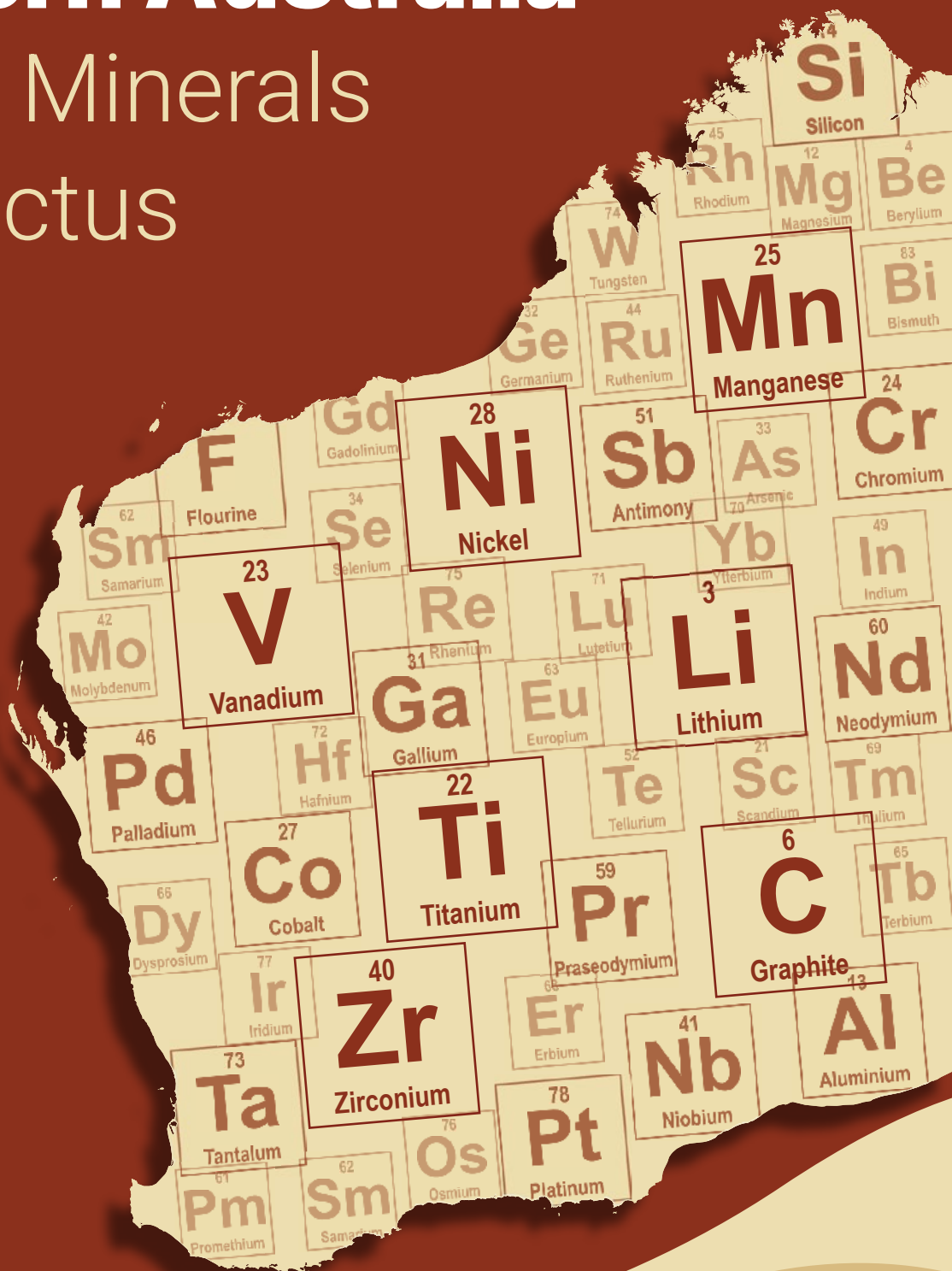


Western Australia

Critical Minerals Prospectus 2026



Acknowledgement

The Department of Mines, Petroleum and Exploration (DMPE) respectfully acknowledges Aboriginal peoples as being the traditional custodians of Western Australia. We acknowledge the enduring connection Aboriginal people continue to share with the land, sea and sky through both their ancestral ties and custodianship to Country. We pay our respect to Elders both past and present, and acknowledge the value brought to our department through the collective contribution of Aboriginal and Torres Strait Islander peoples across Western Australia.

Disclaimer

The project information contained in this prospectus has been provided directly by the featured companies. DMPE and the State cannot guarantee the accuracy, currency or completeness of the information. Neither the department nor the State of Western Australia nor any employee or agent of the department shall be responsible or liable for any loss, damage or injury arising from the use of or reliance on any information, data or advice (including incomplete, out of date, incorrect, inaccurate or misleading information, data or advice) expressed or implied in, or coming from, this Prospectus, by any person whatsoever.

Minister's Foreword

Western Australia is well placed to help meet one of the defining challenges of our time: supplying the critical minerals needed for clean energy, defence, advanced manufacturing, and secure global supply chains. Our State combines world-class mineral endowment, established infrastructure, technical capability, and a proven record of responsible resource development.

The Western Australia Critical Minerals Prospectus profiles 47 developing projects across lithium, rare earth elements, nickel, cobalt, graphite, vanadium, manganese, niobium and other critical minerals. Together, these projects show the depth, diversity, and scale of opportunities across the State.

That opportunity is backed by strong fundamentals. In 2025, Western Australia generated around A\$182 billion in sales from mining, supported more than 140,000 on-site mining and mineral exploration full-time equivalent jobs, and attracted A\$2.7 billion in mineral exploration expenditure, the highest on record for a calendar or financial year. Global demand is also rising: world lithium demand is forecast to more than double between 2024 and 2030 to support the energy transition. Western Australia is positioned not only to supply these minerals, but to capture greater value through downstream processing, refining and advanced manufacturing.

Western Australia remains a trusted investment destination, with transparent regulation, reliable approvals pathways, extensive infrastructure, and strong partnerships with industry and international markets. As countries seek secure, sustainable and resilient supply chains, our State has the capability and credibility to deliver.

I commend the Department of Mines, Petroleum and Exploration for compiling this prospectus and thank the participating companies for sharing their projects. Their work highlights Western Australia's critical role in the global energy transition and reinforces our reputation as one of the world's premier destinations for critical minerals investment.

Hon Daniel Pastorelli MLA

Minister for Mines, Petroleum and Exploration





Contents

Introduction	4
Why Western Australia	5
Facilitation offices and contacts	6
Glossary of Terms	8
Classifications	9
Acronyms	10
Criteria	10
Government Investment initiatives	11
Project locations, major strategic infrastructure and transport pathways.....	13
Upstream Summaries.....	14
Antimony	15
Cobalt.....	16
Copper	18
Fluorine.....	24
Gallium.....	26
Graphite	28
Heavy Mineral Sands	29
High Purity Alumina	30
Lithium.....	32
Manganese	39
Nickel	41
Niobium.....	43
Palladium	46
Platinum Group Elements.....	48
Rare Earth Elements	49
Rubidium	54
Silica.....	55
Titanium	57
Tungsten	59
Vanadium.....	61
Midstream Summaries	65
Cobalt.....	66
Gallium.....	67
Graphite	68
High Purity Alumina	69
Manganese	70
Nickel	71
Silicon.....	72
Western Australia: Tectonic Map	74

Introduction

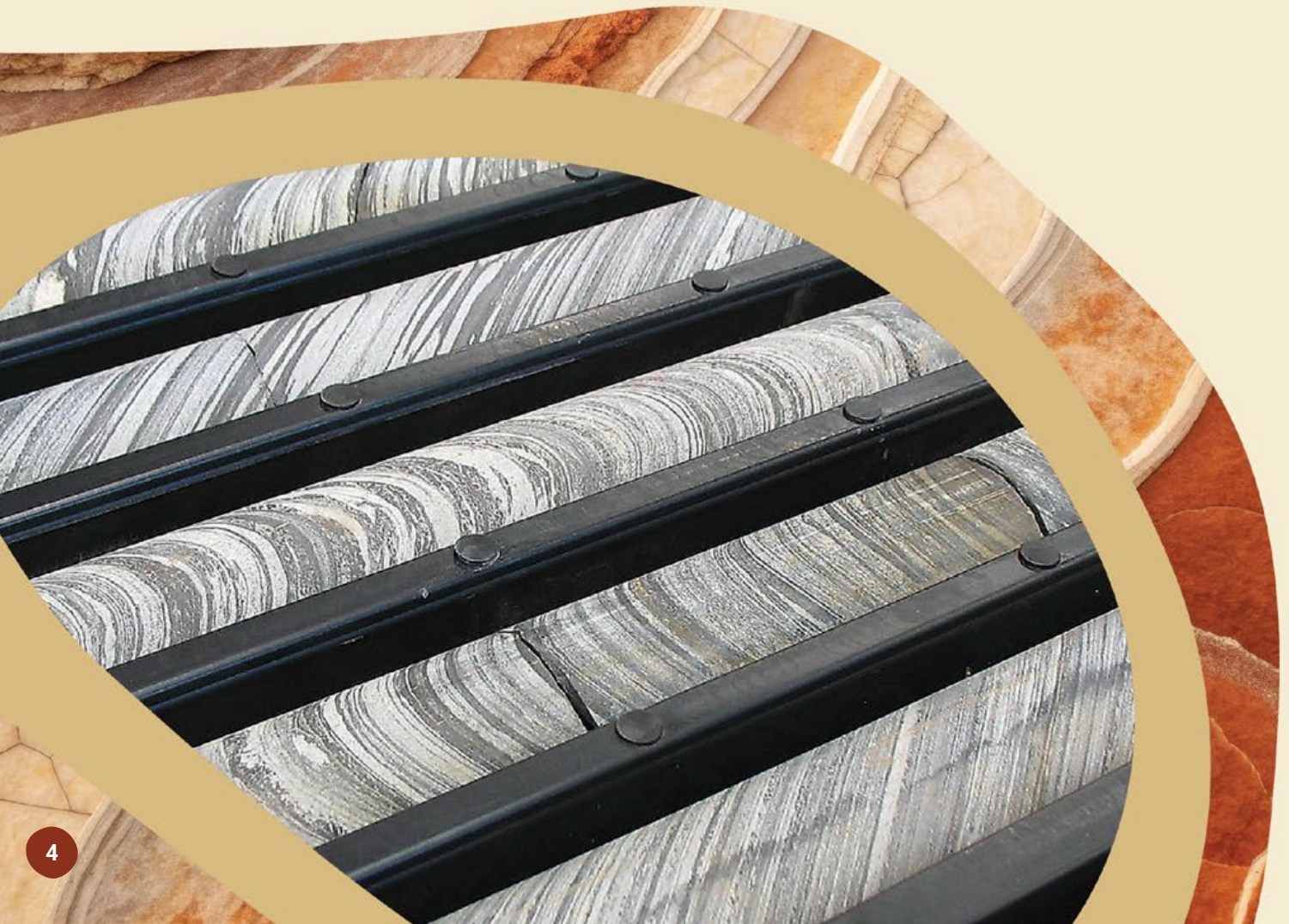
Western Australia is one of the world's premier mineral investment destinations, combining world-class geology, low sovereign risk, established infrastructure and a highly skilled mining and resources sector. The State is a major producer of commodities including iron ore, gold and lithium, with significant resources of critical and strategic minerals including rare earth elements, nickel, cobalt and copper.

As global demand grows for the minerals needed for electrification, decarbonisation, advanced technologies and defence, Western Australia is well positioned to play an increasingly important role in secure global supply chains. The State is also building capability beyond extraction, with investment in downstream processing and value-adding, including lithium hydroxide and rare earths processing.



The Western Australian Government supports continued investment and discovery through world-class pre-competitive geoscience, the Exploration Incentive Scheme, co-funded exploration programs and an established resources investment and services ecosystem — providing investors with access to opportunities from early-stage exploration through to advanced projects and downstream development.

This prospectus provides a snapshot of Western Australia's critical minerals sector and highlights selected opportunities for investment and collaboration across the State. It is not intended to be an exhaustive list of projects, companies or opportunities in the sector.



Why Western Australia

More than A\$25 billion of mining and associated infrastructure projects are under construction or recently completed, supporting jobs and long-term operations across Western Australia.

With more than A\$8 trillion in identified mineral and energy resources, Western Australia offers significant opportunities for investors, proponents and strategic partners across the resources value chain.*

*Source: CME/EY-Parthenon, 2026.

Highly skilled workforce
Deep industry knowledge and expertise supporting a smarter, more sustainable resources sector.

Strong ESG outcomes
Robust governance, regulation and a whole-of-economy commitment to responsible development.

Collaborative approach
Connecting investors, buyers and project proponents with opportunities across Western Australia.

Secure and stable place to invest
Australia's only AAA-rated jurisdiction by both S&P Global and Moody's.

Committed to responsible development
by improving environmental, social and governance outcomes, including decarbonisation and responsible investment.

A\$34 billion invested in Western Australia mining and petroleum
with Western Australia accounting for 62 per cent of national mining and petroleum investment. The resources sector contributed 69 per cent of total new capital expenditure in the State.

Facilitation offices and contacts

Minerals Investment Team, Department of Mines, Petroleum and Exploration

The Mineral Investment team supports investment into Western Australia's minerals sector by providing trusted geoscience, project and market information to current and prospective investors.

The team connects investors with project proponents, government agencies and relevant industry stakeholders, helping investors identify opportunities, navigate Western Australia's minerals landscape and progress investment discussions.

Working across domestic and international markets, the team also promotes Western Australian mineral projects and investment opportunities to targeted investors, strategic partners and global supply-chain participants.

Email: minerals.investors@dmpe.wa.gov.au

Office: 100 Plain Street, East Perth WA 6004

Department of Mines, Petroleum and Exploration Government of Western Australia

DMPE oversees the regulatory and policy requirements of the resources sector in Western Australia. The department plays a critical role in building the State's economy and ensuring mineral and petroleum resources are developed in a sustainable and responsible way.

