



VHM Limited

Securing supply of critical minerals for the global energy transition

July 2024

ASX:VHM

Acknowledgement of Country

VHM acknowledges the Australian Aboriginal and Torres Strait Islander peoples as the first inhabitants of the nation and the traditional custodians of the lands where we live, learn and work. We pay our respects to past, present and emerging Elders.

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Compliance Statement

The information in this presentation that relates to the Goschen DFS refresh and the Mineral Resource and Ore Reserve estimates were reported in the ASX announcement dated 28 March 2023. The Carnie Mineral Resource estimate was reported in the ASX announcement dated 16 May 2023 and the Area 4 Ore Reserve estimate was reported in the ASX announcement dated 29 September 2023. The Nowie Mineral Resource estimate was first reported in the ASX announcement dated 24 January 2024. The Company confirms that it is not aware of any new information or data that materially affects the matters previously reported and that all material assumptions and technical parameters underpinning the Mineral Resources and Ore Reserves estimates and forecast financial information derived from the production target in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented and have not been materially modified.

Agenda

1 Company Overview

2 Goschen Project

3 Markets

4 Look Ahead

Appendix

A Exploration Portfolio

B Peer Comparison Tables

C JORC Tables

1. Corporate Snapshot

VHM Limited (ASX:VHM) overview

Corporate Snapshot

Market Cap¹

A\$91.61 million

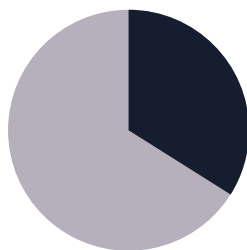
Share Price

A\$0.45

Issued Shares

203,596,690

Top 20 Shareholders



Top 20: 34%
Ellison WA: 8.9%

Cash²

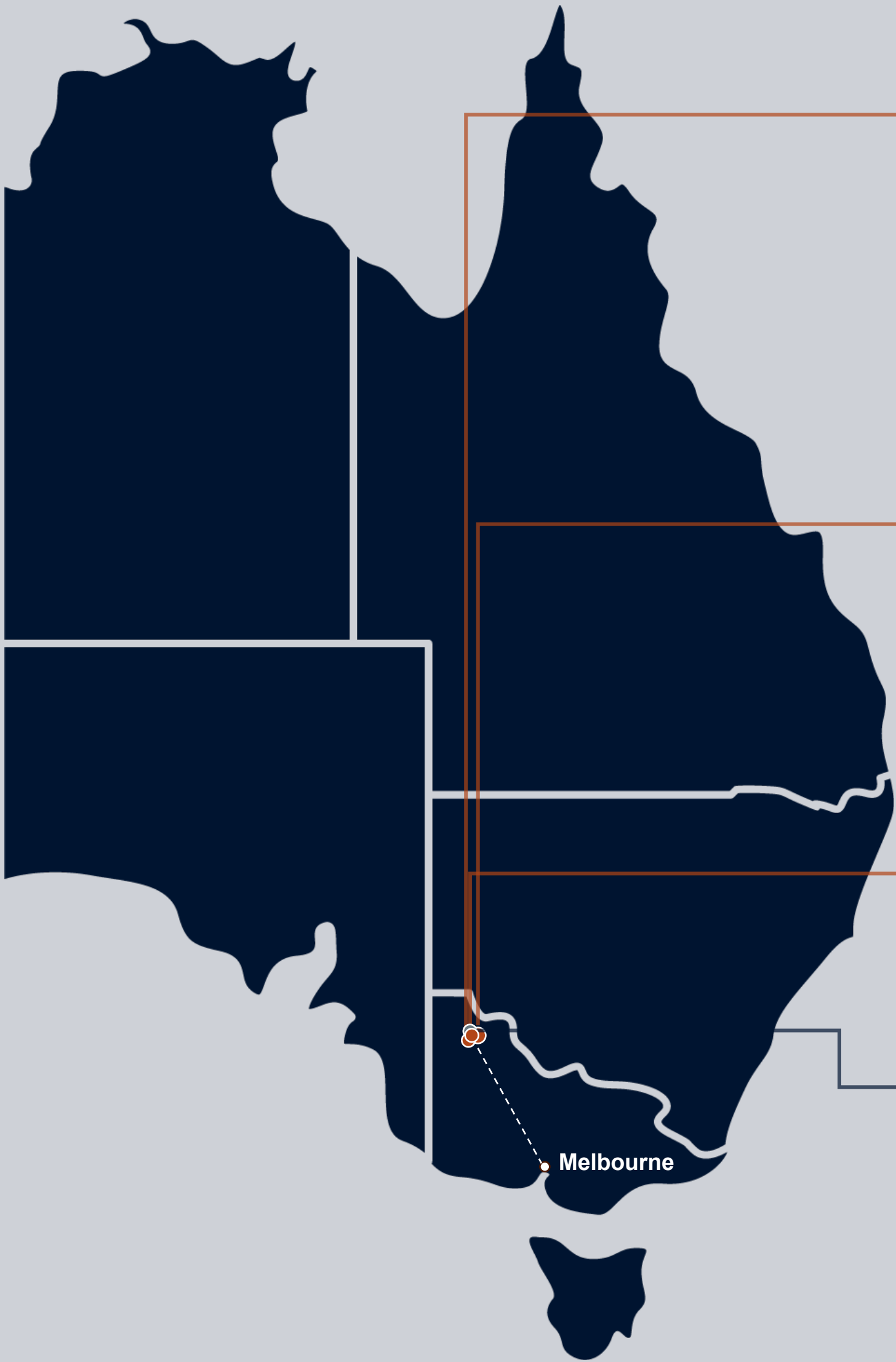
A\$10.1 million

Share Options

12,009,555



Australian owned rare earths and mineral sands
mine and processing developer



GOSCHEN PROJECT³

210Mt @ 3.8% THM, MRE
629Mt, 413Kt TREO, Zircon
21.4%, Rutile 9.7%,
Mon 3.5%, Xen 0.6%

CANNIE PROJECT⁴

192Mt MRE @ 3.1% THM,
176Kt TREO, Zircon
24.5%, Rutile 15.5%, Mon
4.1%, Xen 0.8%

AREA 4 ORION PROJECT⁵

11.5Mt ORE @ 5.6% THM,
Zircon 19.6%, Rutile 12.2%,
Mon 3.0%, Xen 0.7%

NOWIE PROJECT⁶

16.4Mt MRE @ 3.8% THM,
Zircon 16.1%, Rutile 15.6%,
Mon 2.1%, Xen 0.5%

Notes:
(1): Market data at 11 July 2024 and sourced from the ASX
(2): Cash position reported 31 March 2024 to the ASX
(3): See Company ASX release dated 28 March 2023
(4): See Company ASX release dated 16 May 2023
(5): See Company ASX release dated 29 September 2023
(6): See Company ASX release dated 24 January 2024

Board and management team



Ian Smith
BEng Mining (Honours),
BFinAdmin, FAusIMM, FIEAust
Non-Executive Chairman

40+ years executive and board experience with a career spanning domestic and international mining and mining services companies.

Mr Smith's technical, operational and commercial disciplines have been attributes of his successful delivery of major capital projects and business growth for a number of listed companies and has held managing director and chief executive officer positions for Orica and Newcrest Mining.

Other Directorships:

- Chair of Rex Minerals Limited
- NED of Kestrel Coal Limited
- NED of Raven Gold Limited



Ron Douglas
BE, FAIM, MAusIMM, MAICD

Executive Director and CEO

Extensive executive and operations delivery experience gained over a 40-year career with publicly listed global mining, energy, and manufacturing companies.

Mr Douglas expertise is in executive operations delivery positions with strengths in major capital program execution, and running corporate profit/loss centres, involving strategic program directorship, safety leadership and corporate transaction negotiation.

Other Directorships:

- Director of Talbot Investments



Maree Arnason
BA, FAICD

Non-Executive Director

35 years' experience across the resources, energy and manufacturing sectors and is highly experienced in the areas of governance, strategy, sustainability, risk, corporate affairs, stakeholder relations, transformations, divestments and integrations. Her broad commodity experience includes iron ore, gold, copper, timber, coal, mineral sands, and natural gas.

Other Directorships:

- NED of Gold Road Resources Limited
- NED of Ardea Resources Limited
- WA Division Director, AICD
- Co-founder and Director of Energy Access Services



Don Runge
BEng Mining, MAusIMM

Non-Executive Director

40+ years' operational and project experience including industrial minerals where he managed the development of the Uley Graphite Project in South Australia.

Mr Runge has held management positions for Newcrest Mining Limited, including Manager for Ridgeway Underground Project Development and General Manager of Cracow Gold Mine.



Colin Moorhead
BSc (Honours) Geology & Geophysics,
FAusIMM CP, FSEG, GAICD
Non-Executive Director

30+ years' experience in the global mining industry with his foundation expertise in Geology.

Mr Moorhead has a demonstrated track record of developing value in mining companies in both board and executive positions through innovation, discovery, project development, and safe, efficient operations.

Other Directorships:

- Chair of Sihayo Gold Limited
- Chair of Xanadu Mines Limited
- NED of Ramelius Resources Limited
- NED of Aeris Resources Limited



Michael Sheridan
BEc, LLB, LLM, GradDipAppFinInv
Chief Financial Officer

30+ years' operations and financial experience as executive, having worked at senior management levels in publicly listed companies, predominantly in the international resources sector (mining and oil and gas), as well as telecommunications and corporate advisory sectors.



Ms Carly O'Regan
MBA, GDipCom
Executive General Manager, Strategy and Investor Relations

Significant business and operational experience in a diverse range of industries, including finance, commercial, mining, oil and gas, both in Australia and internationally including Barclays Global Investors (iShares), Chevron Australia Gorgon and Wheatstone Projects, KPMG, Newcrest, and Shell Australia.



Mr Bernie Hyde
Executive General Manager, Operations Readiness

25+ years supervisory and management experience in operations and maintenance roles in the mining industry. Mr Hyde is the current Chair of the MCA (Vic) Safety and Health Working Group.

