congo rail link

Reuters | July 5, 2023 | 8:07 am Top Companies Africa Copper



Notes

1. Fraser Institute Survey of Mining Companies 2023.

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Unique near surface high grade ore body with access to world class infrastructure

Overview

- Mine life of over 20 years based on JORC ore reserve grade of 3.04% TREO (Total Rare Earth Oxide) containing 139,000 tonnes NdPr oxide.
- Mine and process 800,000 tonnes pa with a feed grade of 4.12% TREO with a very low mine strip ratio.
- To produce 20,000 tonnes pa of highly marketable clean MREC (Mixed Rare Earth Carbonate) from late 2026 with plans to expand to 40,000 tonnes pa (circa 5% of world production) from 2027.
- Excellent infrastructure (Lobito Corridor + Hydro power) allows for ultra-low capital cost of US\$217 million including contingency.
- With site infrastructure and access road already in place mobilisation of contractors and construction of the modularised process plant is underway.

Key differentiators

- Fully financed and in construction.
- One of the largest and highest-grade undeveloped magnet metal projects worldwide.
- Lowest capital intensity for a project of this scale.
- High demand for 20,000 tonnes pa MREC from 2026.
- High interest in proposed expansion to 40,000 tonnes pa in 2027.



22Mt at 3.04% TREO

Mineral reserve

20+ years

Life of Mine

US\$ 217 million

Stage 1 Capital expenditure

4,200tpa NdPr

Full production potential (Stage 1+2)

2026

Start of production

In construction

Project status

PENSANA Plc

Exciting new exploration discoveries at Coola and Sulima West

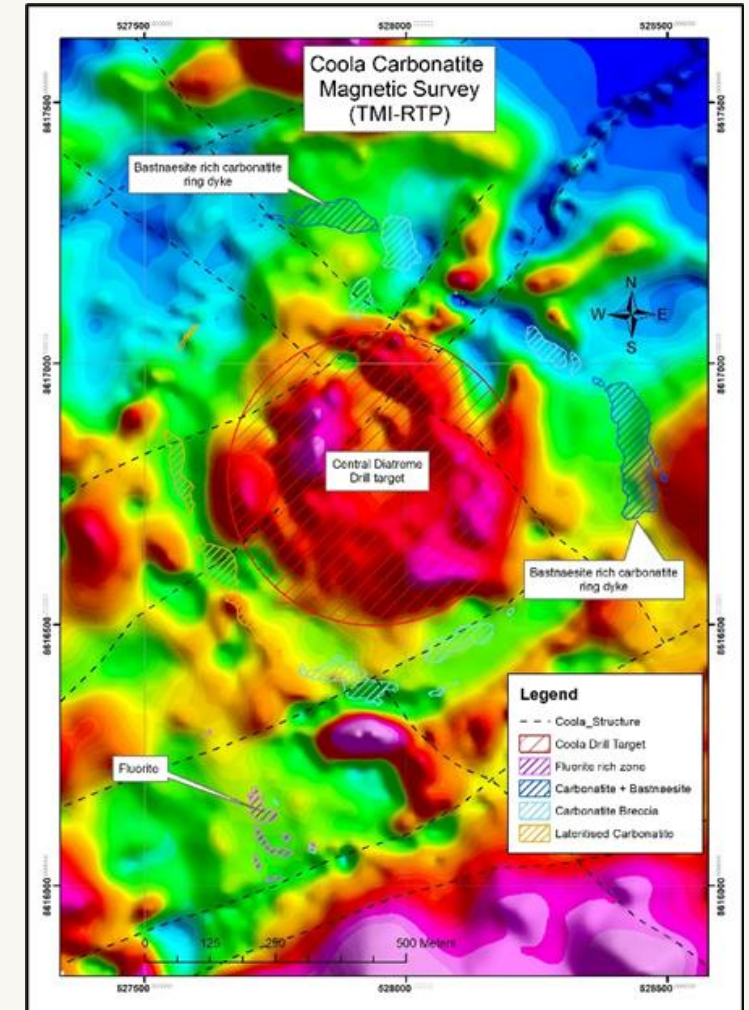
- Exciting new discoveries at Coola and Sulima West - 75 km north of Longonjo
- Coola confirmed as a 900-metre diameter carbonatite ring dyke with similar scale and prospectivity to Longonjo.
- Sulima West has reported strong anomalies with high-grade mineralisation for drill testing.
- Metallurgical testwork on a Coola 4.7% TREO bastnaesite bulk sample and a Sulima West 4.8% TREO enriched laterite bulk sample has confirmed the potential to provide feedstock for Longonjo