Key functions include:

- **Geological Survey of Western Australia (GSWA)**, which provides geoscientific data and research.
- **Resource Tenure**, which administers mining, petroleum and geothermal titles.
- **Resource and Environmental Compliance**, which assesses environmental approvals and compliance across the resources lifecycle.

The department works collaboratively with industry, government, community organisations, peak industry bodies and other stakeholders to provide fair and transparent regulatory practices that balance economic growth with environmental conservation.

Michele Spencer | Executive Director Geological Survey and Resource Strategy

Email: geological.survey@dmpe.wa.gov.au

Office: 100 Plain Street, East Perth WA 6004



Australian Government

Australian Trade and Investment Commission

Austrade

Austrade supports international investment and trade in Australia's critical minerals sector by connecting investors, project proponents and global supply-chain partners.

It promotes Australian critical minerals opportunities in international markets and helps facilitate investment, commercial partnerships and market access.

Phone: 13 28 78

Email: criticalminerals@austrade.gov.au

Office: Level 17, 141 St Georges Terrace, Perth WA 6000



Invest & Trade WESTERN AUSTRALIA

Invest and Trade Western Australia

The Invest and Trade Western Australia team in Perth, located at Department of Energy and Economic Diversification (DEED), works in partnership with overseas office locations to coordinate ministerial missions and delegations and further strategic partnerships.

The Government of Western Australia has a presence in 17 international locations across six regions that help Western Australian companies to access investment and trade opportunities in each region.

Email: investandtrade@deed.wa.gov.au

Office: Level 11, 1 William Street, Perth WA 6000

Glossary of Terms

ASIC

The Australian Securities and Investments Commission (ASIC) is Australia's corporate, financial services and consumer credit regulator. It oversees companies and financial markets, enforces laws, and helps protect investors, consumers, and creditors by promoting fair, transparent and accountable business practices.

Commodity

A mineral commodity is a naturally occurring mineral or mineral-derived substance that is extracted and traded for economic purposes.

JORC Code and Resource Classifications

The JORC Code is Australia's mandatory standard for the public reporting of exploration results, mineral resources and ore reserves. It governs how ASX-listed mining companies classify and report mineral assets, requiring the disclosure of material geological, technical and economic information to ensure transparency and investor confidence. JORC stands for the Joint Ore Reserves Committee.

Measured Mineral Resource

A measured mineral resource is defined by very high geological confidence, supported by closely spaced sampling, reliable geological modelling, and strong continuity of grade and geology. It is detailed enough to underpin mine planning and economic studies with minimal uncertainty.

Indicated Mineral Resource

An indicated mineral resource has reasonable geological confidence, based on adequate sampling and geological understanding, allowing for meaningful evaluation of mine design and economic potential, though with more uncertainty and less precision than a measured resource.

Inferred Mineral Resource

An inferred mineral resource is estimated from limited geological evidence and sampling, providing only an approximate indication of quantity and grade; it carries significant uncertainty, cannot be used for detailed mine planning, and requires further drilling to upgrade confidence.

Proved Ore Reserve

The economically mineable portion of a measured mineral resource. It represents the highest level of confidence.

Probable Ore Reserve

The economically mineable portion of an indicated mineral resource. It represents a lower level of confidence compared to a proved resource.

Chemical elements are often shortened to their official International Union of Pure and Applied Chemistry symbols, e.g. Li for lithium, Cu for copper.

Classifications

Exploration Phase

Target — An area identified through geological, geochemical, or geophysical data as having potential for mineralisation, but not yet tested by drilling. Essentially a hypothesis about where mineralisation might exist.

Prospect — A target that has had some exploration work (e.g. initial drilling, trenching, mapping and lab-based assays) confirming the presence of mineralisation, but not yet enough data to estimate a resource.

Deposit — A mineral occurrence for which a mineral resource estimate has been reported. Mineral resources should preferably be reported in accordance with the JORC Code or another CRIRSCO member reporting code; however, historical or pre-JORC resource estimates may also be classified as deposits, provided the status of the resource estimate is clearly documented.

Resource Definition

Maiden Resource Estimate (MRE) — The first formal, compliant estimate of tonnes and grade (Measured/Indicated/Inferred Ore Reserve) for a deposit. This is a key milestone as it is the first independently verifiable statement of scale.

Scoping Study (SC) — An early-stage technical and economic assessment of a mineral project that evaluates its potential viability and whether further investigation and investment are justified. For a more detailed description, refer to the JORC Code.

PFS (Prefeasibility Study) — A more detailed study evaluating mining method, processing route, and economics, usually testing several options to select a preferred development case. For a more detailed description, refer to the JORC Code.

Feasibility Study (FS) — comprehensive technical and economic evaluation of the selected development option that demonstrates economic extraction is justified and provides the basis for an investment and development decision. For a more detailed description, refer to the JORC Code.

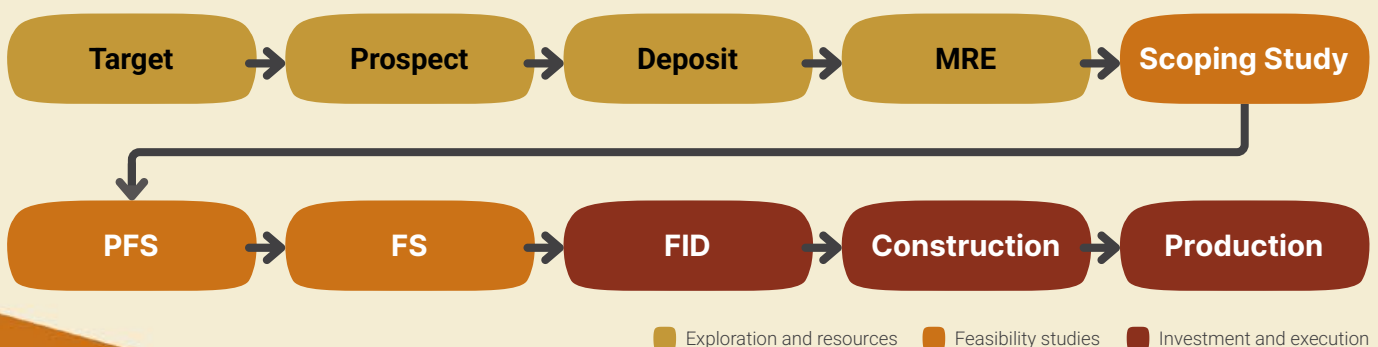
Definitive Feasibility Study (DFS) — A comprehensive, detailed engineering and economic study ($\pm 10\text{--}15$ per cent accuracy) on the selected project configuration, used as the basis for a final investment decision and often for permitting.

Bankable Feasibility Study (BFS) — Similar rigor to a DFS, but specifically structured to meet the due-diligence standards of banks/financiers for project debt funding. Often used interchangeably with DFS, though “bankable” implies it has been prepared to a standard acceptable for external financing.

Development Decision

Final Investment Decision (FID) — The formal decision by a company’s board (and often joint venture partners) to commit capital and proceed with construction, based on the full feasibility outcomes, financing being secured, and permits/approvals in place.

Project lifecycle (example):



Acronyms

3E	Three-element platinum group elements comprising platinum, palladium and gold.	JOGMEC	Japan Organisation for Metals and Energy Security
5E	Five-element platinum group elements comprising platinum, palladium, gold, rhodium and iridium.	JV	Joint Venture
AMEC	Association of Mining and Exploration Companies	LED	Light Emitting Diode
CAM	Cathode Active Material	LOM	Life of Mine
CY	Calendar Year	LREE	Light Rare Earth Elements
DISR	Department of Industry, Science and Resources (Australian Government)	LREO	Light Rare Earth Oxides – Total of La ₂ O ₃ , CeO ₂ , Pr ₆ O ₁₁ , Nd ₂ O ₃ , Pm ₂ O ₃ , Sm ₂ O ₃ , Eu ₂ O ₃ , Gd ₂ O ₃
DSO	Direct Shipping Ore	LREO %	LREO/TREO × 100
EFA	Export Finance Australia	Mdtpa	Million dry tonnes per annum
EPA	Environmental Protection Authority (Western Australia)	MRIWA	Minerals Research Institute of Western Australia
ESG	Environmental, Social, and Governance	MOU	Memorandum of Understanding
EU	European Union	MREC	Mixed Rare Earth Carbonate
FY	Financial Year	MRE	Maiden Resource Estimate
HiTi	High-Titanium feedstock	MSO	Mineable Shape Optimiser
HM	Heavy Minerals	MSP	Mixed Sulphide Precipitate
HMS	Heavy Mineral Sand	N/A	Not Applicable
HPA	High Purity Alumina	NAIF	North Australian Infrastructure Facility
HPAL	High Pressure Acid Leach	NPS	Nanoporous Silicon
HPMSM	High Purity Manganese Sulphate Monohydrate	NT	Northern Territory
HPQZ	High Purity Quartz	p-CAM	precursor Cathode Active Material
HREE	Heavy Rare Earth Elements	PGE	Platinum Group Elements
HREO	Heavy Rare Earth Oxides – Total of 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	PGM	Platinum Group Metal
HREO %	HREO/TREO × 100	REE	Rare Earth Elements
IRR	Internal Rate of Return	REO	Rare Earth Oxides
IUPAC	International Union of Pure and Applied Chemistry	TBD	To Be Disclosed
		TGC	Total Graphitic Carbon
		TIMA	Tescan Integrated Mineral Analyser
		TPA/tpa	Tonnes Per Annum
		TREO	Total Rare Earth Oxides
		UHPQ	Ultra-high Purity Quartz
		VFB	Vanadium Flow Battery

Criteria

Projects included in this prospectus have been selected based on the following criteria:

- The project involves a critical mineral or strategic material listed by the Australian Government Department of Industry, Science and Resources (DISR).
- The project has reached Pre-Feasibility Study (PFS) stage or later, unless the commodity is under-represented, considered niche, and the available data indicates the project may have significant deposit-scale potential.
- Predominantly projects owned by mid-tier and junior mining and exploration companies.
- Companies featured in this prospectus have consented to inclusion, and the data presented is their own. Inclusion of a project in this prospectus does not constitute an endorsement, recommendation or investment advice by the State of Western Australia.

Weights, grades, concentrations and volumes presented in this prospectus may have been rounded in accordance with standard mathematical reporting practices.

Government Investment initiatives

Government of Western Australia

Program	Amount	Comments
Exploration Incentive Scheme (EIS)	A\$18.5 million per year	Early exploration (co-funding for drilling and geophysics) and acquisition of precompetitive geoscience data.
Critical Minerals Advanced Processing Common-user Facility (CMAP)	A\$200 million (*A\$100 million each)	Western Australia State and *Commonwealth. (Sept 2026; Undergoing feasibility assessment and business case development).
Strategic Industrial Fund	A\$500 million in 2025–26	Total fund to A\$1 billion over 10 years to unlock Strategic Industrial Areas (SIAs) across Western Australia delivering infrastructure to support renewable hydrogen, critical minerals, and other job-creating industries.
Strategic Industrial Areas Rent Scheme	A\$160 million	Open to mid-2028, provides an <i>Option to Lease</i> fee rebate and five-year lease-rent waiver for eligible applicant with project capital expenditure of A\$1 billion or more.

Non-financial incentive scheme

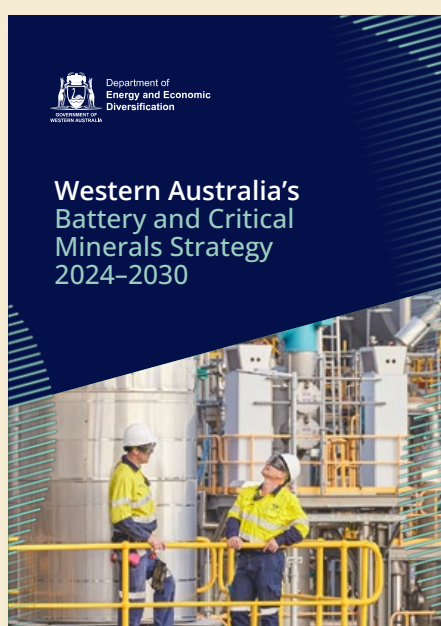
Lead Agency Framework

Significant facilitation support for major projects navigating approvals and government coordination.

Policy framework

Battery and Critical Minerals Strategy 2024–2030

An important overarching strategic framework guiding Western Australia support measures.



Western Australia's Battery and Critical Minerals Strategy 2024–2030

Western Australian Government is seeking to grow the State's participation in global battery supply chains. The strategy is strongly aligned to Australia's Critical Minerals Strategy, published in 2023.

Federal

Program	Amount	Comments
Critical Minerals Facility	A\$5 billion	Loans and equity investments to de-risk and support strategically important critical minerals projects aligned with the Government's Strategy and in Australia's national interest.
Critical Minerals Strategic Reserve	A\$1.2 billion	Secures the supply of vital materials for Australia's economy and national security. Includes A\$1 billion for transactions drawn from the A\$5 billion Critical Minerals Facility, and A\$185 million for selective stockpiling and implementation cost.
Resourcing Australia's Prosperity (RAP)	A\$3.4 billion over 35 years	Supports early exploration, delivering pre-competitive geoscience to accelerate mineral discovery and investment.
Northern Australian Infrastructure Facility (NAIF)	Up to A\$500 million	Allocated from the A\$7 billion NAIF to help finance projects in the Northern Territory, Queensland and Western Australia.

Future Made in Australia Plan		
Program	Amount	Comments
Critical Minerals Facility	A\$5 billion	Loans and equity investments to de-risk and support strategically important critical minerals projects aligned with the Government's Strategy and in Australia's national interest.
National Reconstruction Fund (NRF)	Up to A\$1 billion	Value-addition in resources, processing, refining and using critical minerals domestically. The NRF provides finance in the form of debt, equity and guarantees for projects in Australian economic priority areas with a total fund amount of A\$15 billion.
Critical Minerals Productions Tax Incentive	A\$17.6 billion over 14 years	Ten per cent refundable tax offset on relevant processing and refining cost for Australia's 31 critical minerals. Applicable for up to 10 years per project, for production between 2027–28 and 2039–40.