Key highlights

Emerging Tier 1 integrated rare earth and minerals sands project with globally significant mineral assemblage

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Construction ready with pathway to production: in anticipation of primary approval.

Simple operating methodologies: Shallow-pit mined via truck-shovel with conventional processing flowsheet for Phase 1 (Base Plant).

Dual commodity asset: generates revenue from two independent product streams with rare earths *and* zircon and titanium.

Compelling mineral assemblage and mineralisation: a unique orebody with both light (NdPr) *and* heavy (DyTb) rare earths mineralised in sands.

Advanced Approvals: All Goschen environmental and social assessments complete | EES public inquiry and evaluation stages complete | Recommendation report with the Victorian Minister for Planning to determine an outcome¹.

100% land ownership: VHM has acquired all land required for the Goschen Project footprint².

Notes:

(1) See Company ASX release dated 03 July 2024

(2) See Company ASX release dated 3 October 2023

Accelerating Goschen towards production

Extensive development works complete

Definitive Feasibility Study

Refreshed

20–25-year Life of Mine
 | NPV A\$1.525B | IRR 44% | Low Capex |
 Payback 2.8 years¹

Goschen Environment Approval

Report with the Minister

Independent recommendations report on the Goschen primary approval assessment.³

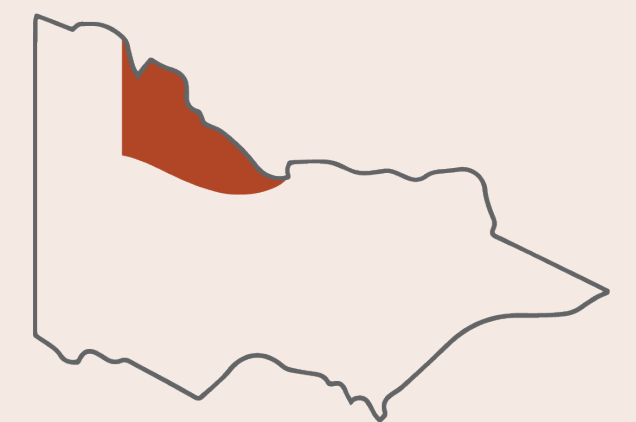
30% Capex Reduction for Goschen Base Plant

Achieved

With inputs from Base Plant detailed engineering design & principal mining services partners.⁵

Extensive Exploration Drill Program

Discovered a major new Critical Minerals Province



55km stretch of contiguous resource confirmed in north west Victoria⁷.

Accelerating Goschen to targeted first production in 2025

Goschen is now Australia's lowest capital rare earths project

Pilot-scale Hydromet Plant

Produced high-purity rare earth carbonate

Market leading recoveries achieved at ANSTO, producing a mixed rare earth carbonate product².

First Binding Offtake

Secured

For Base Plant products (Phase 1) Indicating quality of Goschen Project's commercial products⁴.

Mining Services Partner

Appointed

Victoria-based Yellow Iron Fleet⁶

Deposit scale offers future upside.

Notes:

(1) See Company ASX release dated 28 May 2024
 (2) See Company ASX release dated 6 June 2023
 (3) See Company ASX release dated 17 June 2024

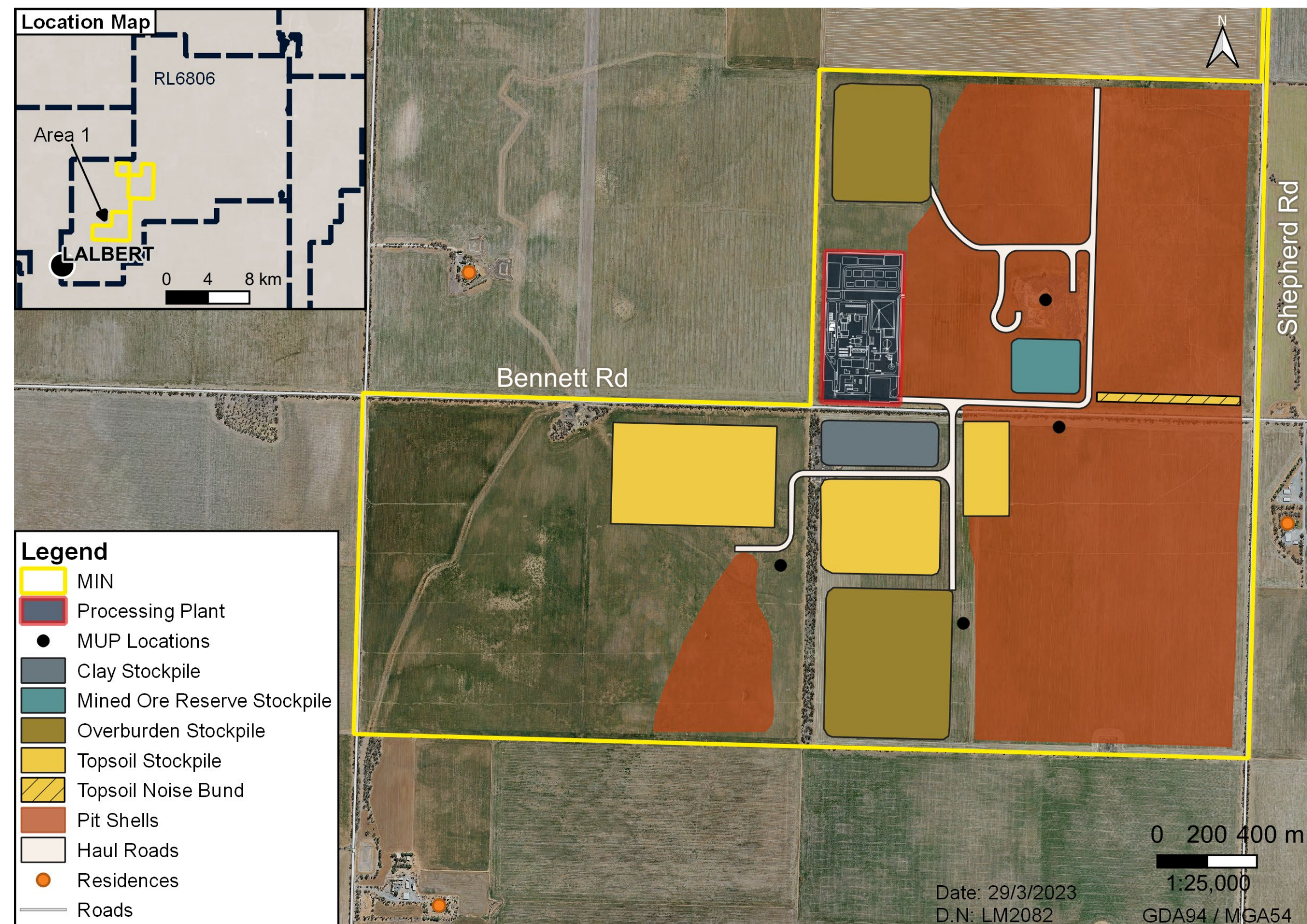
(4) See Company ASX release dated 31 January 2024
 (5) See Company ASX release dated 17 June 2024
 (6) See Company ASX release dated 28 May 2024
 (7) See Company ASX release dated 16 May 2023



2. Goschen Project Overview

Staged project development

Producing dual stream, concentrate products from base plant followed by value-add carbonate product



Base Plant

- Mining unit plant
- Feed preparation plant
- Wet concentrator plant
- Rare earth flotation circuit

Product suite consists of:

- 9.4ktpa REMC
- 134.5ktpa zircon/titania HMC

Hydromet Circuit

- Hydromet Circuit with a nameplate capacity of 12,000 tpa
- Co-located at Goschen
- Driven by high-grade REMC from Goschen

Product suite consists of:

- 8.6ktpa MREC

Infrastructure rich area

Optimally positioned to access existing local infrastructure

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Rail



Ports



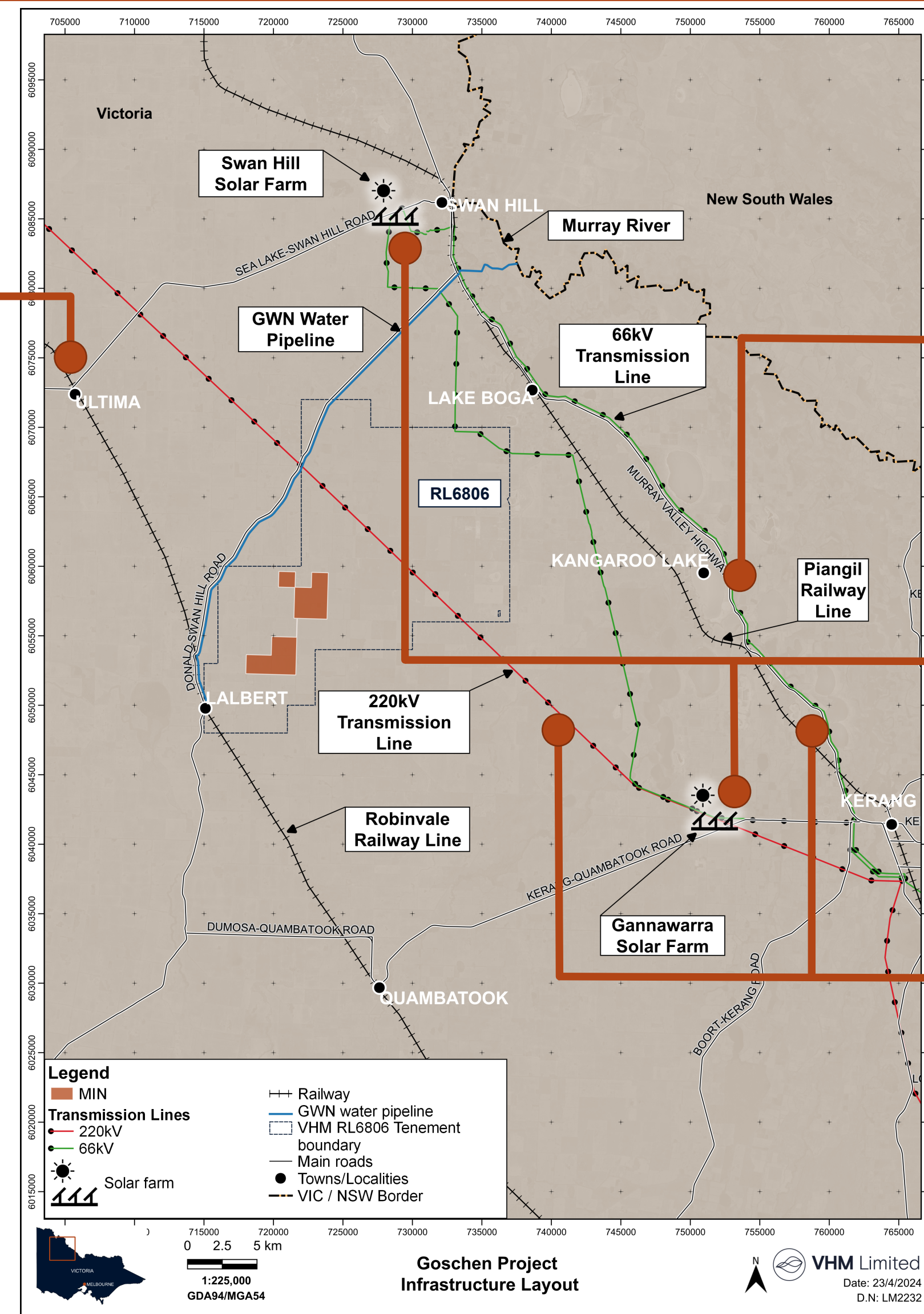
Water



Power
(Solar farms)



Power
(Transmission lines)



Goschen permitting pathway

Approvals milestones achieved

Primary Approval (EES)

Source: Engage Victoria website

Q4 2023

Victorian Minister for Planning approved public exhibition for Goschen EES¹

Exhibition stage: Public Submissions²

Monday 20 November 2023 – Wednesday 17 January 2024

Q1 2024

Hearing stage: Directions Hearing

Tuesday 13 February 2024

Hearing stage: Public Hearing

25 March 2024 – 30 April 2024³

Q2 2024

Report stage: IAC Panel reports back to Planning Minister and next steps

Approval stage: Ministerial approval

Secondary Approvals (Work Plans, Mining Licence)

Statutory advertising for the Goschen **Mining Licence** application executed, January 2024³

We are here

Mining Licence application assessed by Earth Resources Regulator

Notes:

(1) See ASX release dated 1 November 2023

(2) See ASX release dated 14 November 2023

(3) See ASX release dated 24 January 2024

Pathway to production

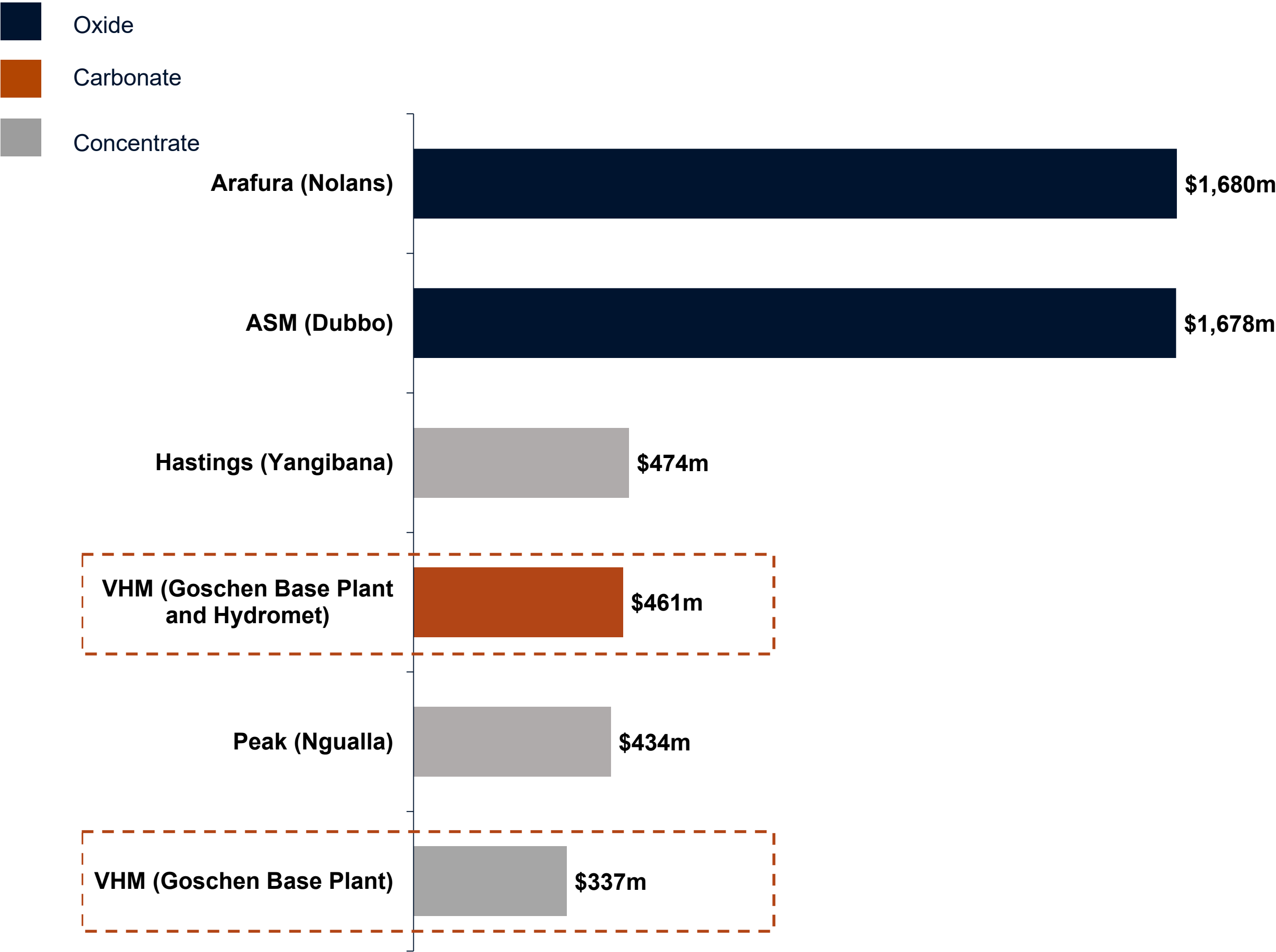
Immediate next steps

- EES Ministerial approval
- Mining Licence approval

Final Investment Decision

Activity	2023				2024				2025				2026			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Definitive Feasibility Study	Completed	Completed														
Detailed Engineering	Completed	Completed	Completed	Completed												
Offtake agreement finalised				Completed	Completed											
EES Ministerial approval				Completed	Completed	Completed	Forecast	Forecast								
Work Plans approved (including Mining Licence)								Forecast	Forecast							
Final Investment Decision									Forecast							
Construction									Forecast	Forecast	Forecast	Forecast				
Commissioning													Forecast commissioning	Forecast commissioning		

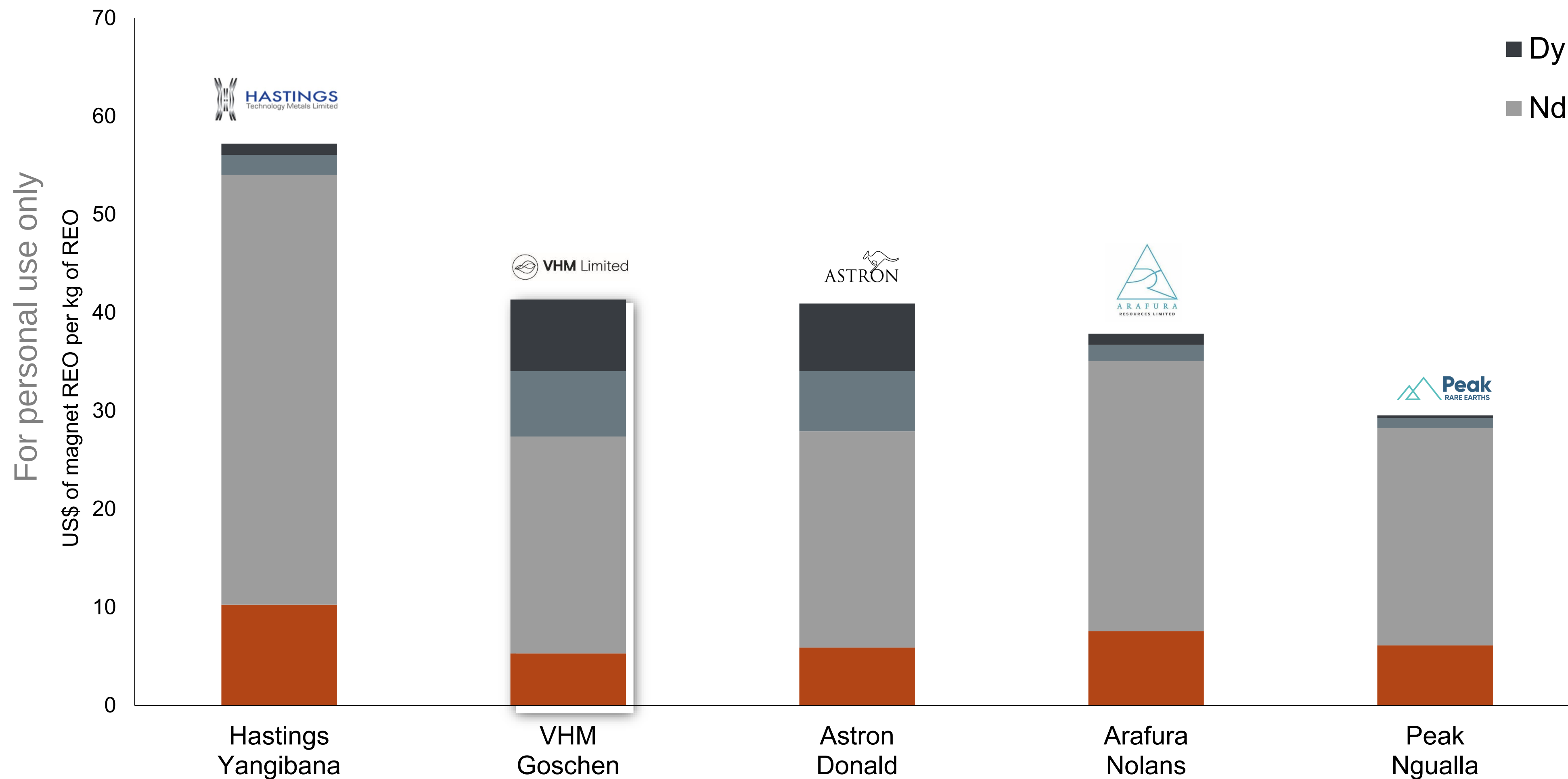
Capex is amongst the lowest of selected rare earth projects