A significant Rare Earths discovery

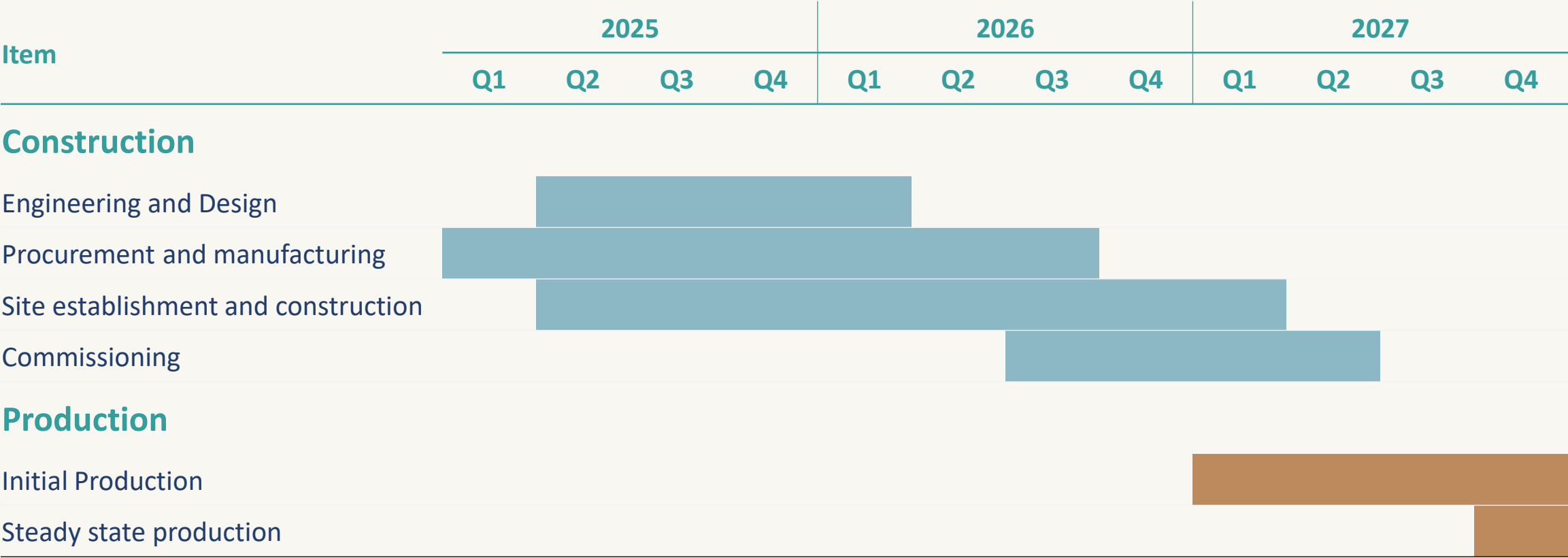


Grant Hayward (Exploration Manager, Pensana)

“We believe Coola to be a highly prospective volcanic pipe which appears to have a similar scale to Longonjo. Sulima West has some exciting high-grade drill targets. We are metallurgical testing bulk samples from these two deposits as potential high-grade feedstock for processing at Longonjo.”