Project locations, major strategic infrastructure and transport pathways



Upstream Summaries

Mt Clement Antimony Project	15	Aileron Project.....	43
Mt Thirsty Project.....	16	Luni Niobium Project.....	44
Whim Creek Project.....	18	Gonneville Project	46
Halls Creek Project.....	20	Parks Reef PGM Project.....	48
Nifty Copper Complex	22	Jupiter Rare Earth Project	49
Speewah Fluorite Project	24	Gifford Creek Carbonatite Project	50
Mons Project	26	Browns Range Heavy Rare Earths Project.....	51
McIntosh Graphite Project.....	28	Cummins Range Project.....	52
Cyclone Project	29	North Stanmore Project	53
Lake Hope Project	30	Mt Edon Critical Minerals Project.....	54
Pioneer Dome North Project	32	Arrowsmith North Project	55
Manna Lithium Project	33	Muchea Project	56
Mt Marion Project.....	34	Medcalf Project	57
Wodgina Project	35	Pitfield Project.....	58
Pilgangoora Operation.....	36	O'Callaghans Project	59
Tabba Tabba Project.....	38	Mt Mulgine Project	60
Balfour Manganese Field	39	Windimurra Vanadium Project	61
Butcherbird Manganese Project.....	40	The Australian Vanadium Project.....	62
NiWest Nickel-Cobalt Project	41	Victory Bore Vanadium Project	64
Kalgoorlie Nickel Project – Goongarrie Hub	42		

Mt Clement Antimony Project

Black Cat Syndicate Limited (ASX: BC8)

Seeking

Commercialisation options, offtake partners and strategic partners

Project Status	Tenement Status	Capital cost	Primary Commodity
Scoping Study underway	Exploration Licences granted	Scoping Study (completion TBD)	Antimony (Sb)
	Mining Leases granted		Secondary Commodity(s)
	Environmental applications not submitted		Pb, Ag

Project overview

Mt Clement is one of Australia's largest undeveloped antimony deposits. It is a high-grade antimony-silver-lead asset in the Pilbara with an antimony resource of 2.6 Mt @ 1.2 per cent Sb for 26 kt of contained Sb. The project is located only 30 km from the Paulsens gold operations with good access to major roads and ports.

Project details

- Inferred mineral resource of 2.6 Mt for 26 kt of contained antimony.
- High-grade antimony intercepts include 6.90 m @ 2.18 per cent Sb (EHDD25006), 4.20 m @ 1.92 per cent Sb (EHDD25009) and 12.45 m @ 1.15 per cent Sb (EHDD25002).
- The resource remains open in all directions, with a further Resource Definition drill program being planned.
- Early discussions with potential offtake partners in Asia, Europe and the United States (US) have been positive and remain ongoing. Engagement with Austrade has facilitated introductions to several prospective offtake partners. Discussions with Export Finance Australia (EFA) and the Department of Industry, Science and Resources (DISR) have also been positive, with future recognition of Major Project Status already in discussion.
- The project is in the Scoping Study phase with throughputs between 200,000 and 650,000 tpa still being evaluated.

Deposit	Resource Category	Tonnage (Mt)	Grade					Contained Metal				
			Au (g/t)	Cu (%)	Sb (%)	Ag (g/t)	Pb (%)	Au (koz)	Cu (kt)	Sb (kt)	Ag (koz)	Pb (kt)
Western	Inferred	415	2.6	0.4	0.2	76.9	0	37	1.6	0.7	1,026	0
Eastern	Inferred	2,190	0.2	0	1.2	16.7	1.8	16	0	25.8	1,172	39.0
Total	Inferred	2,605						53	1.6	26.5	2,198	39

Contact details

Christian Welke

Phone

+61 449 544 105

Email

cwelke@bc8.com.au

Website

bc8.com.au

Mt Thirsty Project

Conico Ltd (ASX: CNJ) (50 per cent) / Maritana Minerals Ltd (ASX: MRT) (50 per cent)

Seeking

Project finance | Offtake partners | Strategic partners



Project Status	Tenement Status	Capital cost	Primary Commodity
Pre-Feasibility Study completed (2020)	Mining Lease granted	US\$370M (PFS 2020)	Cobalt
Resource Development underway			Secondary Commodity(s) Ni, Mn, Sc

Project overview

Mt Thirsty is situated in the Eastern Goldfields, 16 km from Norseman and is a 50:50 JV between CNJ and MRT, with a JORC Resource of 66.3 Mt containing cobalt, nickel, manganese, and scandium. The laterite resource is situated in the Mt Thirsty Sill and extends to the north onto tenements held by Galileo Mining Ltd (ASX: GAL). A PFS using atmospheric leach was completed in 2020 and a Scoping Study was completed in 2023 based on HPAL but not released.

This study focused on the production of a precursor cathode active material (p-CAM). The project benefits from being close to major roads, rail, power and seaport infrastructure. There is also the potential for nickel sulphides and platinum group elements (PGE) from the deposit.

Project details

- Project scaled up to 1.8 Mtpa feed rate using atmospheric leach.
- 19.1 kt of cobalt and 24.8 kt of nickel as a Mixed Sulphide Product (MSP).
- Study based on JORC 2012 Probable Ore Reserve of 18.8 million dry tonnes at 0.13 per cent cobalt and 0.54 per cent nickel.
- AISC US\$35,000 per tonne contained cobalt.
- Draft Scoping Study based on HPAL was completed in 2023 but not released due to over-reliance on Inferred Resources.

Grade	Cut off Grade (NiEq%)	Dry Tonnage (Mt)	Ni (%)	Co (%)	Mn (%)	Contained Metal					
						Ni (kt)	Co (kt)	Mn (kt)	Ni (kt)	Co (kt)	Mn (kt)
Mt Thirsty Main (MTTM)											
Indicated	0.25	30.2	0.51	0.1	0.69	154	29.3	208.4	154	29.3	208.4
Inferred	0.25	31.9	0.35	0.03	0.24	111.7	9.3	76.6	111.7	9.3	76.6
Total	0.25	62.1	0.43	0.06	0.46	265.7	38.5	284.9	265.7	38.5	284.9
Mt Thirsty North (MTTN)											
Indicated	0.25	0	0	0	0	0	0	0	0	0	0
Inferred	0.25	4.2	0.43	0.05	0.29	18.1	2.0	12.2	18.1	2.0	12.2
Total	0.25	4.2	0.43	0.05	0.29	18.1	2.0	12.2	18.1	2.0	12.2
Total	0.25	66.3	0.43	0.06	0.45	283.7	40.5	297.1	283.7	40.5	297.1



Whim Creek Project

Anax Metals Limited (80 per cent) (ASX: ANX) / Develop Global Limited (20 per cent) (ASX: DVP)

Seeking

Development funding

Project Status	Tenement Status	Capital cost	Primary Commodity
Definitive Feasibility Study completed (2026)	Mining Leases granted	US\$64M (2026 DFS)	Copper
Front-end engineering design underway (2026)	Project fully permitted		Secondary Commodity(s) Zn, Pb, Ag, Au

Project overview

The Whim Creek Project is located on the Northwest Coastal Highway in Western Australia's Pilbara region, approximately 120 km from both Port Hedland and Karratha. Four separate volcanogenic massive sulphide deposits are scheduled for mining; Whim Creek, Mons Cupri, Evelyn and Salt Creek. The project is fully permitted and shovel ready, utilising existing infrastructure from previous oxide copper production. The February 2026 DFS update confirmed a ten-year mine life, average annual production of 13,000 t CuEq over the first eight years from a proposed 400,000 tpa concentrator. With substantial mineral processing infrastructure already in place on the site and over 40 Mt of both oxide and sulphide material located within a 150 km radius, Whim Creek is ideally positioned to be the processing hub for the region.

Project details

- Ideally located in the Pilbara, on Northwest Coastal Hwy, between Port Hedland and Karratha.
- Four separate volcanogenic massive sulphide deposits are scheduled for mining; Whim Creek, Mons Cupri, Evelyn and Salt Creek.
- The DFS confirmed robust project economics, including (100 per cent project basis) a pre-tax NPV7 of A\$501 million, an IRR of 98 per cent, free cash flow of A\$723 million, an estimated capital cost of approximately A\$91 million and a rapid capital payback period of approximately 14 months.
- A shovel ready, fully permitted project, located on granted Mining Leases with substantial existing infrastructure in place.
- With substantial mineral processing infrastructure already in place and over 40 Mt of both oxide and sulphide material located within a 150 km radius, Whim Creek is ideally positioned to be the processing hub for the region.

Table 1: Whim Creek Project Global Copper Dominant Mineral Resources

Deposit	Classification	Tonnage (kt)	Cu (%)	Zn (%)	Pb (%)	Ag (ppm)	Au (ppm)
Combined (Mons Cupri, Salt Creek, Whim Creek, Evelyn)	Measured	990	1.62	1.42	0.61	38	0.28
	Indicated	6,420	1.23	0.73	0.17	13	0.14
	Inferred	1,830	0.96	0.44	0.08	7	0.09
Total Cu Resources		9,240	1.22	0.75	0.20	15	0.15
Contained t/Oz			Cu (t)	Zn (t)	Pb (t)	Ag (oz)	Au (oz)
			112,000	69,000	18,000	4,330,000	43,700

Contact details

Geoff Laing (MD)

Phone

+61 8 6143 1840

Email

glaing@anaxmetals.com.au

Website

anaxmetals.com.au

Table 2: Whim Creek Project Global Zinc Dominant Mineral Resources

Deposit	Classification	Tonnage (kt)	Cu (%)	Zn (%)	Pb (%)	Ag (ppm)	Au (ppm)
Combined (Mons Cupri, Salt Creek, Whim Creek)	Measured	70	0.16	4.56	1.79	53	0.23
	Indicated	1,230	0.40	7.55	2.20	58	0.27
	Inferred	450	0.34	5.07	1.75	27	0.1
Total Zn Resources		1,750	0.37	6.75	2.05	50	0.22
Contained t/Oz			Cu (t)	Zn (t)	Pb (t)	Ag (oz)	Au (oz)
			7,000	118,000	36,000	2,790,000	12,600

Table 3: Ore Reserve Summary

Classification	Deposit	Mine Type	Ore (Mt)	Cu (%)	Zn (%)	Pb (%)	Ag (ppm)	Au (ppm)
Proven	Mons Cupri	Open Pit	1.06	1.46	1.58	0.68	38	0.28
	Subtotal		1.06	1.46	1.58	0.68	38	0.28
Probable	Mons Cupri	Open Pit	1.49	0.83	1.08	0.47	23	0.14
	Whim Creek	Open Pit	0.72	1.54	1.14	0.15	7	0.06
	Evelyn	Underground	0.56	2.04	3.26	0.23	34	0.83
	Salt Creek	Underground	0.79	1.57	6.0	1.83	48	0.27
	Subtotal		3.55	1.33	2.52	0.67	27	0.26
Total Proven and Probable Reserves			4.61	1.36	2.31	0.67	30	0.27

Halls Creek Project

Cobalt Blue Holdings (ASX: COB)

Seeking

Strategic partners | Equity investment | Institutional and retail investors



Project Status	Tenement Status	Capital cost	Primary Commodity
Scoping Study completed (2025)	Mining Leases granted (M80/277 and M80/276)	~US\$50M (est. upfront capital)	Copper
Pre-Feasibility underway			Secondary Commodity(s) Zn, Ag

Project overview

The Halls Creek Project is a brownfield copper–zinc–silver development located approximately 15 km southwest of Halls Creek in Western Australia’s Kimberley region. The project includes the Onedin and Sandiego deposits, situated on granted mining leases within a broader 250 km² tenement package. Together, the deposits host Mineral Resources of 8.9 Mt grading approximately 1.0 per cent copper, 3.7 per cent zinc and 32 g/t silver, containing approximately 89 kt copper, 326 kt zinc and 9.2 Moz silver. Approximately 96 per cent of the resource tonnage is classified as Indicated.

A June 2025 Scoping Study outlined a staged development pathway designed to reduce initial capital requirements and bring forward cash flow, based on a 10.5-year project life, including initial construction. Stage 1 comprises open pit mining and heap-leach processing at Onedin to produce copper metal and zinc sulphate monohydrate. Stage 2 comprises underground mining and flotation processing at Sandiego to produce separate copper and zinc concentrates with silver credits.

Current metallurgical studies are evaluating opportunities to optimise recoveries, recover silver from Stage 1 material and simplify the development pathway.

Project details

- Strategic location: Located 15 km southwest of Halls Creek, with the Onedin and Sandiego deposits situated on granted mining leases near established road and regional infrastructure.
- Lower-emissions power concept: The Scoping Study incorporates a hybrid power system comprising 6 MW of solar generation, battery storage and backup diesel capacity.
- Staged development: The June 2025 Scoping Study outlines a 10.5-year project life, commencing with open pit heap-leach operations at Onedin before transitioning to underground mining and flotation at Sandiego. Estimated upfront capital is approximately US\$47 million.
- Production potential: Scoping Study estimates include total production of approximately 52,400 t copper and 118,900 t zinc, plus 381,300 oz silver recovered in Sandiego concentrates.
- Silver and growth upside: Approximately 3.6 Moz of silver within the Stage 1 production target was excluded from the Scoping Study production and financial estimates. Silver recovery is under evaluation, while the broader 250 km² tenement package provides additional exploration and regional development potential.