Goschen's low development capex

Rare earth peer comparison

Attractive proportion of rare earth elements – heavy and light



Dy and Tb are sourced almost entirely from ionic clays in China and Myanmar

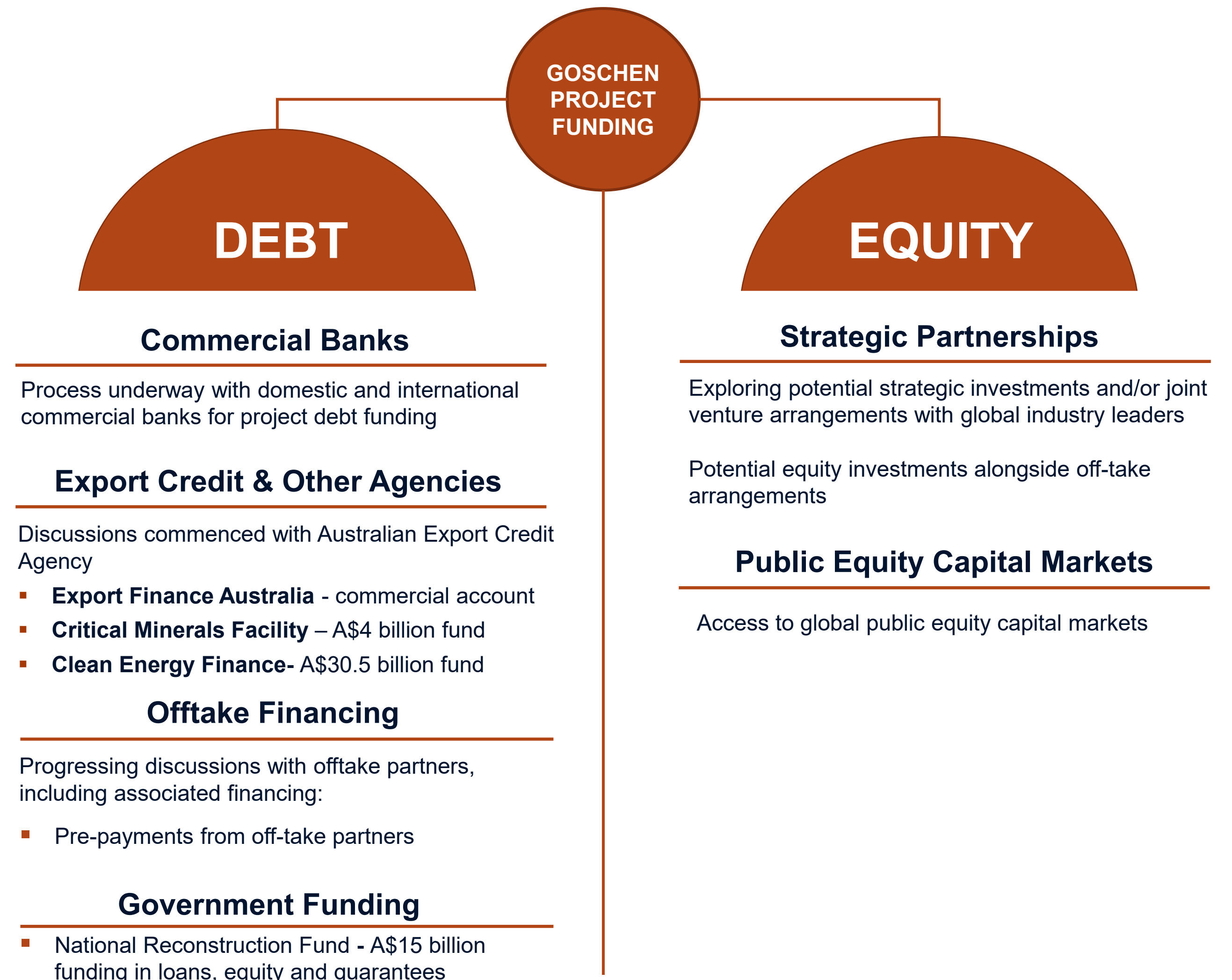
There is an opportunity for Victorian projects to be an alternative source of supply

Funding strategy

Multifaceted funding strategy comprising debt, equity and government funding

VHM is progressing its multifaceted funding strategy for the Goschen Project with a view to finalising the funding pathway ahead of Final Investment Decision.

We anticipate the Project will be funded using a combination of funding options and are well advanced in discussions in all categories.



Advisor - Equity Capital Markets



Advisor - Government Funding



3. Markets for Critical Minerals

Secure supply of light and heavy rare earths

Goschen has the critical minerals required for electrification and decarbonisation

87% of Goschen basket value is derived from the critical rare earths crucial for electric vehicles and the green energy transition¹.

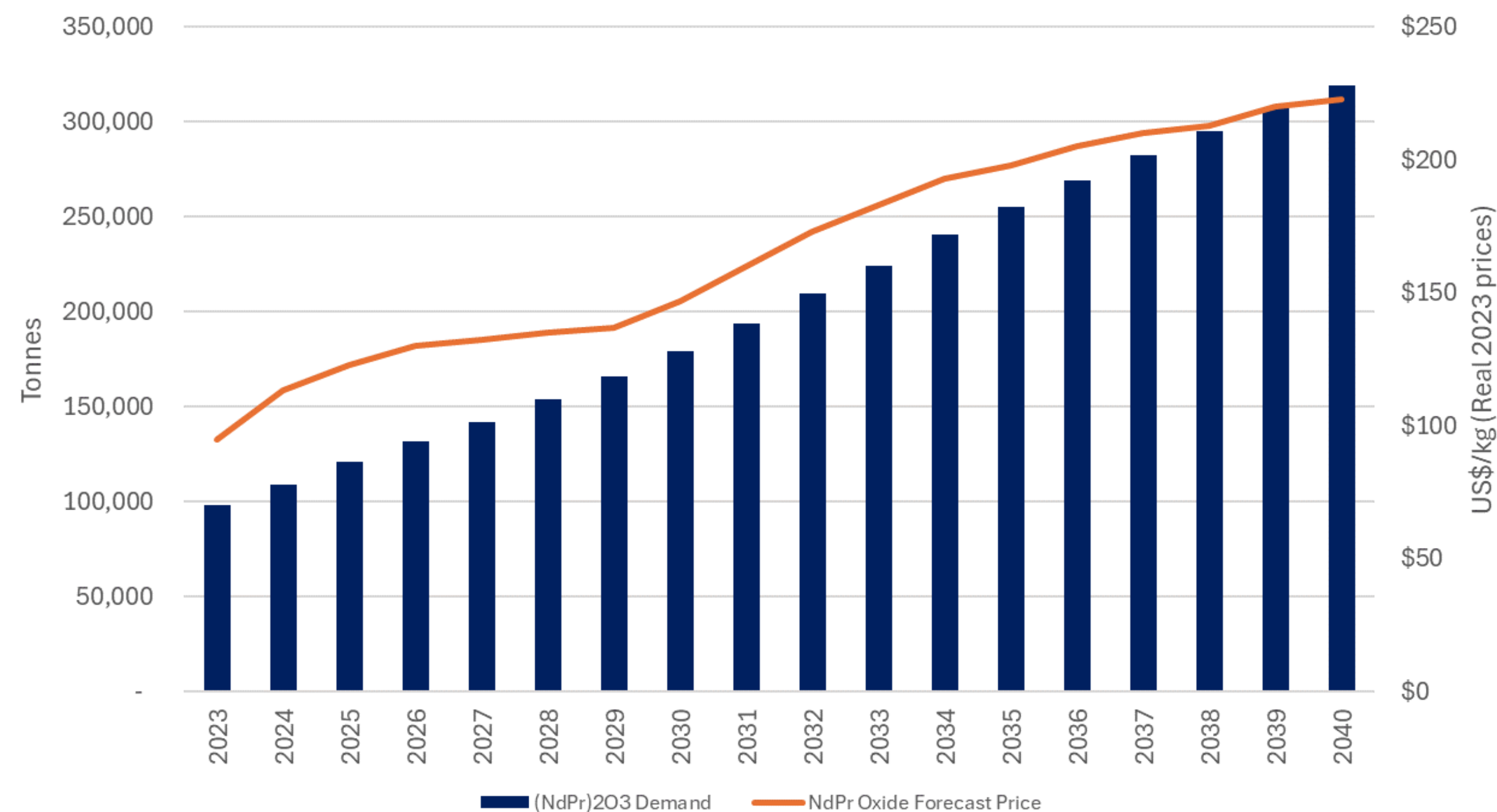
60 Nd Neodymium 144.242	59 Pr Praseodymium 140.90766	66 Dy Dysprosium 162.500
65 Tb Terbium 158.92535	40 Zr Zirconium 91.224	22 Ti Titanium 47.867