Longonjo construction timeline: 18 months to initial production

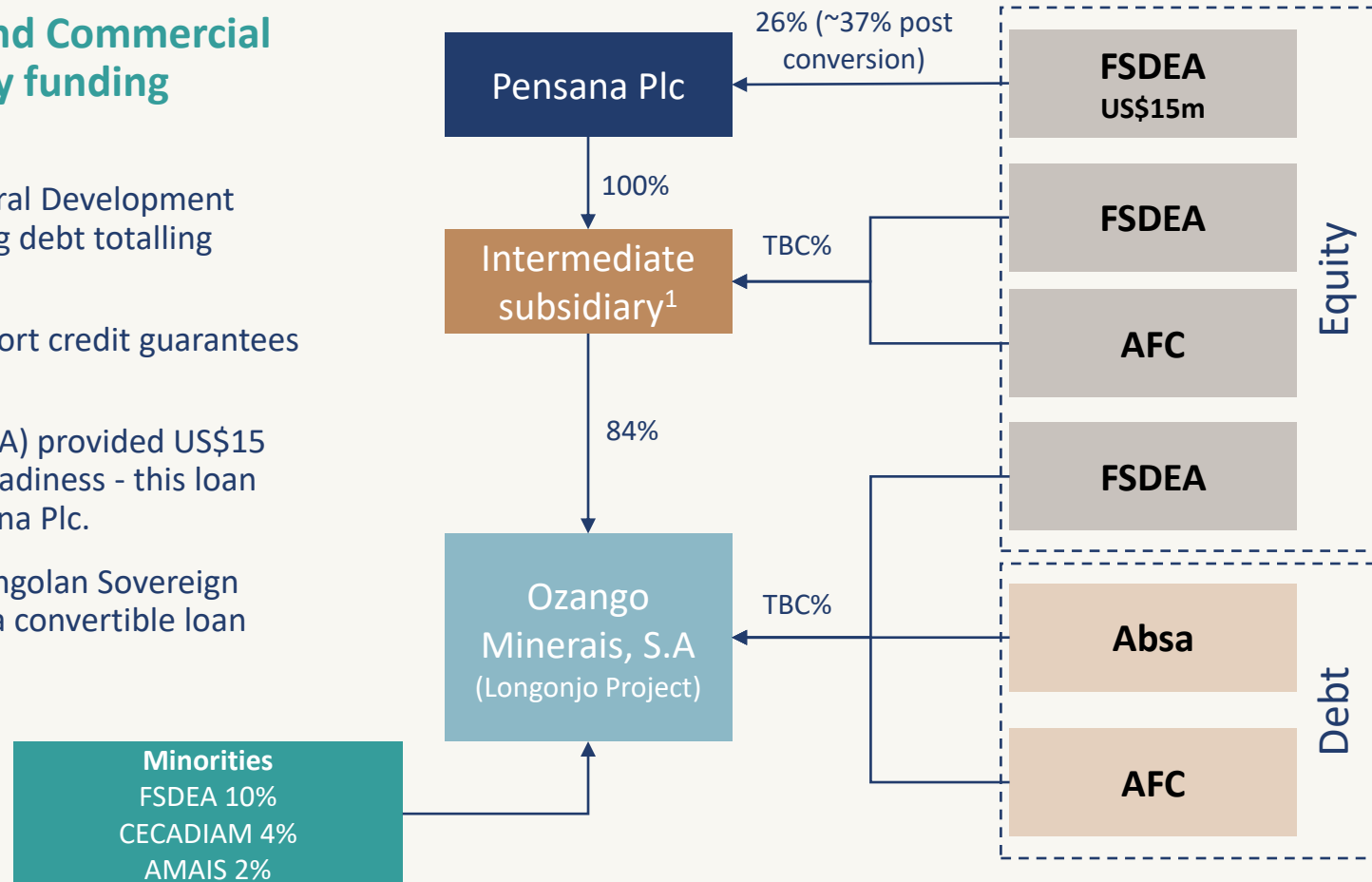


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Current contemplated Longonjo funding structure

Sovereign Wealth Fund, Multilateral Agency and Commercial Bank providing US\$268 million debt and equity funding package

- Major South African commercial bank Absa and Multilateral Development Financial Institution African Finance Corporation providing debt totalling US\$160 million (50/50).
- 7 year secured debt facility, post equity participation, export credit guarantees (Absa only) and offtake agreements.
- Major shareholder Angolan Sovereign Wealth Fund (FSDEA) provided US\$15 loan to facilitate route to main finance and operational readiness - this loan was fully utilised and will be converted to shares in Pensana Plc.
- Equity, to be deployed at a subsidiary level provided by Angolan Sovereign Wealth Fund FSDEA (US\$38m) in the form of equity and a convertible loan and AFC (US\$55m) in the form of a convertible loan.



Notes

- Equity investments to be made at an intermediate subsidiary level through Pensana's shareholding in SBLRTHS and Sable Min (Portugal), or similar structure, who currently holds the combined 84% interest in Longonjo.