Mineral Resources (JORC 2012)	Deposit	Tonnage (Mt)	Cu (%)	Contained Cu (kt)	Zn (%)	Contained Zn (kt)	Ag (g/t)	Contained Ag (Moz)
Note minor rounding errors may have occurred in compilation of these tables.	Onedin (Deposit totals combine separately reported copper and zinc zones. Cut off grades are 0.4% Cu and 1.0% Zn)							
	Indicated	4.8	0.7	33	3.1	151	38	5.9
	Subtotal	4.8	0.7	33	3.1	151	38	5.9
	Sandiego (Deposit totals combine separately reported copper and zinc zones. Cut off grades are 0.8% Cu and 3.0% Zn)							
	Indicated	3.7	1.4	51	4.3	160	27	3.2
	Inferred	0.4	1.3	5	3.8	15	6	0.1
	Subtotal	4.1	1.4	56	4.3	175	25	3.3
	Total	8.9	1.0	89	3.7	326	32	9.2

Contact details

Joel Crane

Phone

+61 2 8287 0660

Email

joel.crane@cobaltblueholdings.com

Website

cobaltblueholdings.com/



Nifty Copper Complex

Cyprium Metals Limited (ASX: CYM)

Seeking

Strategic partnerships | Credit funding | Collaboration with government credit agencies



Project Status	Tenement Status	Capital cost	Primary Commodity
Pre-Feasibility Studies completed (2024)	All permits and approvals granted	Not disclosed	Copper
Cathode production underway (2H 2026)			Secondary Commodity(s)
Expansion Feasibility Studies underway			Co

Project overview

Nifty is one of Australia's most advanced brownfield copper projects, containing a significant JORC Ore Reserve of 83 Mt at 0.9 per cent Cu for 753 kt of contained copper, along with a further 91 kt of copper within existing leach pads.

With a long operating history in both cathode and concentrate production, Nifty benefits from established infrastructure within a Tier 1 jurisdiction, including a 25 ktpa solvent extraction–electrowinning (SXEW) plant, a 2.8 Mtpa concentrator capable of producing 50,000 tpa of copper in concentrate, accommodation village, sealed airstrip, and haul roads. Cyprium's continued investment at Nifty has preserved all key permits and approvals, allowing for the immediate use of key site facilities and restart readiness.

Cyprium is advancing a low-capital, multi-staged restart of operations at Nifty, beginning with the fully funded Phase 1 Cathode Restart, re-leaching of existing heap leach pads to produce copper cathode via the SXEW plant. In Phase 2 the Nifty open pit will be mined, which hosts a shallow oxide resource above a large sulphide orebody. Oxide material from the open pit will be processed via the refurbished SXEW plant. Sulphide material would be processed through the refurbishment and expansion of the 2.8 Mtpa concentrator, supporting 36,000 tpa of Cu-in-conc production over a 20-year mine life.

Project details

- Emerging producer: Cyprium commencing production of copper cathode in 2H 2026 from the Phase 1 Cathode Restart Project.
- PFS highlighted scale and mine life potential of Phase 2: The 2024 PFS defined a large-scale sulphide open pit operation producing an average of 36,000 tpa of copper in concentrate over a 20-year mine life.
- Staged development strategy: Cyprium is executing a capital-light phased redevelopment approach via progressive refurbishment and use of existing infrastructure.
- Existing infrastructure: The Nifty site includes a 25,000 tpa SXEW facility, a 2.8 Mtpa sulphide concentrator historically capable of producing more than 50,000 tonnes of contained copper annually, a power station, accommodation, workshops, and an all-weather airstrip.
- Major regional growth opportunity: Maroochydore contains an Inferred Mineral Resource of approximately 1.6 million tonnes of copper and 84,000 tonnes of cobalt. Maroochydore is a large, shallow and relatively flat-lying sediment-hosted copper-cobalt resource with similar geological characteristics to Nifty.

Nifty Ore Reserves (2024)

	Classification	Tonnage (Mt)	Cu (%)	Cu (t)
Sulphide Stream	Proved	22.7	1.06	239,000
	Probable	60.6	0.85	514,000
	Subtotal	83.8	0.90	753,000

Ore tonnes are rounded to the nearest 100,000; Cu tonnes are rounded to the nearest 1,000; apparent discrepancies are due to rounding errors.

Nifty Mineral Resources (2024)

	Classification	Tonnage (Mt)	Cu (%)	Cu (t)
Oxide, transitional	Measured	2.6	1.02	26,471
	Indicated	17.5	0.74	130,081
	Inferred	0.8	0.70	5,902
	Subtotal	21.0	0.78	162,000
Sulphide	Measured	35.5	0.98	347,610
	Indicated	63.4	0.80	505,685
	Inferred	5.2	0.43	22,479
	Subtotal	104.0	0.84	876,000
	Total	125.0	0.83	1,038,000

The Nifty Mineral Resource Estimate is reported above a 0.25% Cu cut off grade.

Ore tonnes are rounded to the nearest 1,000; total Cu tonnes are rounded to the nearest 1,000; apparent discrepancies are due to rounding errors.



Speewah Fluorite Project

Japan Australia Fluorite Associates Pty Ltd (JAFA) - JV between Tivan Limited (ASX: TVN), ETFS Capital, Sumitomo Corporation and JOGMEC.



Seeking

Not required

Project Status	Tenement Status	Capital cost	Primary Commodity
Feasibility Study completed (2026)	Mining Leases granted	A\$301.3M (pre-production)	Acid-grade fluorspar (acidspars)
Definitive Feasibility Study underway (targeted Q4 2026)	Environmental approvals underway		Secondary Commodity(s)
First production targeted Q3 2028			Metallurgical-grade fluorspar (metspar)

Project overview

The Speewah Fluorite Project is an advanced critical minerals development in Western Australia's East Kimberley, approximately 100 km south of the Port of Wyndham. The Project is positioned to establish a new sovereign Australian supply of acid-grade fluorspar for semiconductors, energy technologies, and other high-value industries. Fluorine was added to Australia's Critical Minerals List in 2023, and there is currently no domestic fluorite production.

Speewah hosts Australia's only JORC-compliant fluorspar resource and is one of the largest high-grade fluorite resources globally. The Feasibility Study completed in March 2026 confirmed technical and economic viability, with open pit mining and onsite processing, producing an average of 149 ktpa of acid-grade fluorspar (acidspars) and 15.5 ktpa of metspar over an initial 10-year life.

The Project is being developed through a joint venture between Tivan, ETFS Capital, Sumitomo Corporation and JOGMEC. Sumitomo Corporation is leading product marketing, with a binding offtake term sheet covering up to 100 per cent of production for export through the Port of Wyndham into international acidspars markets.

Project details

- Australia's first fluorite project: establishing a new sovereign capability and export commodity. Delivered in a landmark Australia–Japan partnership.
- World-class resource: 43.2 Mt @ 8.3 per cent CaF_2 including 9.6 Mt @ 20.6 per cent CaF_2 .
- Production: average 149,000 tpa acidspars (97 per cent CaF_2) plus 15,500 tpa metspar over an initial 10 years, exported via the Port of Wyndham.
- Advanced development: DFS, approvals, Traditional Owner agreements, financing, offtake and operational-readiness workstreams are progressing toward FID.
- Government and strategic support: Federal Major Project status and A\$7.39 million Australian Government critical minerals grant funding, with engagement from EFA and NAIF. Formally recognised as a key critical minerals project under Australia–Japan and Japan-US critical minerals cooperation.

Classification	Tonnage (Mt)	CaF_2 (%)	Contained CaF_2 (kt)	Classification	Tonnage (Mt)	CaF_2 (%)	Contained CaF_2 (kt)
Indicated	27.7	9.2	2,540	Indicated	6.8	21.9	1,501
Inferred	15.5	6.8	1,048	Inferred	2.8	17.4	484
Total	43.2	8.3	3,588	Total	9.6	20.6	1,985

Speewah Fluorite Mineral Resource Estimate, February 2026 (JORC 2012) – 2% CaF_2 cut off.

Inclusive of high-grade component – 10% CaF_2 cut off.



Mons Project

Nimy Resources (ASX: NIM)

Seeking

Offtake partners | Strategic partners



Project Status	Tenement Status	Capital cost	Primary Commodity
Metallurgical test-work underway (2026)	Exploration licences granted	TBD	Gallium
Scoping Study (September 2026)			Secondary Commodity(s) Cu, Ni, PGEs, Zn, Au

Project overview

Nimy Resources is a Western Australian exploration company exploring and developing its recently discovered Mons Greenstone Belt, situated within the world-famous Yilgarn Craton, 370 km northeast of Perth and 140 km north-northwest of Southern Cross, a Tier 1 mining jurisdiction in Western Australia. In November 2025 Nimy Resources delivered a high-grade gallium inferred resource (JORC 2012) of 7.2 Mt @ 102 ppm Ga₂O₃ (70ppm cutoff) and 538 ppm TREO for 740 t gallium contained metal and 3,890 t TREO. Expansion of the resource is targeted with a JORC exploration target published for an additional 26 Mt at 100 ppm Ga₂O₃ and 100 Mt at 710 ppm TREO. Metallurgical test work (initial high-grade concentrate, gallium metal to follow) commenced early 2026, along with a Scoping Study scheduled for completion in September 2026.

The Mons Greenstone Belt offers multi commodity opportunities; Nimy Resources has discovered significant mineralisation within the first four years of exploration including Masson (Magmatic Intrusive Cu–Ni–PGE), Sneaky Squirrel (Volcanogenic Massive Sulphides Cu–Zn–Au) and the June 2026 Corporate James Au prospect (720 m strike of anomalous gold in soil sampling). Large scale Ground EM surveys at Masson and Sneaky Squirrel, and an initial drill campaign at Corporate James, are all scheduled for completion in 2026.

Project details

- The Mons Gallium Project high-grade gallium mineralisation is uniquely hosted within a chlorite schist which outcrops at surface when the majority of the world supply of gallium exists as byproduct from bauxite or zinc mining. The inferred resource is the highest-grade gallium resource published globally, with additional high grade JORC exploration targets identified.
- In June 2026 the Nimy Resources Mons Gallium Project received funding via the Minerals Research Institute of Western Australia (MRIWA) with a co-funded project awarded partnering Nimy Resources with the world class Curtin University (Resources Technology and Critical Minerals Trailblazer team) leading the project in investigating innovative pathways to concentrate, extract and refine gallium ores locally.
- Nimy Resources has membership of the US Defence Base Industry Consortium (DIBC) following participation in the Western Australian Government Critical Minerals Trade Mission delegation (New York and Washington), and a Partner Agreement executed with the Critical Metals for Critical Industries Cooperative Research Centre (DISR, Australian Government).
- Multiple commodities discovered with an aggressive geophysics and drilling exploration program in place 2026, targeting Cu–Ni–PGEs (Masson), Cu–Zn–Au (Sneaky Squirrel) and Au (Corporate James).

Contact details

Luke Hampson

Phone

+61 8 9261 4600

Email

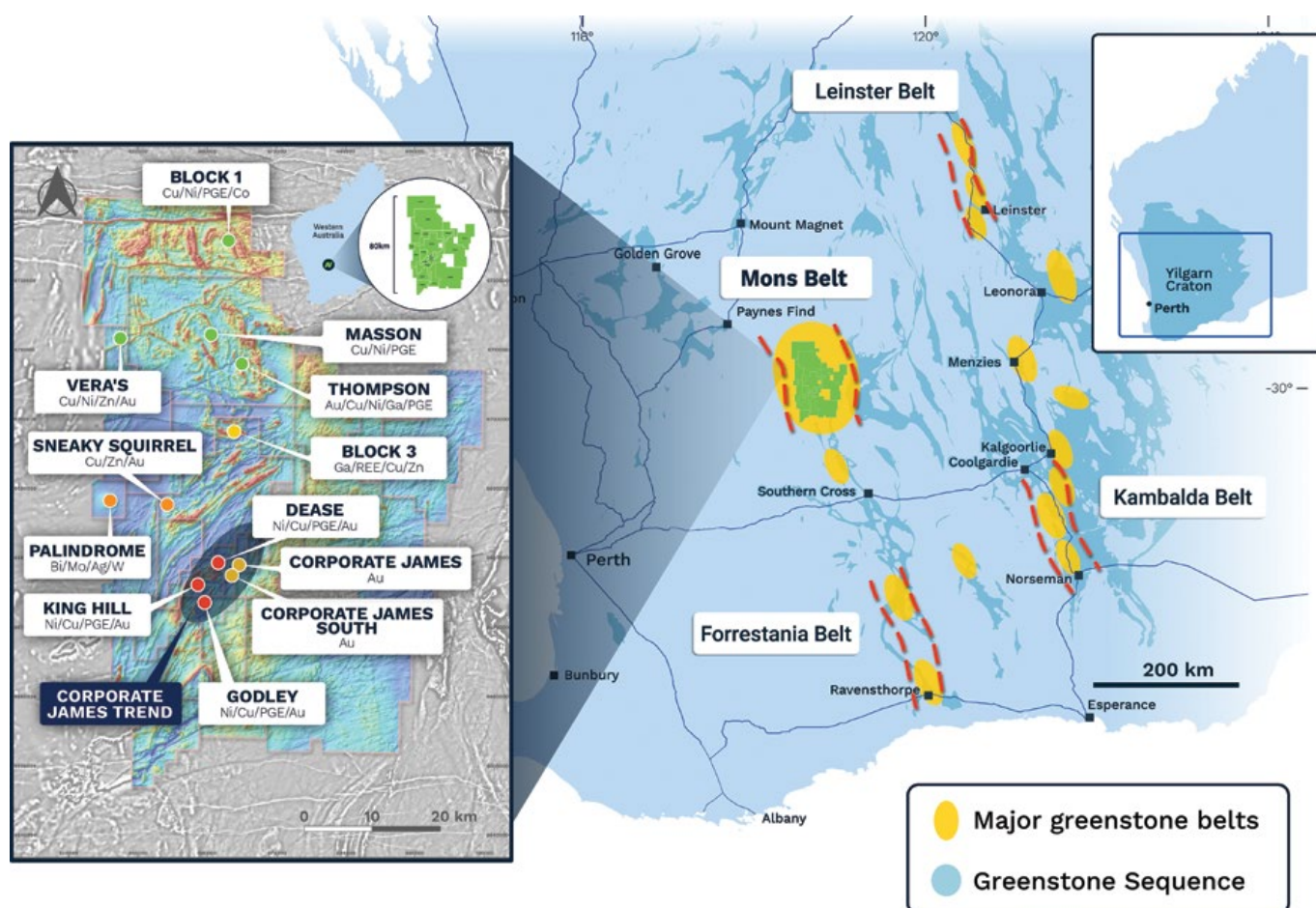
luke.hampson@nimyresources.com.au

Website

nimy.com.au

	Classification MRE tonnage	Tonnage (Mt)	Ga ₂ O ₃ (ppm)	TREO (ppm)	HREO (ppm)	LREO (ppm)	HREO/TREO (%)
Mineral Resources (2025)	Indicated	—	—	—	—	—	—
	Inferred	7.2	102	538	214	324	66.0
	Total	7.2	102	538	214	324	66.0