Market outlook

Forecasted demand for magnet rare earth oxides

Forecast demand and price for NdPr



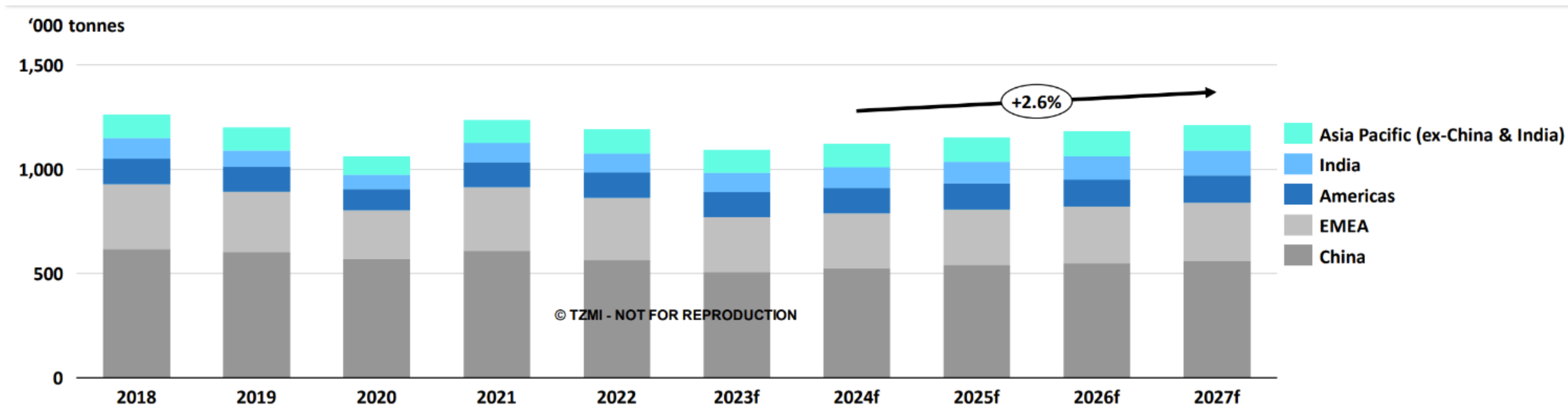
- Adamas projects by 2040 the global demand for magnet rare earth oxides will reach **330,000 tonnes** – **triple the global consumption in 2023**
- Demand is driven by offshore wind power installations, passenger electric vehicle, industrial robots and consumer appliances



Market outlook

Forecasted demand zircon

Forecast demand for zircon sands by region



- Zircon prices have remained relatively stable at ~US\$2,000/tonne.
- TZMI expects long-term global zircon demand to grow at 2.6% per annum with India, the Americas and other Asia Pacific markets expected to be the long-term key growth drivers.
- Growth drivers include urbanization in emerging economies such as India and Southeast Asia, decarbonisation and renovation trends for developed economies.



Critical minerals supply chain security

Policy initiatives driving international commercial co-operation

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South Korea Critical Minerals Strategy

Diversifying
sources through
international
collaboration



US Inflation Reduction Act

Supporting
industry
development in
the battery and
magnet value
chains



Japanese Economic Security Promotion Act

JOGMEC
investment and
subsidies



EU Critical Minerals Raw Materials Act

EU access to a
secure and
sustainable supply
of critical raw
materials

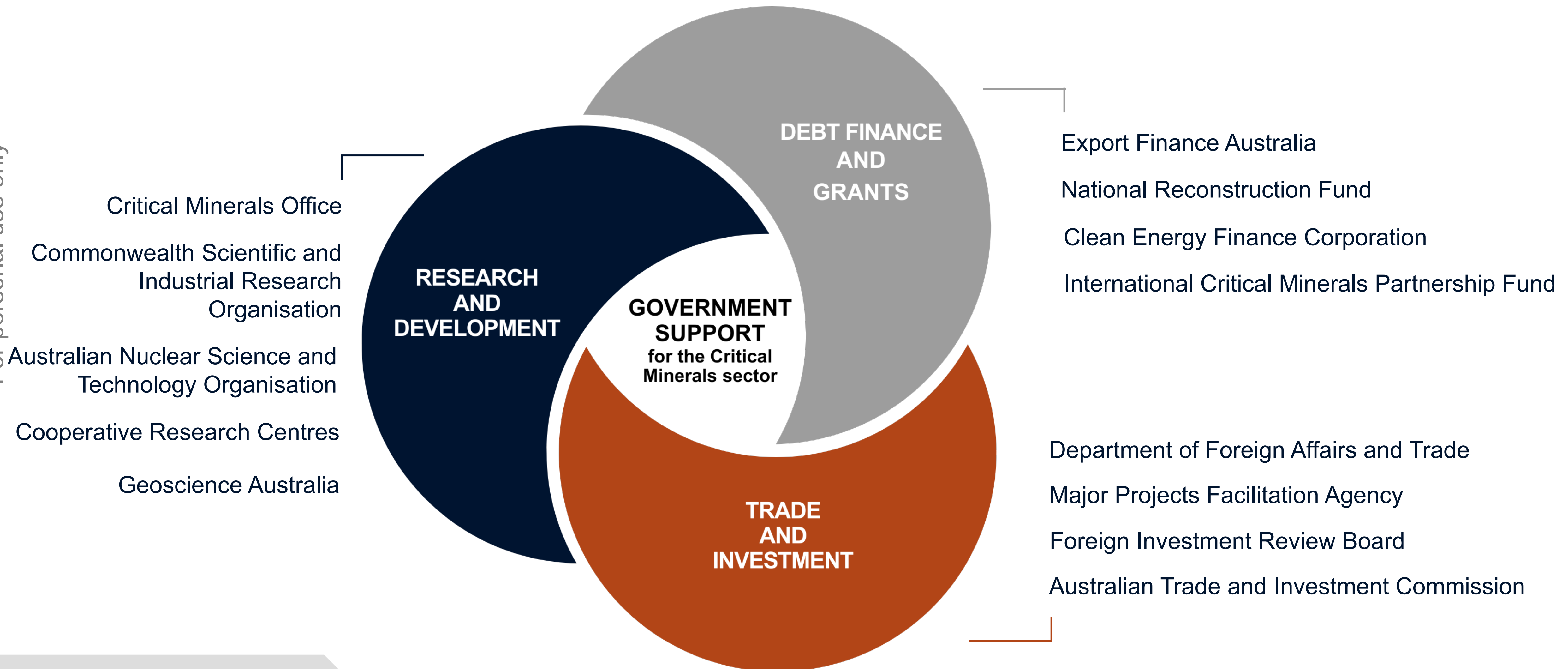


Australian Critical Minerals Strategy

Future Made in
Australia policy
Building new
resilient supply
chains

The Australian Government is backing the critical minerals sector

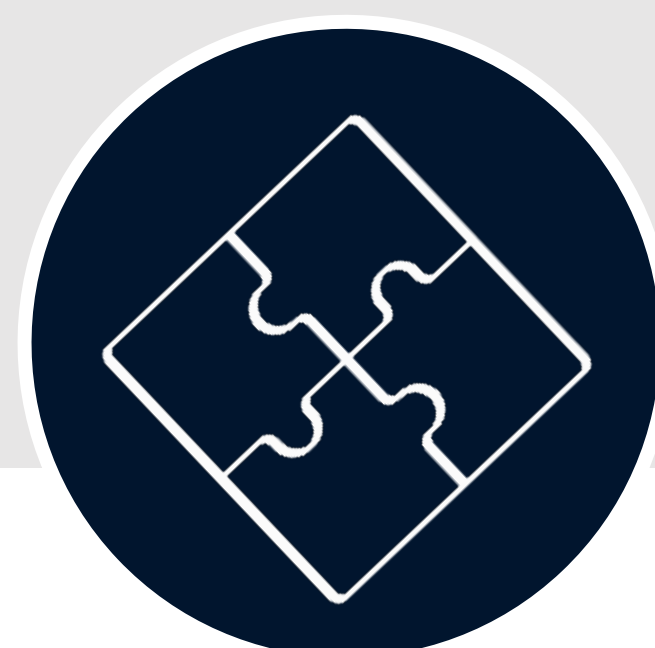
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Upcoming milestones