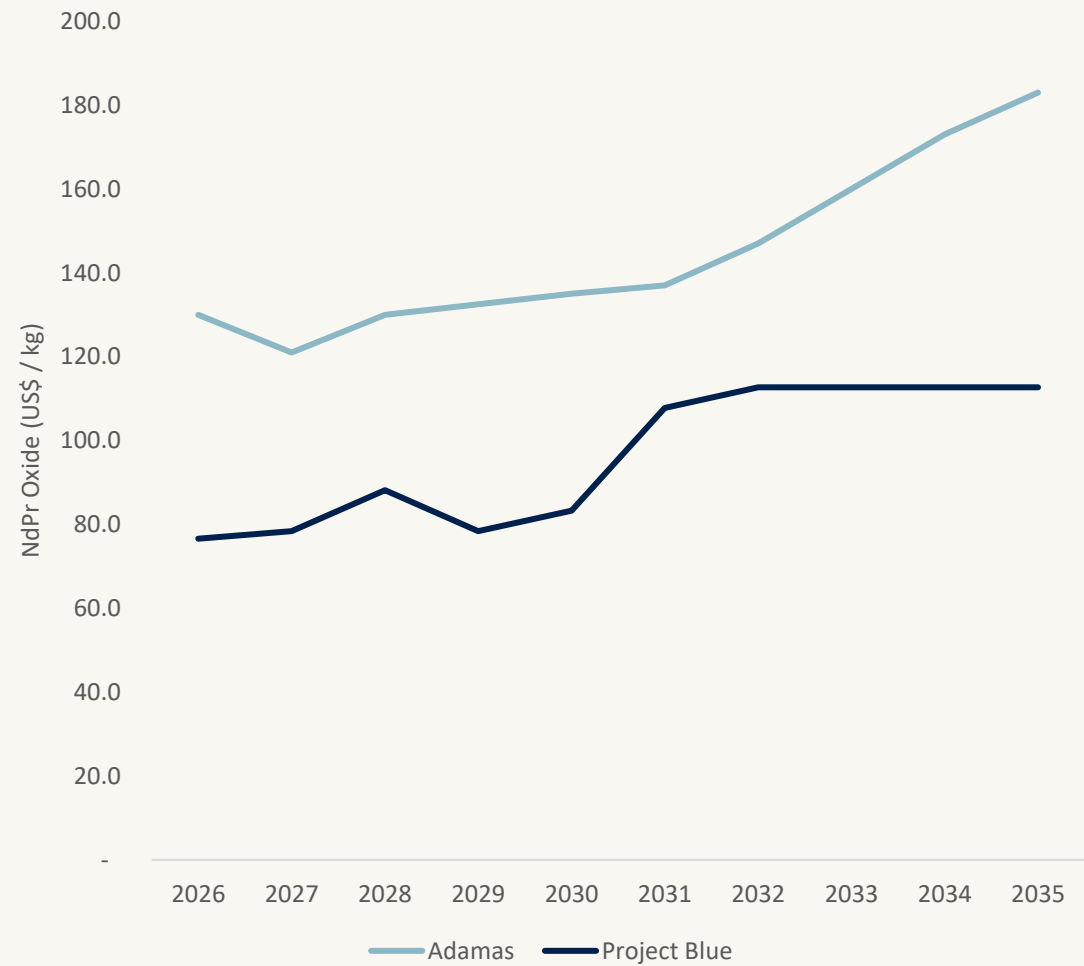
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Low upfront Capex with strong cashflow, very highly leveraged to the NdPr price