	Cut off (Ga ₂ O ₃ ppm)	Resource (Mt)	Ga ₂ O ₃ (ppm)	TREO (ppm)	HREO (ppm)	LREO (ppm)
Inferred Mineral Resources (2025)	0	65.8	41	502	213	289
	10	65.8	41	502	213	289
	20	64.3	42	507	215	292
	30	42.6	50	571	247	324
	40	18.5	72	598	253	344
	50	13.4	82	583	244	339
	60	9.5	93	563	231	332
	70	7.2	102	538	214	324
	80	5.4	112	508	193	315
	90	4.0	121	492	183	308
	100	2.9	131	448	163	285



McIntosh Graphite Project

GCM Corporation (ASX: GCM)

Seeking

Offtake partners | Investment



Project Status	Tenement Status	Capital cost	Primary Commodity
Pre-feasibility Study completed (2025).	Sixteen granted tenements held by NH3 Clean Energy and its subsidiaries.	US\$38.9M (PFS 2025)	Graphite
Definitive Feasibility Study underway.			Secondary Commodity(s) Nil

Project overview

The McIntosh Graphite Project is located in Western Australia's Kimberley region and hosts one of Australia's largest flake graphite resources (32.6 Mt @ 4.25 per cent TGC). A PFS completed by GCM in June 2025 demonstrated robust economics for the McIntosh project based on mining and on-site processing of 380 ktpa ore producing ~13.5 ktpa of flake graphite concentrate. The PFS is based on conventional open pit mining and on-site processing via flotation to deliver flake graphite concentrate at ~95–97 per cent TGC and recoveries >90 per cent. McIntosh benefits from significant exploration upside, with an exploration target of 111–157 Mt @ 3.5–5 per cent TGC. The Project is located near key infrastructure, including sealed roads and the Wyndham deep-water port, providing direct access to global export markets.

Project details

- The McIntosh Graphite Project contains a Mineral Resource Estimate (MRE) of 32.6 Mt grading 4.25 per cent total graphitic carbon (TGC), making the McIntosh Graphite Project the 4th largest graphite resource in Australia and one of Australia's most advanced graphite projects, with over A\$15 million spent on drilling and metallurgical test work to date.
- Ore Reserve of 11.1 Mt grading 3.88 per cent TGC, containing 432,101 tonnes graphite, derived from only two of the five known Mineral Resource deposits, all classified as Probable.
- Targeting annual processing of 380,000 tonnes of raw material to produce approximately 13,500 tonnes of flake and micronised graphite concentrate, with a purity of 95 per cent TGC. Proven potential to increase annual production as project and customer relationships mature.
- A pre-tax NPV8 per cent of A\$340M and a post-tax NPV8 per cent of A\$235M.
- IRR pre-tax of 29.6 per cent and post-tax 25.3 per cent.

McIntosh Graphite Project Mineral Resource and Ore Reserves Estimation (JORC Code 2012) 30 June 2025	Classification	Tonnage (Mt)	Graphite (%TGC)	Contained Graphite (kt)
Mineral Resources 2025 (2 per cent and 3 per cent TGC cut off)	Indicated	21.66	4.22	914.15
	Inferred	10.93	4.33	473.12
	Total	32.59	4.25	1,387.27
Ore Reserves 2025 (2 per cent TGC cut off)	Probable	11.13	3.88	432.1
	Total	11.13	3.88	432.1

Contact details

David Eastman

Phone

+61 437 520 040

Email

davideastman@gcmcorporation.com

Website

www.gcmcorporation.com

Cyclone Project

Lost Sands Pty Ltd, a wholly owned subsidiary of Diatreme Resources Limited (ASX: DRX)

Seeking

Offtake partners | Equity | Strategic partners

Project Status	Tenement Status	Capital cost	Primary Commodity
Feasibility Study completed (2018)	Mining Lease granted	~US\$172M	Zirconium
Study update underway	Native Title agreement granted		Secondary Commodity(s)
	Environmental approvals in progress		Ti

Project overview

Lost Sands Pty Ltd (Lost Sands), a subsidiary of Diatreme Resources Limited (Diatreme), discovered the Cyclone Deposit in 2007. Ongoing exploration and bulk sample drilling programs have provided valuable data, enabling the development of the mineral resource and ore reserve estimates. The Mineral Resource Estimate, last updated in April 2017, stands at 203 Mt with a grade of 2.3 per cent heavy minerals. Of this, 77 per cent is Measured, while the remaining 23 per cent is Indicated. The Ore Reserve estimate, updated in June 2016, currently holds 138 Mt with a grade of 2.6 per cent heavy minerals. Zircon dominates both in terms of grade and value. The Ore Reserve also includes the valuable titanium minerals; rutile, leucoxene, HiTi, altered ilmenite, and siliceous Ti-oxide. HiTi and altered ilmenite are planned project products and comprise various proportions of these minerals.

Project details

- Mining lease and primary environmental approvals in place. No competing land use.
- Optimal transport solution can be managed through the standard secondary approvals framework.
- Standard mining method: low strip ratio, relocatable dozer trap and conveyor system.
- Conventional wet concentrator processing using gravity separation.

Category	HM cut off (%)	Material (Mt)	HM (%)	HM (Mt)	Slime ¹ (%)	OS ¹ (%)	Head Grade						Zircon (kt)
							Zircon (%)	Rutile (%)	Leuco (%)	HiTi (%)	Alt Ilm (%)	Si TiOx (%)	
Measured	2	69	3.7	2.58	3.6	3.8	1.06	0.11	0.24	0.88	0.45	0.82	735
Measured	1.5	102	3.1	3.14	3.9	4.4	0.88	0.09	0.20	0.73	0.38	0.67	896
Measured	1	156	2.4	3.81	4.2	5.0	0.69	0.07	0.16	0.58	0.30	0.53	1,079
Indicated	2	13	3.2	0.41	3.8	4.4	0.66	0.07	0.18	1.06	0.55	0.60	83
Indicated	1.5	24	2.5	0.60	4.1	5.0	0.52	0.05	0.12	0.84	0.41	0.46	123
Indicated	1	48	1.9	0.89	4.4	5.1	0.38	0.04	0.09	0.62	0.30	0.34	183
Total	2	82	3.6	2.99	3.6	3.9	1.00	0.10	0.23	0.91	0.47	0.79	818
Total	1.5	126	3.0	3.75	3.9	4.5	0.81	0.08	0.18	0.75	0.38	0.63	1,019
Total	1	203	2.3	4.70	4.2	5.0	0.62	0.06	0.14	0.59	0.30	0.49	1,262
Mineral Assemblage							27%	3%	6%	26%	13%	21%	
Ore reserve													
Probable	0.4	138	2.6	3.52	4.6	5.3	0.72	0.07	0.17	0.59	0.32	0.57	990
Total	0.4	138	2.6	3.52	4.6	5.3	0.72	0.07	0.17	0.59	0.32	0.57	990
Mineral Assemblage							28%	3%	7%	23%	13%	22%	

1. A constant SG of 1.7 has been used to derive material tonnes. Slime refers to material typically <53µm. OS refers to oversize material typically >2mm. Leucoxene (Leuc) – Ti-oxides containing 85–95% TiO₂, HiTi – Ti-oxides containing 70–85% TiO₂, Altered Ilmenite (Alt Ilm) – Ti-oxides containing <70% TiO₂, Si-bearing Ti-Oxide (Si TiOx) – Ti-oxides containing >10% silica-rich Ti minerals. Resources are inclusive of Reserves.

Contact details

Joe Lodge

Phone

+61 404 254 308

Email

j lodge@metallicaminerals.com.au

Website

diatreme.com.au

Lake Hope Project

Impact Minerals Limited (ASX: IPT) (80 per cent)

Seeking

Offtake partners | Strategic partnerships | Project-level equity | Project debt | Downstream processing and qualification partners



Project Status	Tenement Status	Capital cost	Primary Commodity
Pre-Feasibility Study completed (2025)	Mining Lease under application	US\$160.6M pre-production	High Purity Alumina (HPA)
Definitive Feasibility Study underway	Environmental approvals underway		Secondary Commodity(s)
Commercial scale facility targeted (2029)	Traditional Owner agreements underway		Sulphate of potash (SOP)
			Aluminium chloride hexahydrate (ACH)

Project overview

Lake Hope is an advanced HPA development project located approximately 500 km east of Perth. The deposit comprises high-grade alumina hosted within extremely fine-grained evaporite and clay minerals in the upper two metres of the Lake Hope playa system. The shallow, free-digging orebody supports simple surface mining with no blasting, minimal beneficiation and a small environmental footprint.

Ore will be transported to an offsite refinery in the Kwinana Strategic Industrial Area for processing through the patented Playa One Low Temperature Leach sulphuric acid flowsheet, producing 4N (99.99 per cent Al_2O_3) HPA. Test work has demonstrated total contaminants of approximately 41 ppm, equivalent to 99.996 per cent Al_2O_3 .

The June 2025 Pre-Feasibility Study defined a 33-year operation producing 10,000 tpa of HPA following a two-year ramp-up period. The study reported a post-tax NPV10 of US\$722 million, initial capital of US\$161 million, and operating costs of US\$5,860/t before byproduct credits. Recovery of sulphate of potash is expected to reduce operating costs below US\$4,500/t, with additional potential to produce aluminium chloride hexahydrate as an intermediate product.

Project details

- Globally unique orebody: High-grade alumina clay hosted in the upper two metres of a dry salt lake, supporting shallow free-dig mining with no blasting, no crushing and minimal beneficiation.
- Strong project economics: The June 2025 Pre-Feasibility Study defined a 33-year operation producing 10,000 tpa of 4N HPA, with a post-tax NPV10 of A\$1.165 billion and initial capital of A\$259 million.
- Maiden Ore Reserve: Proved and Probable Ore Reserve of 1.7 Mt at 26 per cent Al_2O_3 containing approximately 449,000 t of alumina, converted from a Mineral Resource of 3.5 Mt at 25.1 per cent Al_2O_3 .
- Government support: A\$2.87 million Australian Government CRC-P grant supporting pilot plant development with CPC Engineering and Edith Cowan University, supplemented by Australian R&D Tax Incentive rebates.
- Proprietary processing technology: Patented low-cost, low-emissions process flowsheet demonstrated to produce 4N HPA, with potential sulphate of potash and aluminium chloride hexahydrate byproducts.

Lake Hope HPA Project – JORC 2012 Mineral Resource and Ore Reserve				
	Classification	Tonnage (Mt)	Al_2O_3 (%)	Contained Al_2O_3 (t)
Mineral Resource (2025)	Measured	0.73	25.8	189,000
	Indicated	1.88	25.0	471,000
	Inferred	0.17	23.1	40,000
	Total	3.50	25.1	880,000
Ore Reserves (2025)	Proved	0.61	25.9	159,000
	Probable	1.12	26.0	290,000
	Total	1.70	26.0	449,000

JORC Code 2012. Measured Resource per ASX release 18 November 2024. Resource total per maiden Mineral Resource Estimate, June 2023. Maiden Proved and Probable Ore Reserve per Lake Hope Pre-Feasibility Study, June 2025. Figures rounded; totals may not sum exactly due to rounding.

Contact details

Dr Michael (Mike) Jones

Phone

+61 8 6454 6666

Email

info@impactminerals.com.au

Website

www.impactminerals.com.au



Pioneer Dome North Project

Develop Global Limited (ASX: DVP)

Seeking

Not disclosed



Project Status	Tenement Status	Capital cost	Primary Commodity
Operating mine	All leases and approvals granted	Not disclosed	Lithium DSO
Feasibility Study for Stage 2 underground expansion underway			Secondary Commodity(s)
			Ta

Project overview

The 100 per cent Develop-owned Pioneer Dome North Project is located 130 km south of Kalgoorlie, in the Eastern Goldfields region. The project is well serviced by existing infrastructure including a sealed road, water and gas pipelines, and rail.

Develop commenced open pit construction at the Pioneer Dome Cade Lithium–Tantalum Resource in August 2026, with first DSO sales scheduled for the December 2026 quarter.

During the September 2026 quarter, the company initiated studies for the proposed Stage 2 underground expansion at Pioneer Dome. Develop expects to make a Final Investment Decision on the Pioneer Dome Stage 2 expansion in late 2026, subject to prevailing lithium market conditions.

Develop remains confident in the outlook for the lithium market and demand for its DSO product, supported by ongoing customer engagement and inbound offtake interest. This favourable supply–demand dynamic continues to underpin strong market interest in the DSO product for uncommitted offtake beyond Stage 1 of the project.

Project details

- Pioneer Dome is fully funded as a result of the US\$400M financing and offtake package with global commodities trader Trafigura. This package also includes Develop's Sulphur Springs copper-zinc project in Western Australia's Pilbara region. Trafigura has committed to DSO offtake from Pioneer Dome, with terms including a time and volume-linked floor price and pricing optionality.
- Pioneer Dome is a capital-light, fast-to-market DSO project located within a Tier 1 mining jurisdiction, which will enable Develop to capitalise on the strong lithium market, maximising free cashflow in the process. The Project is scheduled to produce more than 750 ktpa of 1.2 per cent Li₂O DSO that will be shipped from the nearby deep-water port at Esperance.
- The Pioneer Dome Project is a highly prospective, multi-commodity project that hosts several LCT Pegmatite deposits, including the previously mined Sinclair Pegmatite (Cs–Be–Li), along with the Cade-Davy-Heller Li–Ta Pegmatites. The project has exceptional exploration potential with numerous outcropping LCT-style pegmatites already identified.