Goschen EES
Approval by Planning Minister



Finalise further offtake
and strategic partnerships



Secure arrangements
for a Final Investment Decision



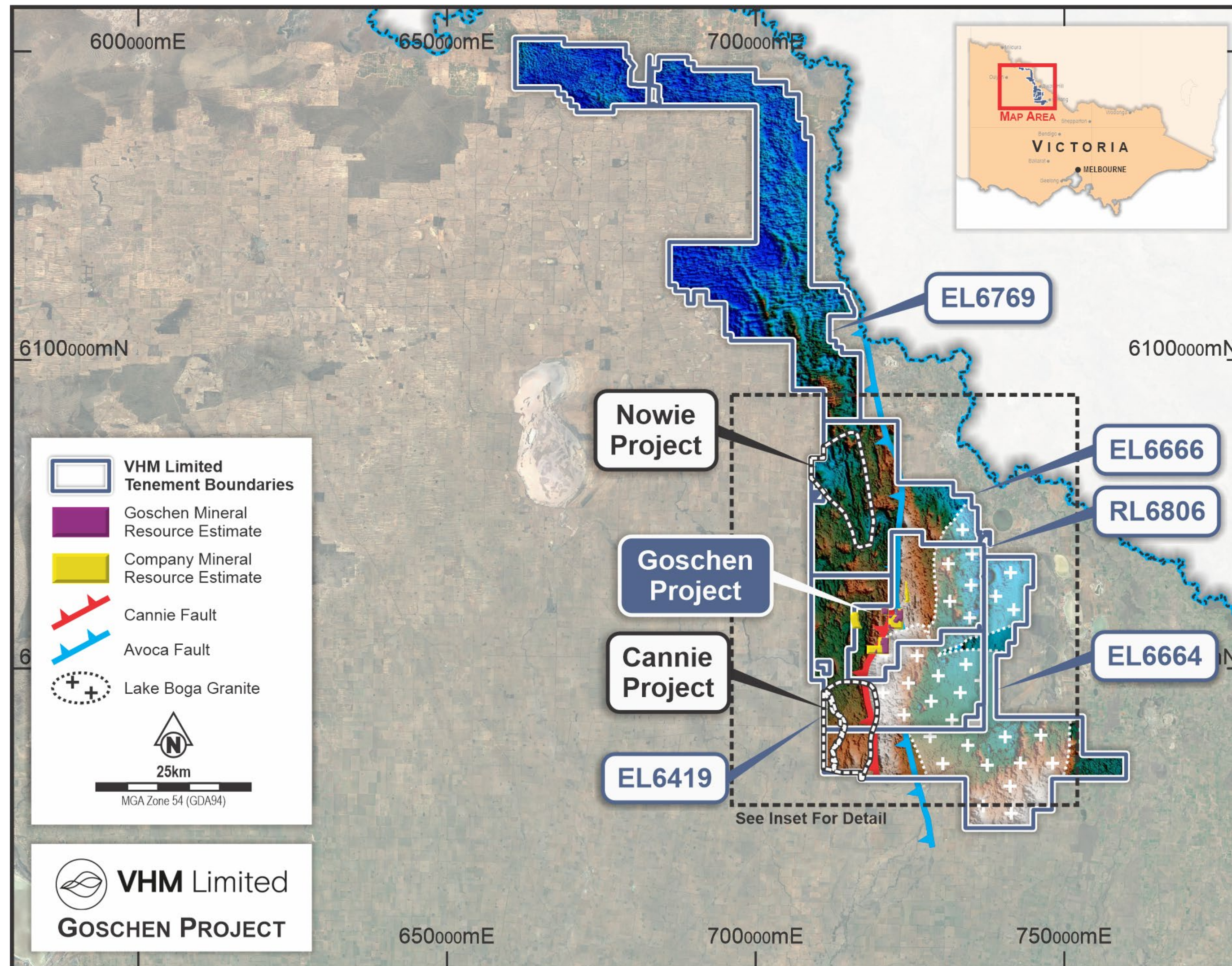
Construction
for Phase 1 subject to approvals

Australian owned rare earths and mineral sands developer

Appendix A. Exploration Portfolio

VHM Limited geological overview

A major critical mineral inventory of a global scale is in the making at VHM



With the discovery of the Cannie and Nowie Projects the Company confirms a major new critical minerals province centred on top and west of the Lake Boga granite¹.

A significant Critical Minerals inventory that has the potential to unlock new growth in Victoria's mineral processing industry.

Exploration activities

Area 4 Orion Strandline - Maiden Probable Ore Reserve

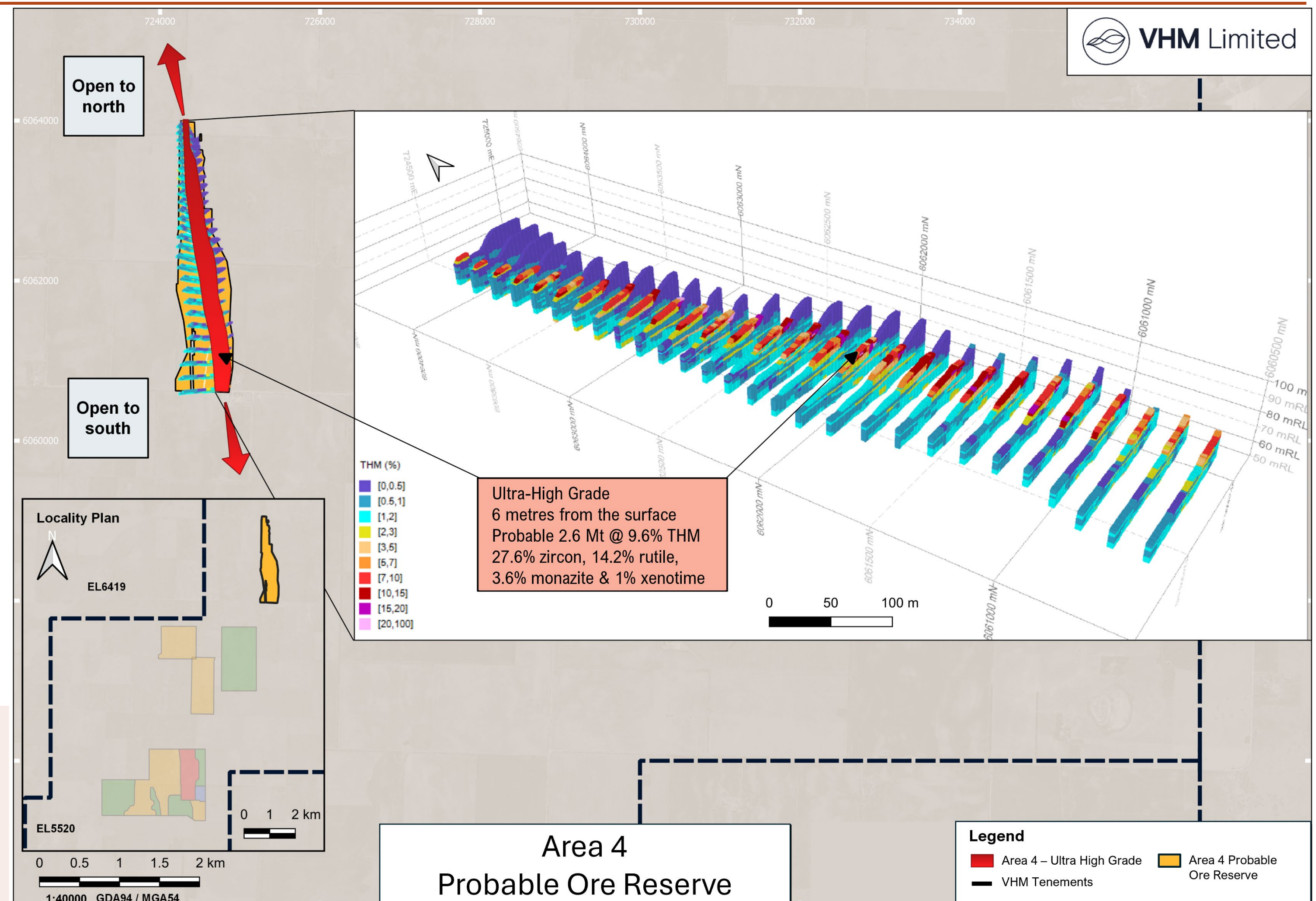
Added **11.5 Mt @ 5.6% THM** to Company Probable Ore Reserve¹.

Within this Ore Reserve a high-grade mineable horizon of 2.6 Mt @ 9.6% THM exists at the top of the ore body 6m from surface, including:

- 245,500 tonnes of mineable THM
- Average in-situ grade of TREO 2300ppm
- 67,700 tonnes of zircon at an in-situ grade of 2.6%

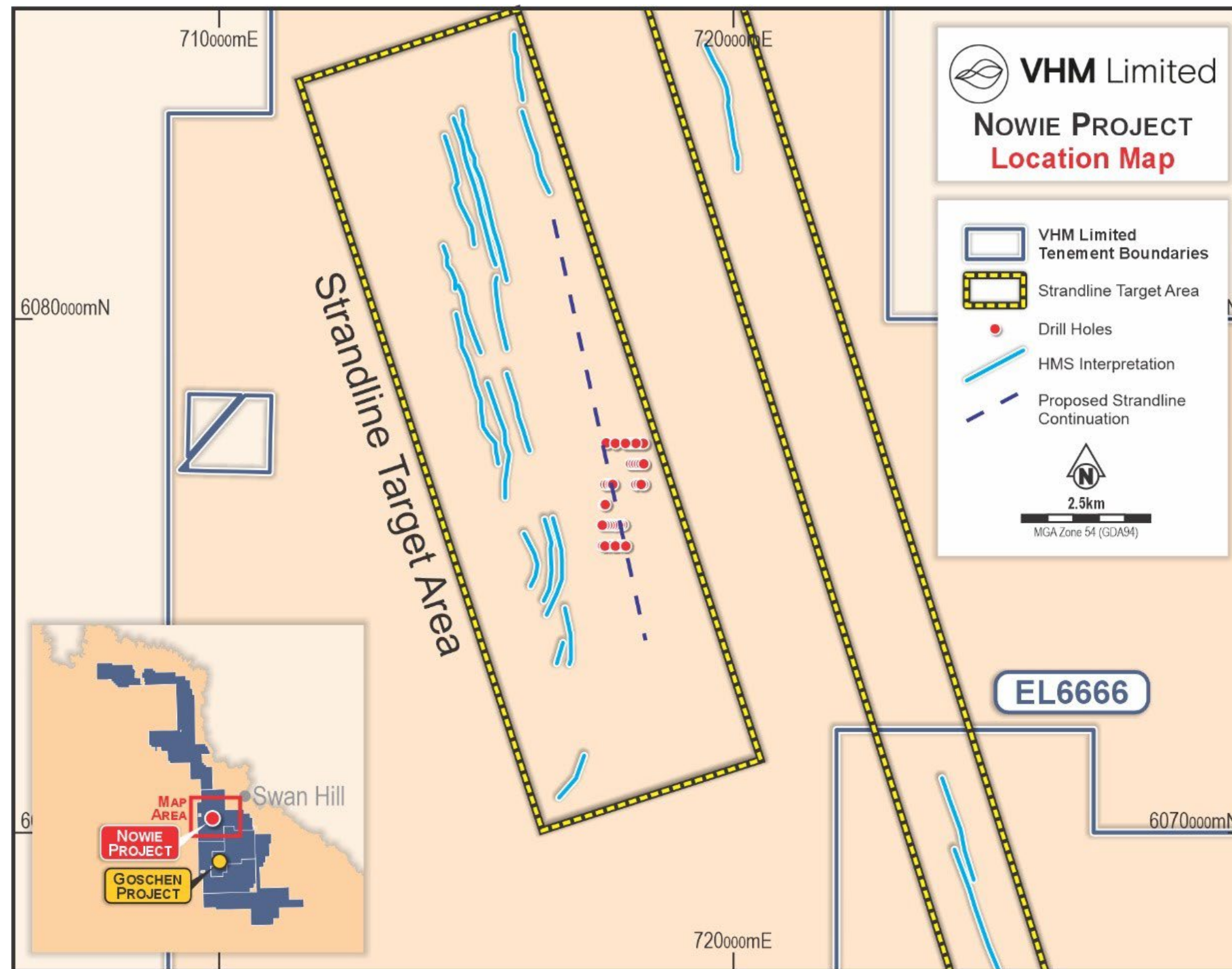
Area 4 is situated 8km to the north of the proposed Goschen Rare Earths and Mineral Sands process plant.