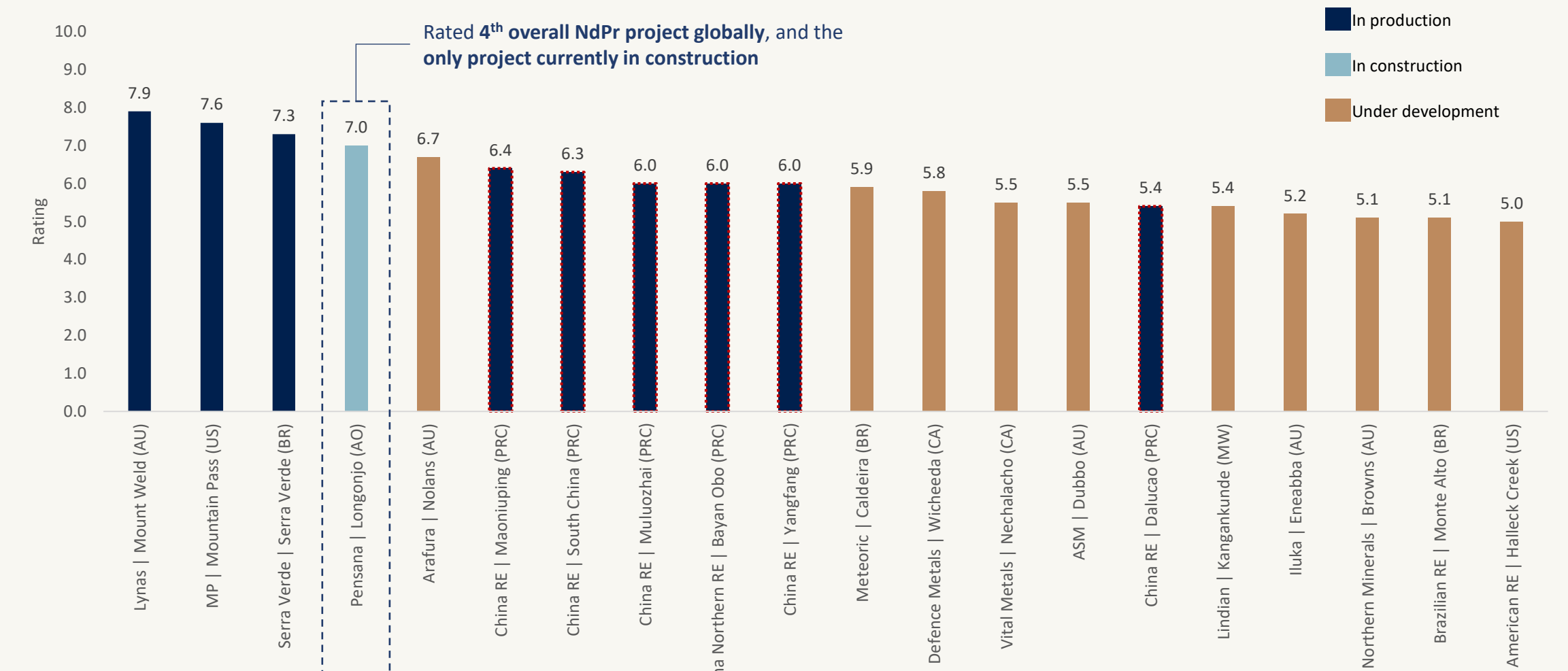
Item	Longonjo Stage 1	Longonjo Stage 2
Production	<ul style="list-style-type: none">MREC capacity of ~20kt p.a.NdPr of ~2.4kt p.a.	<ul style="list-style-type: none">MREC capacity of ~40kt p.a.NdPr of ~4.2kt p.a. LOM Avg.
Capital	<ul style="list-style-type: none">Upfront capital of US\$217m (Includes ~10% contingency)	<ul style="list-style-type: none">Expansion capital of US\$105m 2 years post first production
EBITDA (LOM Avg.)	<ul style="list-style-type: none">US\$145m	<ul style="list-style-type: none">US\$214m
NPV (at 8%)	<ul style="list-style-type: none">US\$944m	<ul style="list-style-type: none">US\$1,299m
IRR	<ul style="list-style-type: none">45%	<ul style="list-style-type: none">50%
Payback	<ul style="list-style-type: none">2 years	<ul style="list-style-type: none">2 years

Notes

- Longonjo project economics: Base case prepared basis Adamas Base pricing as per Q4 2023 intelligence report
- NdPr price outlook: Adamas as per Q4 2023 intelligence report, Project Blue as per Q2 2024 report