	Classification	Tonnage (Mt)	Li ₂ O (%)	Ta ₂ O ₅ (ppm)	Fe ₂ O ₃ (%)	Contained Li ₂ O (t)
Pioneer Dome Mineral Resources at 30 June 2026 (using 0.3% Li₂O cut off)	Indicated	8.6	1.23	55	0.46	105,800
	Inferred	2.6	0.92	62	0.55	23,900
	Total	11.2	1.17	57	0.48	129,700

Contact details

Guy Singleton

Phone

+61 8 6389 7400

Email

hello@develop.com.au

Website

www.develop.com.au

Manna Lithium Project

Global Lithium Resources (ASX: GL1)

Seeking

Equity financing | Strategic investment partnerships



Project Status	Tenement Status	Capital cost	Primary Commodity
Definitive Feasibility Study completed (2025)	Mining leases granted	US\$308M (2025 DFS)	Spodumene Concentrate (SC5.5)
Final Investment Decision underway (Q4 2026)	Native title signed		Secondary Commodity(s)
	Mine development proposal approved		DSO Spodumene
	Project approvals/permits submitted		

Project overview

The 100 per cent-owned Manna Lithium Project is located on Kakarra Country, approximately 110 km east of Kalgoorlie in the Eastern Goldfields region. The project hosts a Mineral Resource of 51.6 Mt at 1.00 per cent Li_2O and an Ore Reserve of 19.4 Mt at 0.91 per cent Li_2O . The December 2025 DFS outlined an average nameplate production of approximately 236,000 tpa of 5.5 per cent Li_2O spodumene concentrate over a 14.3-year mine life. GL1 has agreed to acquire the Nova-Bollinger Operation, approximately 170 km by road from Manna, including an existing 1.8 Mtpa processing plant, power station, accommodation camp and associated infrastructure. The acquisition has the potential to materially reduce development capital and accelerate production. Manna ore is planned to be transported to Nova for crushing, sorting and processing, with products exported through the port of Esperance.

Project details

- 100 per cent-owned, advanced-stage hard-rock lithium project located on Kakarra Country, approximately 110 km east of Kalgoorlie, Western Australia.
- Mineral Resource of 51.6 Mt at 1.00 per cent Li_2O and Ore Reserve of 19.4 Mt at 0.91 per cent Li_2O .
- December 2025 DFS supports a 14.3-year mine life and nameplate production of approximately 236,000 tpa of SC5.5 spodumene concentrate.
- Proposed Nova-Bollinger acquisition provides an existing 1.8 Mtpa processing plant and infrastructure, with potential to materially reduce capital expenditure and accelerate production.
- The funding strategy is advanced, with 70 per cent of production contracted and a US\$75M Lopal prepayment facility committed, subject to positive FID.

Mineral Resources				
Project Name	Category	Tonnage (Mt)	Li_2O (%)	Ta_2O_5 (ppm)
Manna	Indicated	32.9	1.04	52
	Inferred	18.7	0.92	50
	Total	51.6	1.00	52
Ore Reserves				
Project Name	Category	Tonnage (Mt)	Li_2O (%)	Li_2O (t)
Manna Open Cut	Proved	–	–	–
	Probable	14.4	0.93	133,920
	Subtotal	14.4	0.93	133,920
Manna Underground	Proved	–	–	–
	Probable	5.0	0.84	42,000
	Subtotal	5.0	0.84	42,000
Combined Total Reserves		19.4	0.91	175,920

Contact details

Dr Dianmin Chen

Phone

+61 8 6103 7488

Email

info@globallithium.com.au

Website

www.globallithium.com.au

Mt Marion Project

MML JV (50 per cent Mineral Resources Limited (ASX: MIN) / 50 per cent Ganfeng Lithium Group Co)



Seeking

Not required

Project Status	Tenement Status	Capital cost	Primary Commodity
In operation since 2016 with multiple expansions and optimisations	All approvals and leases granted	N/A	Lithium Spodumene
			Secondary Commodity(s)
			Nil

Project overview

Mt Marion is located 70 km south of Kalgoorlie in the West Australian Goldfields. There is extensive infrastructure already on site including multiple open pits, waste dumps, a ROM pad, tailings storage facilities, workshops, offices, stores, grid and diesel power generation, an underground mine portal, and a FIFO camp accommodating up to 500 people. In 2024 the crushing and dense media separation plant was expanded to a capacity of 500,000 tpa SC6 spodumene concentrate, which is trucked to Esperance and shipped to China.

While Mt Marion hosts significant open-pit reserves, mineralisation also extends at depths more economically suited to underground mining. Mineral Resources commenced development of an underground exploration decline in 2024. However, in December 2024 this was placed into care and maintenance due to market conditions. Development is scheduled to recommence in Q1 FY27 with two in-pit portals.

Construction of a flotation plant is progressing, with commissioning planned for Q2 FY28.

Project details

- The project is operated by MinRes under a life-of-mine, build, own, operate, Mining Services Agreement.
- 75 per cent of tenure still unexplored, with plans to target both near mine low strip and underground extensions.
- FID approved and work underway for a flotation plant to lift product by 100,000 tpa SC6 as well as product specification to an average 5 per cent with a aim to begin commissioning Q2 FY28.
- FID approved to recommence underground mining and development beginning Q1 FY27 with award of services contract to Macmahon Holdings.
- MinRes Air is used to transport the operational workforce from Perth to Kalgoorlie.

	Classification	Tonnage (Mt)	Li ₂ O (%)
Mineral Resource (2026)	Measured	–	–
	Indicated	54.7	1.4
	Inferred	11.4	1.1
	Total	66.1	1.3
Ore Reserves (2026)	Proved	0.3	1.2
	Probable	35.4	1.4
	Total	35.7	1.4

Contact details

Kelly Chalwell

Phone

+61 448 806 468

Email

kelly.chalwell@mrl.com.au

Website

www.mineralresources.com.au

Wodgina Project

MARBL JV (50 per cent Mineral Resources Limited (ASX: MIN) / 50 per cent Albemarle)

Seeking

Not required



Project Status	Tenement Status	Capital cost	Primary Commodity
Operating since 2010, progressing studies for mining and processing capabilities	All approvals and leases granted	N/A	Lithium Spodumene
			Secondary Commodity(s)
			Nil

Project overview

Located 120 km south of Port Hedland in the West Australian Pilbara region. Wodgina forms part of an unincorporated joint venture between MinRes (50 per cent) and leading battery chemicals producer Albemarle Corporation (50 per cent). MinRes manages all operations at Wodgina, from exploration through to mining and processing. The major infrastructure on site includes:

- open pit mine, waste dumps, ROM pad and tailings storage facilities.
- crushing and processing plant via flotation concentrator.
- workshops, offices, gas-fired power generation and bore fields.
- FIFO camp that can accommodate up to 900 people.

Processing capacity at least 750,000 tpa of SC6 product with a target grade of 5.5 per cent. Concentrate is trucked to Port Hedland and shipped to China.

While Wodgina has significant open-pit reserves there are future opportunities to mine ore at depth via underground mining methods which are being assessed along with undertaking PFS level studies looking at options to expand the existing processing facility.

Project details

- Wodgina is one of the world's largest known hard-rock lithium deposits.
- Main ore body open at depth, with numerous other untested targets on tenure.
- Wodgina is ramping up to full production rates and is expected to remain competitive across lithium price cycles.
- MinRes' share of concentrate sales are unencumbered with all volumes sold at spot price.
- MinRes Air is used to transport the operational workforce from Perth and Brisbane to the mine site.

	Classification	Tonnage (Mt)	Li ₂ O (%)
Mineral Resource (2026)	Measured	–	–
	Indicated	182.1	1.2
	Inferred	35.3	1.2
	Total	217.4	1.2
Ore Reserves (2026)	Proved	0.4	1.2
	Probable	164.3	1.2
	Total	164.7	1.2

Contact details

Kelly Chalwell

Phone

+61 448 806 468

Email

kelly.chalwell@mrl.com.au

Website

www.mineralresources.com.au

Pilgangoora Operation

PLS Group Limited (ASX: PLS)

Seeking

Offtake partners | Strategic partners



Project Status	Tenement Status	Capital cost	Primary Commodity
Operating	Mining Lease granted	P2000 CAPEX US\$1.2B (July 2024)	Spodumene Concentrate
P2000 Expansion feasibility underway	Regulatory approvals in place		Secondary Commodity(s) Ta

Project overview

The 100 per cent-owned flagship Pilgangoora Operation is located 140 km southeast of Port Hedland, in the Pilbara region, on Nyamal and Kariyarra Country. Pilgangoora is the world's largest independently owned hard rock lithium operation, supplying approximately 9 per cent of global lithium demand. Pilgangoora is home to the world's largest lithium ore sorter and has the capacity to produce up to 1 Mtpa of spodumene concentrate.

Following a substantial resource upgrade in 2023, PLS completed a Pre-Feasibility Study which determined that production capacity at the company's 100 per cent owned Pilgangoora Operation could be expanded to more than 2 Mtpa. Such an expansion is expected to result in the first ten years of annual production averaging approximately 1.9 Mtpa, with production of more than 2 Mtpa over the first six years after ramp up. The potential expansion, named the P2000 Project, would further extend PLS' position as one of the largest pure play lithium producers globally. The timing of the potential expansion is subject to successful outcomes of the feasibility study due in the December Quarter of FY27.

Project details

- A Western Australian ASX-listed company with a market capitalisation of more than US\$14B, PLS is the world's largest independent supplier of hard-rock lithium globally and a material supplier of tantalum.
- PLS' flagship 100 per cent-owned Pilgangoora operation in Western Australia has a mine life of 31 years with an installed capacity of approximately 1 Mtpa of spodumene concentrate.
- PLS' chemicals joint venture with POSCO in South Korea, producing battery-grade lithium hydroxide, is one of the only western-aligned facilities directly supplying American and Korean battery supply chains at a commercial scale.
- During FY26, PLS opened Australia's first mine-site lithium mid-stream plant at Pilgangoora with Australian technology company, Calix to commercialise proprietary all-electric calcination technology for lithium phosphate production.
- PLS is actively progressing the near-term potential to double lithium capacity at Pilgangoora through a feasibility study of the P2000 expansion project with outcomes expected in the FY27 December Quarter.

		Classification	Tonnage (Mt)	Li ₂ O (%)	Ta ₂ O ₅ (ppm)	Fe ₂ O ₃ (%)
Mineral Resources using 0.2% Li ₂ O cut off (2025)	In situ (≥0.2% Li ₂ O)	Measured	18	1.33	111	0.41
		Indicated	349	1.29	121	0.54
		Inferred	70	1.25	134	0.58
		Subtotal	436	1.29	122	0.54
	Stockpiles (≥0.2% Li ₂ O)	Measured	1	1.07	113	0.69
		Indicated	8	0.93	83	3.37
		Inferred	–	–	–	–
		Subtotal	9	0.95	87	3.04
	Pilgangoora	Measured	19	1.31	111	0.43
		Indicated	356	1.29	120	0.60
		Inferred	70	1.25	134	0.58
		Subtotal	445	1.28	122	0.59

		Classification	Tonnage (Mt)	Li ₂ O (%)	Ta ₂ O ₅ (ppm)	Fe ₂ O ₃ (%)
Ore Reserve using 0.3% Li ₂ O cut off (2025)	In situ (≥0.2% Li ₂ O)	Proved	10.3	1.28	127	1.03
		Probable	188.1	1.18	101	1.01
		Total	198.4	1.18	103	1.01
	Stockpiles (≥0.2% Li ₂ O)	Proved	1.1	1.07	113	0.69
		Probable	7.7	0.93	83	3.37
		Total	8.8	0.95	87	3.04
	Pilgangoora	Proved	11.4	1.26	125	1.00
		Probable	195.8	1.17	100	1.10
		Total	207.2	1.17	102	1.10

**Contact details**

Jackie Oates

Phone

+61 411 584 377

Email

jackie.oates@pls.com

Website

www.pls.com

Tabba Tabba Project

Wildcat Resources Limited (ASX: WC8)

Seeking

Strategic partners | Government support | Equity | Offtake partners



Project Status	Tenement Status	Capital cost	Primary Commodity
Pre-Feasibility Study completed (2025)	Mining Leases granted	US\$485M (PFS 2025)	Lithium
Definitive Feasibility Study underway (due 2027)	Environmental approvals submitted		Secondary Commodity(s) Ta

Project overview

The Tabba Tabba Project is an advanced lithium and tantalum development project located on granted mining leases, approximately 80 km by road from Port Hedland. Located near the Pilgangoora and Wodgina lithium operations, Tabba Tabba benefits from an established mining region, infrastructure, technical expertise and concentrate supply chains.

A PFS completed in the first half of the 2025–26 financial year demonstrated a technically and financially robust development opportunity. Wildcat is now advancing a DFS targeting larger, earlier and more efficient development, with first production targeted for 2028 calendar year. The DFS is evaluating bringing forward processing capacity, optimising mine schedules, infrastructure and haulage, and incorporating the Chewy, Han, Hutt and Tabba Tabba deposits alongside Leia and Luke. The development is planned to produce spodumene, petalite and tantalum concentrates.

Tabba Tabba has a JORC (2012) Mineral Resource Estimate of 74.1 Mt at 1.0 per cent Li_2O . Wildcat has also discovered lithium mineralisation at Bolt Cutter, 10 km from Tabba Tabba, and holds highly prospective surrounding tenure, providing potential for further resource growth and additional production or mine-life extensions.