Significant high-grade ore body located near surface



Exploration activities

Maiden Mineral Resource estimate for Nowie Project



Nowie Project is located 22 kilometres north of the flagship Goschen Project in north west Victoria.

A new *Inferred* Mineral Resource estimate (MRE) of **16.4Mt @ 3.8% THM grade** at Nowie¹.

Results include **6.4Mt @ 6.1% THM** contained in high-grade strandline deposits which remain open along and across strike.

Mineral assemblage containing **16% Zircon, 16% Rutile, 24% Leucoxene, 2.1% Monazite** and **0.5% Xenotime**.

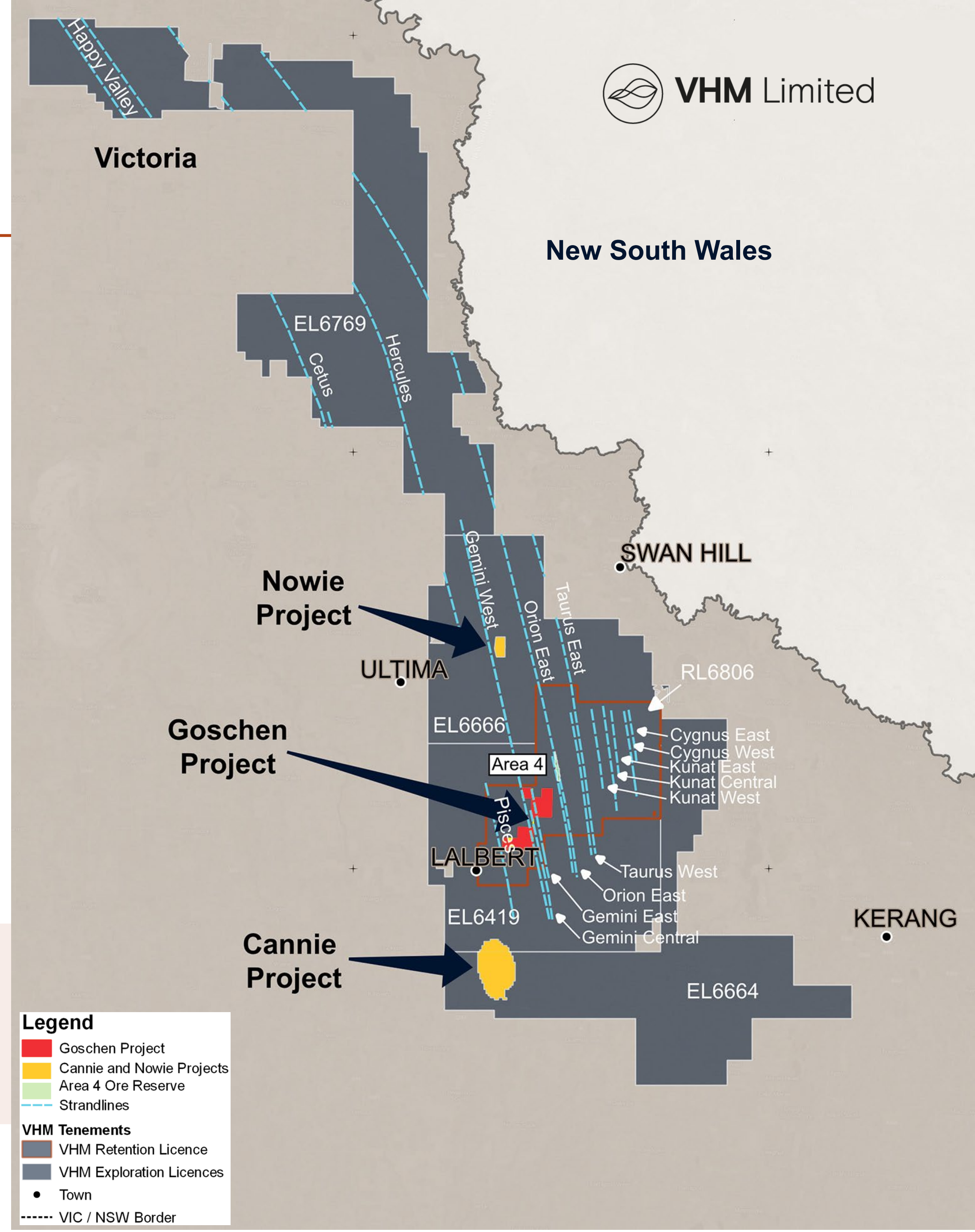
Figure: Nowie geophysics interpretations with identified strandline targets

Exploration activities

High-grade strandlines opportunity

- 21 strandlines identified by processing historic data¹.
- Cygnus strandline 7km east of Goschen Project has returned from VHM drilling very high-grade, 6m below surface 2m >60%THM containing 2.9% in-situ zircon + titanium dioxide and rare earth minerals.

Several high-grade strandline prospects exist in VHM tenements



Appendix B. Peer Comparison Data

Project comparison table data for capex

Name	Project	Product	Plant type	Plant Feed Rate	Annual Production	Stage of Development	Location	Capital Cost (\$A)
Arafura ¹	Nolans	Oxide	SX Facility	1 Mtpa	4.9ktpa	DFS	N.T.	\$1.680B
ASM ²	Dubbo	Oxide	SX Facility	1 Mtpa	1.5ktpa	DFS	N.S.W	\$1.678B
VHM ³	Goschen	Concentrate and Carbonate	Hydrometallurgical Plant	5 Mtpa	Phase 1: 9.4ktpa REMC Phase 1A: 8.5ktpa MREC	DFS	VIC	\$461M
Hastings ⁴	Yangibana	Concentrate	RE Flotation	1.1 Mtpa	Stage1: 37ktpa REMC	DFS	W.A.	\$503M
Peak ⁵	Ngualla	Concentrate	RE Flotation	0.8 Mtpa	16.2ktpa REMC	BFS	Tanzania	\$434M
VHM ⁶	Goschen	Concentrate	RE Flotation	5 Mtpa	Phase 1: 9.4ktpa REMC	DFS	VIC	\$337M

Source data:

1. Arafura Rare Earths (ARU:ASX) Nolans Project sourced from “ASX Announcement – Quarterly Activities Report and Appendix 5B on 31 October 2023 - A\$1,680M.
2. Australian Strategic Materials (ASM:ASX) Dubbo Project data sourced from ASX release “Chief Executive Officer’s AGM Presentation” published on 22 November 2023 - A\$1,678M.
3. VHM (VHM:ASX) Goschen Project data sourced from ASX release “Goschen Project Capex Update” published on 17 June 2024 – A\$337M Base Plant and Goschen Project data sourced from ASX release “DFS Refresh” published on 28 March 2023 A\$124M Hydromet. – \$461M.
4. Hastings (HAS:ASX) Yangibana data sourced from ASX release “Binding Term Sheet Signed for Integrated Tolling and Offtake” published on 16 February 2024 - A\$503M
5. Peak Rare Earths (PEK:ASX) Ngualla data sourced from ASX release “Completion of FEED Study” published on 30 November 2023. US\$287M converted to A\$ at 0.66 FX = A\$434M.
6. VHM (VHM:ASX) Goschen Project data sourced from ASX release “Goschen Project Capex Update” published on 17 June 2024 – A\$337M.

**All data is subject to change without notice.*

Project comparison table data for rare earth basket value

Magnet Rare Earth Oxide % Distribution of Rare Earth Product

Name	Project	Product	Neodymium (Nd)	Praseodymium (Pr)	Dysprosium (Dy)	Terbium (Tb)	Stage of Development	Location	Market Cap* (\$A)
Arafura ¹	Nolans	Oxide	20.5	5.9	0.3	0.1	DFS	N.T.	\$450.50M
Hastings ²	Yangibana	Concentrate	32.6	8.0	0.3	0.1	DFS	W.A.	\$76.85M
Peak ³	Ngualla	Concentrate	16.5	4.8	0.1	0.1	BFS	Tanzania	\$47.95M
VHM ⁴	Goschen	Concentrate & Carbonate	16.5	4.1	1.9	0.3	DFS	VIC	\$91.61M
Astron ⁵	Donald	Concentrate	16.4	4.6	1.8	0.3	DFS	VIC	\$119.79M

Source data:

1. Arafura (ARU:ASX) data sourced from ASX release "Nolans Project Definitive Feasibility Study" published on 7 February 2019.
2. Hastings (HAS:ASX) data sourced from ASX release "Yangibana Project NPV increases 84% to A\$1Billion (post tax)" published on 21 February 2022.
3. Peak (PEK:ASX) data sourced from ASX release "2023 Annual Report" published on 26 October 2023.
4. VHM (VHM:ASX) data sourced from ASX release "ANSTO Testwork Demonstrates High Extraction of Rare Earth Minerals" published on 17 January 2023.
5. Astron (ATR:ASX) data sourced from ASX release "Investor Presentation – Donald Project DFS" published on 17 May 2023.