Highest ranked undeveloped NdPr project globally

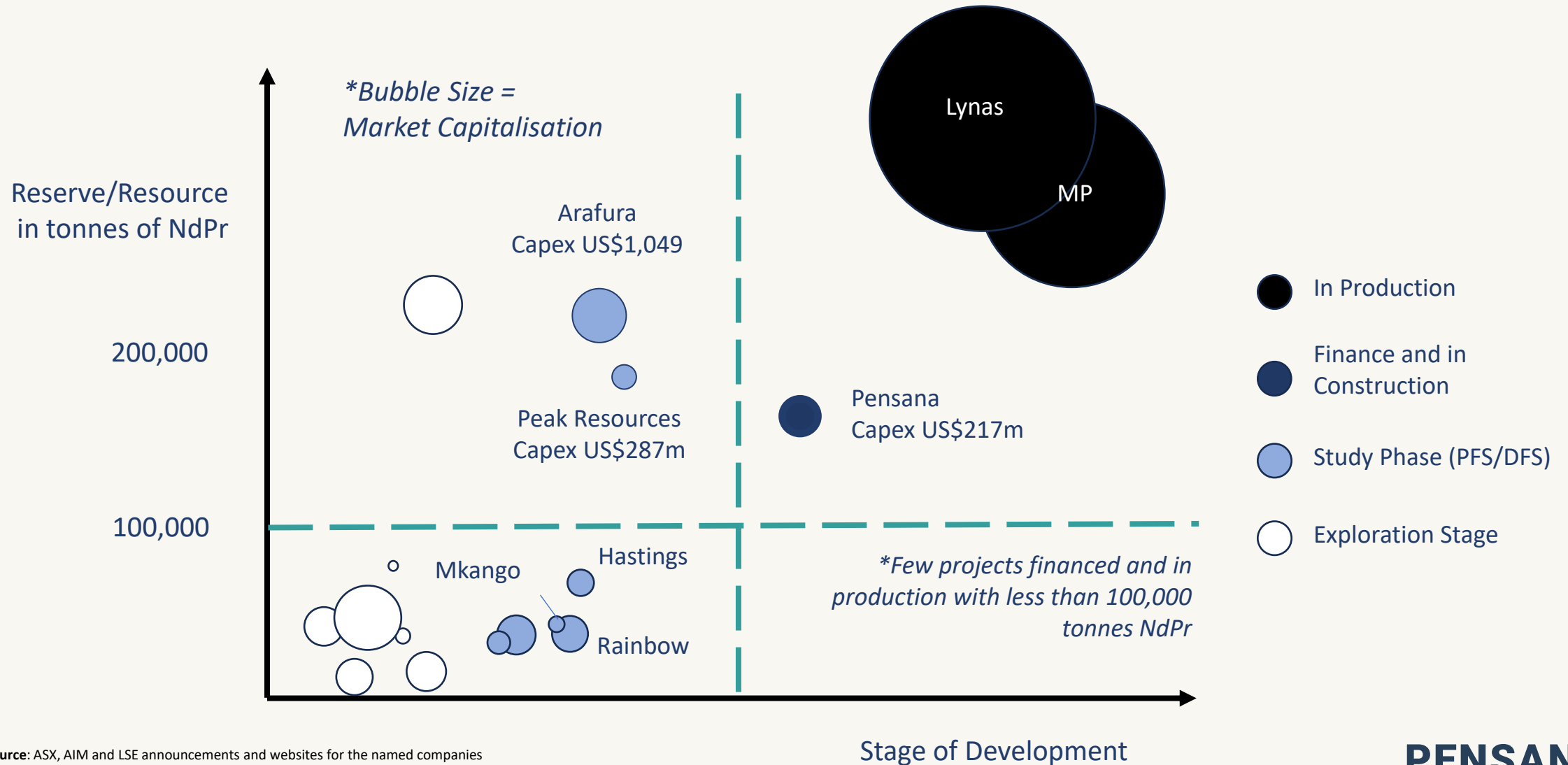


Notes

- Rating as per Rare Earth Exchange Top 20 NdPr Project/Deposit as at 27 May 2025 (<https://rareearthexchanges.com/reex-projects-database/>)