Project details

- Wildcat holds highly prospective tenure surrounding Tabba Tabba and has identified lithium mineralisation at nearby Bolt Cutter Central, providing potential for further discoveries and regional resource growth.
- Indicative project economics include a post-tax NPV of approximately A\$1.2 billion, post-tax free cash flow of A\$3.2 billion and a 23 per cent IRR at a spodumene price of US\$1,384/t. Estimated project development capital is A\$687 million.
- Government critical minerals funds form part of the funding strategy, alongside evaluation of project debt, equity funding and strategic offtake partnerships.
- The PFS outlined the following production targets:
 - Stage 1: 265 ktpa of Spodumene Concentrate 5.5 per cent Li_2O .
 - Stage 2: 595 ktpa of Spodumene Concentrate 5.5 per cent Li_2O .

	Classification	Tonnage (Mt)	Li_2O (%)	Li_2O (t)
Mineral Resources (2024)	Indicated	70.0	1.01	709,100
	Inferred	4.1	0.76	31,100
	Total	74.1	1.00	740,200
Ore Reserves (2025)	Probable	46.3	0.99	456,000
	Total	46.3	0.99	456,000

Contact details

Ajanth Saverimutto

Phone

+61 8 6169 1433

Email

info@wildcatresources.com.au

Website

wildcatresources.com.au

Balfour Manganese Field

Black Canyon Ltd (ASX: BCA)

Seeking

Offtake partners | Strategic partnerships

Project Status	Tenement Status	Capital cost	Primary Commodity
Scoping Study completed (2024)	Exploration licences granted	US\$35–65M	Manganese ore
Pre-Feasibility underway	Mining licence under application		Secondary Commodity(s)
			Nil

Project overview

Black Canyon has consolidated a significant land holding over 2,000 km² in the underexplored Balfour Manganese Field (BMF) and across the Oakover Basin in the East Pilbara.

The company also holds several exploration licences that are either 100 per cent owned or held under joint venture. A Global Mineral Resource (Measured, Indicated and Inferred) of 315 Mt @ 10.5 per cent Mn has been defined across the BMF projects with almost 87 per cent of this resource in the Measured and Indicated categories. These are the largest manganese resources in Western Australia and the second largest in Australia. Downstream processing has been completed on test samples from the BMF projects and produced HPMSM.

Project details

- Large-scale greenfields Mn discovery in the East Pilbara.
- Outcropping and shallow, with most of the mineralisation less than 20 m from surface.
- Potential for beneficiated upgrades from in situ grades of 10–32 per cent Mn using dense media separation.
- Projects have the potential for long term supply of manganese oxide over multiple decades.
- The company has produced HPMSM from its manganese ore products.

Global Mineral Resources across the Balfour Manganese Field, 22 Oct 2025

Deposit	Mineral Resource Category	Material (Mt)	In situ Mn (Mt)	Mn (%)	Fe (%)	Si (%)	Al (%)
FB3	Measured	52	5.5	10.5	10.4	16.9	4.3
LR1	Measured	47	4.9	10.3	8.4	16.7	4.6
Total	Measured	100	10.4	10.4	9.4	16.8	4.4
KR1	Indicated	79	7.8	10.0	7.9	18.0	5.4
KR2	Indicated	23	2.6	11.5	10.7	19.2	5.1
FB3	Indicated	63	6.3	10.0	9.6	16.8	4.4
LR1	Indicated	8	0.9	11.3	9.4	6.9	1.8
Total	Indicated	173	17.7	10.2	9.0	17.2	4.8
KR2	Inferred	2	0.3	11.1	11.0	19.4	6.0
Balfour East	Inferred	32	3.9	11.9	8.5	18.6	4.9
Damsite	Inferred	7	0.9	12.1	9.6	17.2	4.2
Total	Inferred	42	5.0	11.9	8.9	18.4	4.9
Grand Total		315	33.1	10.5	9.1	17.2	4.7

Mineral resources reported at a cut off grade of 7% Mn. Appropriate rounding has been applied. Flanagan Bore (FB) deposits, are 75% owned by Black Canyon.

Contact details

Brendan Cummins

Phone

+61 400 799 756

Email

Brendan.cummins@blackcanyon.com.au

Website

www.blackcanyon.com.au

Butcherbird Manganese Project

Element 25 Limited (ASX: E25, OTQCX: ELMTF)

Seeking

Debt equity | Project level equity | Offtake partners for the Louisiana HPMSM Project.



Project Status	Tenement Status	Capital cost	Primary Commodity
Under construction (Commissioning Scheduled Q1 CY 2027)	Mining Lease granted	US\$50M (2026) Butcherbird	Manganese Concentrate
			Secondary Commodity(s) Si, Fe, HPMSM

Project overview

The Butcherbird Manganese Project, owned and operated by Element 25 Limited, is a strategically important manganese operation in Western Australia and a cornerstone of the company's long-term growth strategy. The project is being advanced through the Butcherbird Expansion Project (BBX), which is designed to increase manganese concentrate production capacity to approximately 1.1 Mtpa. The expansion includes key processing enhancements such as the introduction of a mineral sizer for primary crushing, a dense media separation (DMS) drum for final beneficiation, and the addition of a tailings screen and thickener.

Engineering and procurement activities are well advanced, with major equipment packages ordered and construction activities progressing towards commissioning in Q1 2027.

Importantly, Butcherbird is expected to provide secure, long-term manganese feedstock for Element 25's planned high purity manganese sulphate monohydrate (HPMSM) refinery in Louisiana, USA. Through this strategy, the project forms part of an emerging vertically integrated critical minerals supply chain designed to supply battery-grade manganese materials to North American electric vehicle and energy storage markets. The combination of a large-scale Australian manganese resource, planned downstream processing capability and strategic industry partnerships positions Butcherbird as a key supplier to future critical minerals supply chains.

Project details

- Large, long-life manganese resource base: Butcherbird hosts a Mineral Resource of 274.2 Mt at 10.00 per cent Mn and an Ore Reserve of 101.4 Mt at 10.36 per cent Mn with current reserves supporting 18 years of manganese concentrate production.
- The Butcherbird Expansion Project is designed to increase manganese concentrate production capacity to approximately 1.1 Mtpa.
- Australian Government support: NAIF support of up to A\$50 million senior debt financing has been referenced for the Butcherbird Expansion Project in prior E25 materials.
- Strategic downstream relevance: Butcherbird manganese concentrate can support Element 25's planned Louisiana HPMSM strategy, with the Louisiana project designed to produce 65,000 tpa of battery-grade HPMSM.

	Classification	Tonnage (Mt)	Mn (%)	Si (%)	Fe (%)	Al (%)
Mineral Resources (2025)	Measured	13.0	11.3	20.5	11.5	5.7
	Indicated	116.2	10.1	21.0	11.4	6.0
	Inferred	145.2	9.8	20.6	11.5	5.9
	Total/Average %	274.2	10.0	20.8	11.5	5.9
Ore Reserves (2025)	Proved	11.9	11.8			
	Probable	89.5	10.2			
	Total/Average %	101.4	10.4			

Contact details

Justin Brown

Phone

+61 8 6375 2525

Email

admin@e25.com.au

Website

www.element25.com.au

NiWest Nickel-Cobalt Project

Alliance Nickel Limited (ASX: AXN)

Seeking

Offtake partners | Equity investment | Strategic partners | Project finance | Debt finance



Project Status	Tenement Status	Capital cost	Primary Commodity
Definitive Feasibility Study completed (2024)	Mining Lease granted	US\$1.65B (pre-production) (DFS 2024)	Nickel Sulphate
Final Investment Decision underway	Environmental approvals under assessment	Current exchange rate ~US\$1.07B	Secondary Commodity(s) Co

Project overview

The NiWest Nickel-Cobalt Project is a high-grade undeveloped nickel-cobalt laterite deposit located approximately 50 km southeast of Leonora in the North-Eastern Goldfields, immediately adjacent to Glencore's operating Murrin Murrin nickel-cobalt operation. The project is held 100 per cent through the wholly owned subsidiary NiWest Pty Ltd and benefits from established regional infrastructure including sealed roads, rail, gas pipelines and proximity to ports at Esperance and Fremantle. Alliance Nickel's November 2024 Definitive Feasibility Study confirmed a robust, long-life operation producing battery-grade nickel and cobalt sulphate via conventional open pit mining and low-capital heap leaching. Ongoing metallurgical test work is evaluating vat leaching as a potential optimisation to further reduce capital intensity.

NiWest hosts one of Australia's highest-grade undeveloped nickel laterite resources and is positioned to supply Class 1 nickel and cobalt products into the global EV battery supply chain.

Project details

- 35-year processing life comprising 27 years of primary higher-grade ore mining followed by eight years of processing previously mined low-grade stockpiles. Nameplate processing rate 2.3 Mtpa (maximum 2.5 Mtpa).
- Robust November 2024 DFS delivers post-tax NPV8 of A\$2.2 billion, post-tax IRR of 17.6 per cent, five-year payback from first production and first-quartile AISC of US\$4.84/lb nickel over the first 12 years.
- Average annual production of approximately 20,000 tonnes nickel and 1,600 tonnes cobalt (as battery-grade sulphates) over the first 12 years; 35-year processing life.
- Federal Major Project Status granted in May 2024.

Mineral Resource Estimate – NiWest Project (JORC 2012, 0.8 per cent Ni cut off, November 2023)

Classification	Tonnage (Mt)	Ni (%)	Co (%)	Contained Ni (kt)	Contained Co (kt)
Measured	17.77	1.070	0.1	190.0	12.2
Indicated	58.04	1.060	0.1	615.0	42.4
Inferred	17.59	0.940	0.1	166.0	10.6
Total	93.40	1.040	0.1	971.0	65.2

Notes: >83% of the Mineral Resource is classified as Measured + Indicated. Contained metal rounded. Source: Alliance Nickel ASX announcement dated 14 November 2023.

Ore Reserve Estimate – NiWest Project (JORC 2012, 0.5 per cent Ni cut off, November 2024 DFS)

Classification	Tonnage (Mt)	Ni (%)	Co (%)	Contained Ni (kt)	Contained Co (kt)
Probable	84.7	0.94	0.06	800	51
Total	84.7	0.94	0.06	800	51

Notes: Ore Reserve is classified entirely as Probable under JORC 2012. Contained metal figures are approximate (rounded). Source: Alliance Nickel ASX announcement dated 21 November 2024 (DFS and Ore Reserve Update). The Ore Reserve is reported at a 0.5% Ni cut off grade.

Contact details

Paul Kopejtka

Phone

+61 8 6182 2718

Email

info@alliancenicel.au

Website

www.alliancenicel.au

Kalgoorlie Nickel Project – Goongarrie Hub

Ardea Resources Limited (ASX: ARL) (65 per cent) / Sumitomo Metal Mining Company and Mitsubishi Corporation (35 per cent)

Seeking

Offtake partners | Equity and debt funding | Export credit agencies assistance | Strategic partners



Project Status	Tenement Status	Capital cost	Primary Commodity
Pre-Feasibility Study completed (2023)	Mining Leases granted	US\$2.05B (PFS 2023)	Nickel
Definitive Feasibility Study underway (Q4 2026)	EPA referral (2026)		Secondary Commodity(s) Co, Sc, Mg, REE

Project overview

The 2023 Goongarrie Hub PFS confirmed the project's status as one of the world's largest, lowest-cost sources of battery materials. Mining leases granted and expanded environmental baseline surveys to be finalised in 2027 for EPA referral. Mining and Heritage Protection Agreement negotiations with Traditional Owner groups have commenced. In April 2024, ARL selected Sumitomo Metal Mining and Mitsubishi Corporation as its development partners, who are earning a 50 per cent interest in the Goongarrie Hub at Final Investment Decision (FID).

The Goongarrie Hub is a globally significant nickel-cobalt project in the well-established Kalgoorlie mining district, with access to extensive mining and transport infrastructure. Low strip ratio open pit mining will feed 3.5 Mtpa goethite dominated ore into two high-pressure acid leach autoclaves over a 40+ year life. ARL's PFS considered proven hydrometallurgical processing to produce a mixed Ni/Co hydroxide precipitate (MHP). Power will be generated utilising the waste steam from the on-site acid plant, reducing CO₂ emissions.

The project DFS commenced in May 2024 and is assessing a switch to a higher purity mixed sulphide precipitate (MSP) final product. The Goongarrie Hub is part of ARL's greater Kalgoorlie Nickel Project (KNP), the largest nickel-cobalt project in the developed world providing optionality to develop multiple processing hubs and expand production. Ardea also controls 20 km of strike at Kalpini that is highly prospective for primary nickel sulphides and other critical minerals.

Project details

- Broad project support through the Australia–Japan Joint Statement, Japan–US Critical Minerals Project Cooperation Framework, Designated Major Project Status and Lead Agency Status, Investor Front Door inclusion, and conditional A\$1 billion equivalent funding support from Export Finance Australia and US EXIM.
- Sumitomo currently operating successful hydrometallurgical (high pressure acid leach (HPAL)) plants in the Philippines with decades of operating experience; Mitsubishi with decades of mining experience internationally and in Australia.
- Planned production targets of 30 ktpa nickel and 2 ktpa cobalt.
- Project adjacent to major highway, roads and rail. Close to gas pipeline. Ports in Esperance and Fremantle/Kwinana may be utilised.
- Operating in a Tier 1 mining jurisdiction 70 km north of the major mining hub of Kalgoorlie-Boulder with high ESG standards.

Kalgoorlie Nickel Project (KNP) Nickel and Cobalt Mineral Resource Estimate based on a 0.5 per cent Ni cut off grade

	Resource Category	Tonnage (Mt)	Ni (%)	Co (%)	Contained Metal	
					Ni (kt)	Co (kt)
KNP Goongarrie Hub Total	Measured	18.2	0.94	0.085	171	15
	Indicated	276.5	0.70	0.046	1,923	127
	Inferred	289.3	0.67	0.037	1,951	108
	Total	584.0	0.69	0.043	4,044	250

Contact details

Alex Mukherji

Phone

+61 8 6244 5136

Email

amukherji@ardearesources.com.au

Website

www.ardearesources.com.au

Aileron Project

Encounter Resources Limited (ASX: ENR)

Seeking

Potential offtakers | Strategic partners | Equity investors

Project Status	Tenement Status	Capital cost	Primary Commodity
Inferred Mineral Resource Estimate completed (2025)	Exploration licences granted	TBD	Niobium
Commenced project development studies	Mining Lease under application		Secondary Commodity(s) REE, Cu, Au

Project overview

Encounter Resources is advancing the Aileron Project, a globally significant niobium discovery in the emerging West Arunta province of Western Australia. The Aileron Inferred Resource has grown to 120 Mt @ 0.77 per cent Nb₂O₅, containing a high-grade resource of 26 Mt @ 1.7 per cent Nb₂O₅, providing a strong foundation for a potential long-life, high-grade mining operation. Encounter received the 2025 AMEC Prospector Award for the Aileron niobium-REE discovery.