*Market capital data at 11 July 2024 and sourced from the ASX

All data is subject to change without notice

Appendix C. JORC Tables

Company Mineral Resources

892.1 Mt Mineral Resource estimate

	Area	Mineral Resource Category	Material	In Situ THM	Bulk Density	Total Heavy Mineral (THM)	Slimes	Oversize material >2mm	THM Assemblage ⁽⁴⁾						Rare Earth Oxides															
									Zircon	Rutile	Leucoxene	Ilmenite	Monazite	Xenotime	La ₂ O ₃	CeO ₂	Pr ₆ O ₁₁	Nd ₂ O ₃	Sm ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Tb ₄ O ₇	Dy ₂ O ₃	Ho ₂ O ₃	Er ₂ O ₃	Tm ₂ O ₃	Yb ₂ O ₃	Lu ₂ O ₃	Y ₂ O ₃	TREO + Y ₂ O ₃
			(Mt)	(Mt)	(gcm3)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
Goschen	Area 1	Measured	30.7	1.8	1.76	5.7	15	5	29.9	10.8	9.0	24.7	4.3	0.8	0.48	0.96	0.11	0.38	0.07	0.004	0.06	0.01	0.07		0.05	0.01	0.05		0.47	2.72
		Indicated	62.2	1.4	1.72	2.3	18	2	26.6	11.5	9.2	25.0	4.6	0.9	0.53	1.11	0.12	0.46	0.08	0.004	0.07	0.02	0.07		0.05	0.01	0.05		0.48	3.04
		Total ⁽¹⁾	92.9	3.2	1.73	3.4	17	3	27.7	11.2	9.1	24.9	4.5	0.8	0.51	1.06	0.12	0.43	0.08	0.004	0.07	0.02	0.07		0.05	0.01	0.05		0.48	2.94
	Area 3	Indicated	204.1	6.9	1.73	3.4	19	3	19.2	9.0	8.0	25.0	3.2	0.6	0.36	0.78	0.09	0.33	0.06	0.003	0.05	0.01	0.05		0.04	0.01	0.04		0.37	2.19
		Inferred	287.7	6.7	1.72	2.3	18	3	17.2	8.7	7.5	22.7	2.9	0.5	0.35	0.76	0.08	0.31	0.06	0.003	0.05	0.01	0.05		0.03	0.01	0.03		0.36	2.10
		Total ⁽¹⁾	491.8	13.6	1.73	2.8	18	3	18.2	8.9	7.7	23.9	3.0	0.6	0.36	0.77	0.09	0.32	0.06	0.003	0.05	0.01	0.05		0.03	0.01	0.04		0.36	2.14
Area 2	Indicated	75.5	2.39	1.73	3.2	21	7	20.51	12.60	9.5	23.1	3.4	0.7	0.41	0.88	0.10	0.37	0.07	0.00	0.06	0.01	0.06	0.01	0.04	0.01	0.05	0.00	0.42	2.48	
	Inferred	5.74	0.18	1.73	3.1	21	8	19.32	10.15	7.6	21.7	3.6	0.6	0.45	0.95	0.11	0.39	0.07	0.00	0.06	0.01	0.06	0.01	0.04	0.01	0.04	0.01	0.40	2.62	
	Total ⁽³⁾	81.3	2.6	1.7	3.2	21	7	20.4	12.4	9.4	23.0	3.4	0.7	0.4	0.9	0.1	0.4	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.4	2.5	
Area 4	Indicated	18.0	0.8	1.74	4.6	20	5	19.0	11.0	10.0	24.0	3.0	1.0	0.32	0.67	0.07	0.28	0.05	0.002	0.05	0.01	0.05		0.03	0.01	0.04		0.33	1.91	
	Total ⁽³⁾	18.0	0.8	1.74	4.6	20	5	19.0	11.0	10.0	24.0	3.0	1.0	0.32	0.67	0.07	0.28	0.05	0.002	0.05	0.01	0.05		0.03	0.01	0.04		0.33	1.91	
Cannie	Inferred	192	5.9	1.70	3.1	19	6	24.5	15.5	24.3	2.1	4.1	0.8	0.49	1.06	0.12	0.45	0.08	0.004	0.07	0.01	0.07	0.02	0.05	0.01	0.05	0.01	0.49	3.00	
	Total ⁽²⁾	192	5.9	1.70	3.1	19	6	24.5	15.5	24.3	2.1	4.1	0.8	0.49	1.06	0.12	0.45	0.08	0.004	0.07	0.01	0.07	0.02	0.05	0.01	0.05	0.01	0.49	3.00	
Nowie	Inferred	16.4	0.6	1.73	3.8	19	5	16.1	15.5	24.4	5.0	2.1	0.5	0.28	0.61	0.07	0.26	0.05	0.003	0.04	0.01	0.05	0.01	0.04	0.01	0.04	0.01	0.33	1.80	
	Total ⁽³⁾	16.4	0.6	1.73	3.8	19	5	16.1	15.5	24.4	5.0	2.1	0.5	0.28	0.61	0.07	0.26	0.05	0.003	0.04	0.01	0.05	0.01	0.04	0.01	0.04	0.01	0.33	1.80	
Grand Total	Measured	30.7	1.8	1.76	5.7	15	5	29.9	10.8	9.0	24.7	4.3	0.8	0.48	0.96	0.11	0.38	0.07	0.004	0.06	0.01	0.07		0.05	0.01	0.05		0.47	2.72	
	Indicated	359.8	11.5	1.73	3.2	19	4	20.4	10.2	8.6	24.5	3.4	0.7	0.39	0.83	0.10	0.35	0.06	0.003	0.05	0.01	0.05	0.00	0.04	0.01	0.04	0.00	0.39	2.34	
	Inferred	501.6	13.3	1.71	2.7	18	4	20.4	12.0	15.7	12.8	3.4	0.7	0.41	0.89	0.10	0.37	0.07	0.003	0.06	0.01	0.06	0.01	0.04	0.01	0.04	0.00	0.42	2.49	
	TOTAL ⁽⁶⁾	892.1	26.6	1.7	3.0	18	4	21.0	11.2	12.2	18.7	3.4	0.7	0.41	0.87	0.10	0.36	0.07	0.003	0.06	0.01	0.06	0.00	0.04	0.01	0.04	0.00	0.41	2.44	

Notes: Any discrepancies in totals are a function of rounding.

1. Mineral resources reported at a cut-off grade of 1.0% THM.

2. Mineral resources reported at a cut-off grade of 1.75% THM.

3. Mineral resources reported at a cut-off grade of 1.0% TVHM (THM * VHM)

4. Mineral assemblage, via QEMScan Particle Analysis, is reported as a percentage of in situ THM content.

5. In-Situ TREO Grade is calculated by THM Grade (2.95%) multiplied by TREO Grade (2.43%).

6. Combined mineral resource at a cut-off grade of 1% THM for Area1 and Area 3 and 1% TVHM for Nowie, Area 2 and Area 4.

The Mineral Resource estimate was updated and disclosed in the ASX release published 9 April 2024

	Material	In-Situ TREO + Y ₂ O ₃ Grade ⁽⁵⁾	In-Situ TREO + Y ₂ O ₃
	(t)	(%)	(t)
Area 1, Area 2, Area 3, Area 4, Cannie, Nowie	892,000,000	0.07	650,000

Company Ore Reserves

210.2Mt Ore Reserve

Area	Classification	Ore	In-situ THM	THM	THM Assemblage ¹					
					Zircon	Rutile	Leucoxene	Ilmenite	Monazite	Xenotime
		(Mt)	(Mt)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Area 1	Proved	24.5	1.3	5.4	29.9	10.8	9.0	24.7	4.3	0.8
Area 1	Probable	14.6	0.5	3.2	29.2	11.7	9.2	25.5	4.5	0.9
Area 3	Probable	159.6	5.6	3.5	20.3	9.4	8.1	25.8	3.4	0.6
Area 4	Probable	11.5	0.6	5.6	19.6	12.2	10.1	24.6	3.0	0.7
Total	Proved	24.5	1.3	5.4	29.9	10.8	9.0	24.7	4.3	0.8
	Probable	185.7	6.7	3.6	20.9	9.8	8.4	25.7	3.4	0.6
Grand Total		210.2	8.0	3.8	22.4	10.0	8.5	25.5	3.6	0.7

Area	Classification	Rare Earth Oxides ¹													
		CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	La ₂ O ₃	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₄ O ₇	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	TREO
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Area 1	Proved	0.960	0.070	0.050	0.004	0.060	0.480	0.380	0.110	0.070	0.012	0.008	0.470	0.050	2.720
Area 1	Probable	0.971	0.067	0.047	0.004	0.060	0.468	0.400	0.108	0.072	0.011	0.007	0.458	0.050	2.721
Area 3	Probable	0.805	0.057	0.039	0.003	0.056	0.378	0.339	0.093	0.064	0.009	0.006	0.386	0.040	2.297
Area 4	Probable	0.655	0.049	0.035	0.002	0.046	0.310	0.277	0.073	0.050	0.008	0.006	0.335	0.037	1.884
Total	Proved	0.960	0.070	0.050	0.004	0.060	0.480	0.380	0.110	0.070	0.012	0.008	0.470	0.050	2.720
	Probable	0.802	0.057	0.039	0.003	0.055	0.378	0.338	0.092	0.064	0.009	0.006	0.386	0.041	2.287
Grand Total		0.828	0.059	0.041	0.003	0.056	0.395	0.345	0.095	0.065	0.010	0.006	0.400	0.042	2.359

Note: (1) Any discrepancies in totals are a function of rounding. THM Assemblage and Rare Earth Oxides are reported as a percentage of in-situ THM content. The Ore Reserve was updated and disclosed under the JORC Code (2012) in the ASX release published 29 September 2023.



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