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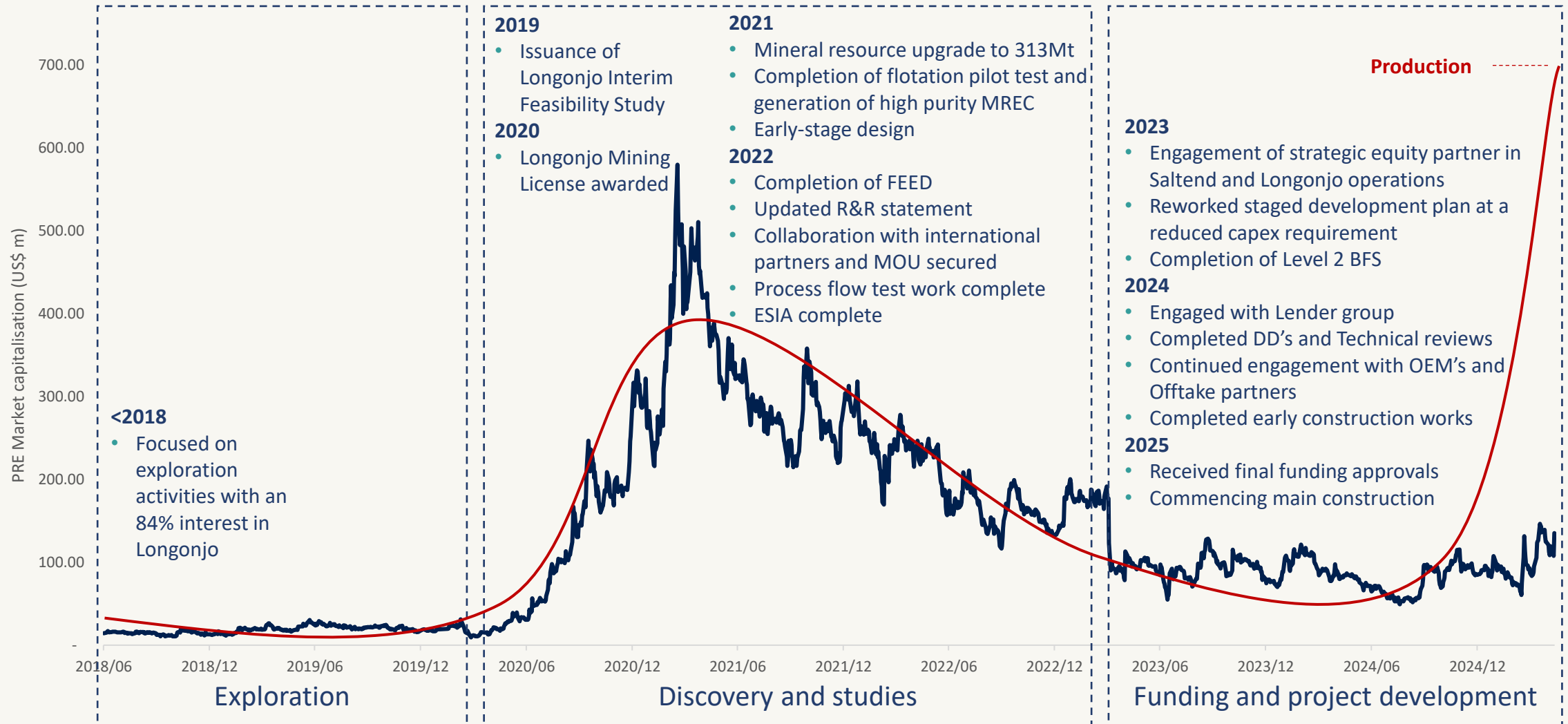
Positioned to be the next Western producer based on >100,000 tonnes NdPr Reserve, Low upfront Capex and Financing



Source: ASX, AIM and LSE announcements and websites for the named companies

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Through the *Development and Financing* period and coming into production as NdPr prices take off



Strategic partnerships

Strong demand for Longonjo's Highly-Marketable Mixed Rare Earth Carbonate (MREC)

- One of the only mine developers to offer a high value product available for export.
- Executed letter of intent and MOU's on offtakes for more than 200% of Stage 1 production with customer approval on MREC product specifications.
- Engaged with major OEM's for partnership to support their magnet supply chains including JLR, Volvo, Mercedes, Ford, Polestar, BMW, VW, Tesla, Stellantis.
- DFC and Hanwa partnerships aimed at downstream refining opportunities.



US\$3.4 million grant

"DFC is pleased to support such an impactful project that aligns with our priority of building more diverse, resilient, and sustainable critical mineral supply chains. This project demonstrates DFC's commitment to fostering growth and economic development in the region".



100% Offtake proposal

"We see this MOU as the path to finalisation of a long-term agreement between Pensana and Hanwa, ensuring high quality magnet metal products with leading ESG benefits are available to Hanwa's Global customers."



Mercedes-Benz*

CO₂ targets as a key criterion and 50% diversified supply chain.

Polestar

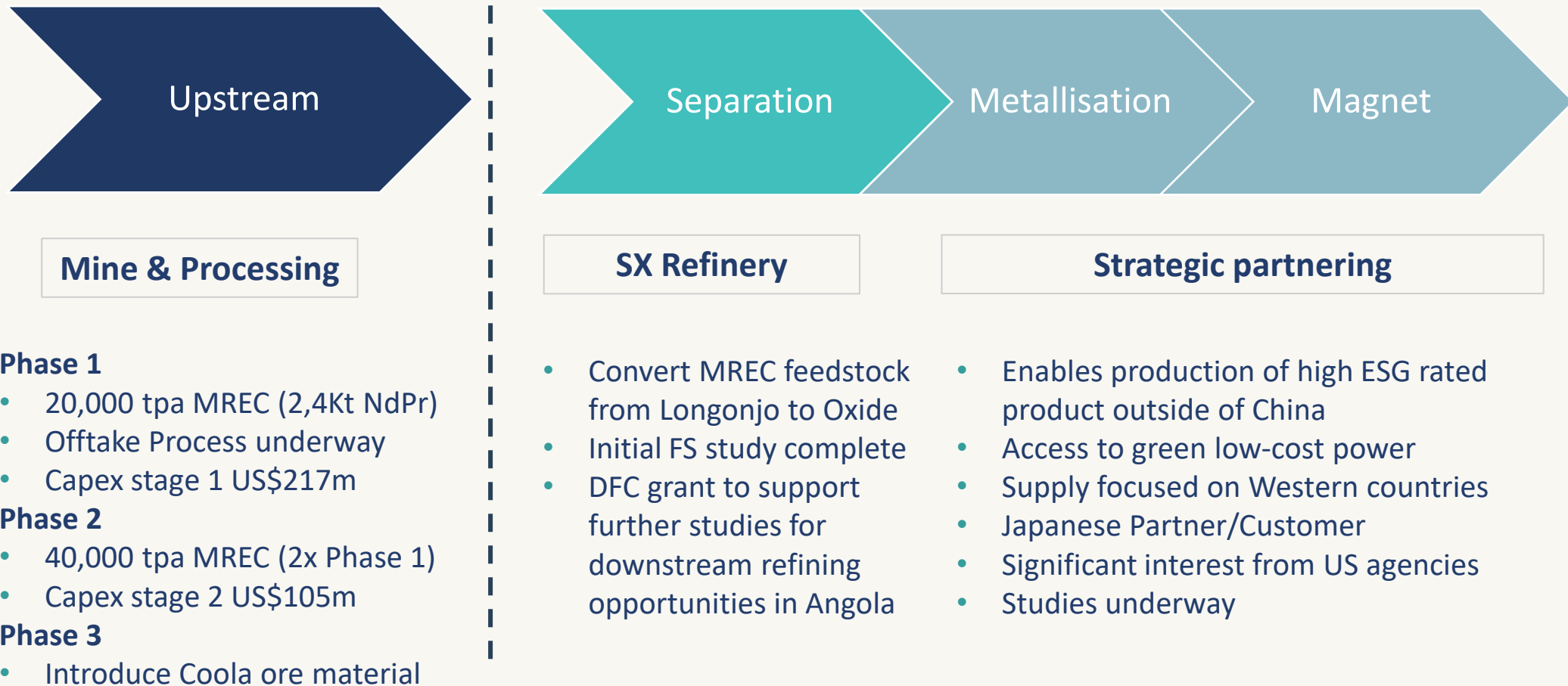
Net-Zero by 2030. Responsible sourcing: Ethical and transparent supply chain.



*

Net-Zero 2039. Full transparency for all supply chain partners.

Looking to establish an independent downstream supply chain



China controls **91%** of Refining, **87%** of Separation and **94%** of Magnet Production

Morgan Stanley predicts one billion Humanoid robots by 2050

Morgan Stanley global insight report predicts seismic implications for Rare Earth sector

- The report estimates that by 2050, the world could host 1 billion humanoid units generating US\$ 4.7 trillion in annual revenue.
- Each humanoid could require up to 1.3 kg of NdPr, pushing incremental NdPr demand to +167% of 2030 levels.
- Morgan Stanley has upgraded long-term NdPr prices from US\$ 135/kg to US\$ 209/kg.



HUMANOID ROBOTS IN USE AT BMW GROUP PLANT SPARTANBURG.

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