The company is also advancing an extensive portfolio of 100 per cent-owned projects, located in some of Australia's most prospective mineral belts, focused on the discovery of major copper/gold deposits. Encounter's strategy is centred on high-impact mineral discovery in Tier 1 jurisdictions, leveraging strong technical capability and a proven track record of attracting leading industry partners.

Project details

- Long-life inferred resource base – 120 Mt @ 0.77 per cent Nb₂O₅, including 26 Mt @ 1.7 per cent Nb₂O₅.
- Moving towards development – metallurgy similar to existing operations, studies and approval workstreams underway.
- District scale exploration upside – approximately 1,600 km² of high yielding tenure, multiple rigs testing targets systematically at speed.
- New world-class niobium province – first drillhole 2020, with numerous untested prospects to be drilled, fresh-rock niobium, REE and copper–gold potential.
- Memorandum of Understanding (MoU) signed in May 2026 with Echion Technologies Ltd and Switch Technologies Pty Ltd to collaborate on development of an integrated lithium-niobium battery industry in Australia.

	Cut off (% Nb ₂ O ₅)	Resource (Mt)	Nb ₂ O ₅ (%)	Contained Nb ₂ O ₅ (kt)	TREO (%)	Contained TREO (kt)
Inferred Mineral Resources (2026)	0.25	120	0.77	919	0.36	433
	1.00	26	1.7	430	0.56	146



Contact details

Will Robinson

Phone

+61 8 9486 9455

Email

will.robinson@enrl.com.au

Website

www.enrl.com.au

Luni Niobium Project

WA1 Resources Ltd (ASX: WA1)

Seeking

Offtake partners | Strategic partners | Institutional equity



Project Status	Tenement Status	Capital cost	Primary Commodity
Pre-Feasibility Study underway (due Q4 CY2026)	Mining Lease submitted	TBD	Niobium
			Secondary Commodity(s)
			Nil

Project overview

WA1 Resources' 100 per cent-owned Luni Niobium Project is a globally significant undeveloped niobium deposit located in Western Australia's West Arunta region. Luni hosts a 220 Mt Mineral Resource at 1.0 per cent Nb₂O₅, including 93 Mt at 1.32 per cent Nb₂O₅ in the Indicated category, and a high-grade subset of 56 Mt at 2.3 per cent Nb₂O₅.

Luni combines exceptional scale and grade with favourable mineralogy and a conventional processing pathway. Extensive metallurgical testwork has demonstrated beneficiation through two-stage flotation, followed by refining and conversion into ferroniobium end product. WA1 has also demonstrated the ability to produce niobium oxide, providing flexibility to optimise the project's ultimate product mix, offtake strategy and funding pathway.

The project is strategically positioned within a highly concentrated global niobium market, where supply is dominated by a small number of producers and niobium is recognised as a critical mineral across major economies. Luni has grown from a major greenfield discovery into one of Australia's most significant emerging critical minerals projects, with the potential to establish the first new, primary source of global niobium supply in over 50 years. WA1 is well funded and is systematically advancing technical, permitting and development workstreams toward a PFS targeted for Q4 CY2026.

Project details

- Tier-1 niobium resource: Luni is a globally significant niobium deposit in Western Australia, with a 220 Mt Mineral Resource at 1.0 per cent Nb₂O₅, including 93 Mt at 1.32 per cent Nb₂O₅ Indicated and a high-grade subset of 56 Mt at 2.3 per cent Nb₂O₅.
- High-grade, conventional development opportunity: Luni combines exceptional scale and grade with favourable mineralogy and a conventional processing pathway, substantially de-risked through extensive metallurgical testwork.
- Multiple high-value products: Testwork has demonstrated the ability to produce both Standard ferroniobium and high purity niobium oxide, providing flexibility to optimise product mix, customer offtake and project funding.
- Strategically important new supply: Niobium is a critical mineral with highly concentrated global production. Luni has the potential to establish Australia as a major new source of niobium and diversify global supply chains.
- Major Project Status awarded by the Australian Government in 2025.

	Classification	Tonnage (Mt)	Nb ₂ O ₅ (%)	Nb ₂ O ₅ (kt)
Luni MRE (13 May 2026)	Indicated	93	1.32	1,230
	Inferred	130	0.70	940
	Total	220	1.00	2,200

JORC Code 2012. Part of the Mineral Resource that would potentially be extractable by open pit techniques is the portion of the block model that is constrained within an FeNb price of ~US\$30/kg (contained Nb in FeNb payable at a price of US\$45/kg), optimised pit shell, and above a 0.25% Nb₂O₅ cut off grade. Estimates are rounded to reflect the level of confidence in the Mineral Resources at the time of reporting.

Contact details

Paul Savich

Phone

+61 8 6478 7866

Email

info@wa1.com.au

Website

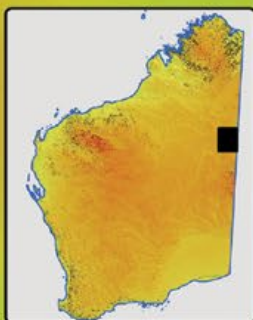
www.wa1.com.au



EXPLORATION INCENTIVE SCHEME

The Western Australian Government's Exploration Incentive Scheme (EIS) supports mineral discovery by co-funding exploration and acquiring precompetitive geoscience data through the Geological Survey of Western Australia. This includes high-resolution datasets, such as 100-metre line spacing aeromagnetic surveys (as shown here), which enhance geological understanding, reduce exploration risk, and help attract private investment into emerging and underexplored mineral provinces.

www.dmpe.wa.gov.au/EIS



- CE, EE, GE = Crean, Emily and Green Deposits held by Encounter Resources.
- LWA1 – Luni deposit held by WA1 Resources.

25

Kilometers

Gonneville Project

Chalice Mining Limited (ASX: CHN)

Seeking

Export credit agencies | Offtake | Royalty/streaming companies | Strategic investors



Project Status	Tenement Status	Capital cost	Primary Commodity
Pre-Feasibility Study completed (2025)	Exploration Licences granted	A\$820M (pre-production)	Palladium
Bankable Feasibility Study underway (due Q1 2027)	Mining Lease underway Environmental approvals under assessment		Secondary Commodity(s) Ni, Cu, Au, Co, Pt

Project overview

Gonneville is a 100 per cent-owned greenfield palladium–nickel–copper development located on Chalice-owned freehold farmland approximately 70 km north-east of Perth. Discovered by Chalice geologists in early 2020, it is the largest and lowest-cost undeveloped palladium–nickel–copper reserve in the Western world and would be Australia's first primary platinum group metals (PGM) mine.

The December 2025 PFS outlines a two-stage open pit operation with a conventional crush-grind-flotation-leach process plant. Stage 1 processes 1 Mtpa oxide and 4 Mtpa sulphide over four years from higher-grade, higher-margin ore. Stage 2 expands sulphide throughput to 12 Mtpa from Year 5, de-bottlenecking to 14 Mtpa after oxide feed is exhausted in Year 9, over a 23-year open pit mine life.

The project sits within a 2,240 ha development envelope on land that is already 56 per cent cleared, close to existing high-voltage power, rail, sealed highways, deep-water ports and a skilled workforce. It will supply critical minerals to automotive, defence, data centre and decarbonisation supply chains, offering a rare non-Russian, non-South African source of palladium and platinum.

Project details

- Australia's first primary PGM mine: a 100 per cent-owned, 23-year, two-stage open-pit palladium–nickel–copper development 70 km northeast of Perth on Chalice-owned freehold farmland, with first production targeted in early 2030.
- Globally significant reserve and scale: Maiden Ore Reserve of 260 Mt at 0.86g/t 3E, 0.16 per cent Ni, 0.098 per cent Cu and 0.017 per cent Co (7.1 Moz 3E, 400 kt Ni, 260 kt Cu, 43 kt Co). The largest and lowest-cost undeveloped Pd–Ni–Cu reserve in the Western world, within a 660 Mt Mineral Resource.
- Production estimates: average 220,000 ozpa 3E (palladium, platinum, gold), 7,000 tpa nickel, 8,000 tpa copper and 700 tpa cobalt over the initial 23-year open pit phase. AISC average US\$370/oz 3E (second quartile), making it the lowest-cost PGM producer in the Western world.
- Government support: approved as a Strategic Project by the Western Australian State Government (September 2024) and awarded Major Project Status by the Australian Federal Government (October 2024). Chalice is also engaging state, federal and export credit agency critical minerals financing programs, alongside a strategic MOU with Mitsubishi Corporation (July 2024).
- Robust, de-risked economics: A\$820M Stage 1 pre-production capital, A\$1.4B pre-tax NPV8, 23 per cent pre-tax IRR and ~2.7-year payback at base case prices, generating A\$4.7B pre-tax free cashflow.

Category	Classification	Tonnage (Mt)	3E ¹ (g/t)	Ni (%)	Cu (%)	Co (%)	3E (Moz)	Ni (kt)	Cu (kt)	Co (kt)
Mineral Resources (2024)	Measured	2.9	1.2	0.21	0.17	0.018	0.12	6.1	4.8	0.52
	Indicated	400	0.79	0.15	0.087	0.015	10	610	370	65
	Inferred	250	0.8	0.15	0.076	0.014	6.4	370	200	37
	Total	660	0.79	0.15	0.083	0.015	17	960	540	96
Ore Reserves (2025)	Proved	2.5	1.4	0.22	0.18	0.018	0.11	5.4	4.4	0.45
	Probable	260	0.85	0.16	0.098	0.017	7.1	400	250	43
	Total	260	0.86	0.16	0.098	0.017	7.1	400	260	43

Cut-offs: Mineral Resources reported within a constraining pit shell at a A\$25/t NSR cut off and, for underground material, an MSO cut off of A\$110/t NSR. Ore Reserves reported at a pit-constrained cut off of A\$100–110/t NSR and an underground cut off of A\$110/t NSR.

1. 3E = palladium + platinum + gold. Mineral Resource Estimate as at 23 April 2024 ("Gonneville Resource Remodelled to Support Selective Mining"); maiden Ore Reserve Estimate per ASX announcement "Gonneville Palladium-Nickel-Copper Project PFS", 8 December 2025. Mineral Resources are inclusive of Ore Reserves. Reported in accordance with JORC Code 2012. Figures rounded; totals may not sum exactly.



Parks Reef PGM Project

Podium Minerals Limited (ASX: POD)

Seeking

Strategic partners | Equity funding | Government funding



Project Status	Tenement Status	Capital cost	Primary Commodity
Pre-scoping study underway	Mining Leases granted	TBD	Pt, Pd, Rh, Ir, Au
			Secondary Commodity(s) Cu, Ni, Co

Project overview

The Parks Reef PGM Project is a 15 km long, continuous PGM deposit with high-grade zones, steeply dipping and still open at depth. Located 80 km west of Meekatharra in the Mid West region of Western Australia, Parks Reef is transitioning from exploration to development and hosts the only 5E PGM mineral resource in Australia of 183 Mt containing 7.6 Moz of 5E PGMs @ 1.30 g/t plus base metals copper, nickel and cobalt. Parks Reef hosts the largest platinum resource in Australia.

Parks Reef is strategically positioned to provide a domestic Australian PGM supply to meet growing global demand for critical metals. These metals will support the transition to a low carbon, clean energy future through hydrogen fuel cell technology developments.

Project details

- Significant 7.6 Moz 5E PGM Resource across 15 km strike length with strong growth potential at depth, plus Cu-Au Zone enhancing scale and optionality.
- Advanced concentrator flowsheet developed, recovering up to 80 per cent of Pt, Pd and Au (3E), producing high-grade PGM concentrates grading 82–115 g/t 3E with a 50–55x upgrade ratio and ultra-low chrome content, using proven processing technologies tailored to Parks Reef.
- Experienced team with deep PGM industry networks, aligned to shareholder outcomes and supported by global PGM experts.

	Pt Metal (Moz)	Pt Grade (g/t)	Pd Metal (Moz)	Pd Grade (g/t)	Rh Metal (Moz)	Rh Grade (g/t)	Ir Metal (Moz)	Ir Grade (g/t)	Au Metal (Moz)	Au Grade (g/t)	5E ¹ PGM (Moz)	5E ¹ PGM (g/t)	Cu Metal (kt)	Cu Grade (%)	Ni Metal (kt)	Ni Grade (%)	Co Metal (kt)	Co Grade (%)
PGM Zone Inferred 183 Mt Resource	3.7	0.62	3.2	0.55	0.3	0.05	0.1	0.02	0.4	0.06	7.6	1.30	103	0.06	143	0.08	27	0.02
Copper- Gold Zone Inferred 60 Mt Resource	–	–	–	–	–	–	–	–	0.3	0.13	0.3	0.13	140	0.23	60	0.01	11	0.02
Total	3.7	0.62	3.2	0.55	0.3	0.05	0.1	0.02	0.7	0.08	7.9	1.01	243	0.10	203	0.06	38	0.02

1. 5E = Platinum (Pt) + Palladium (Pd) + Gold (Au) + Rhodium (Rh) + Iridium (Ir)

Contact details

Ben Newton

Phone

+61 8 9218 8878

Email

benn@podiumminerals.com

Website

www.podiumminerals.com

Jupiter Rare Earth Project

Critica Limited (ASX: CRI)

Seeking

Strategic funding | Strategic partners | Offtake partners



Project Status	Tenement Status	Capital cost	Primary Commodity
Scoping Study underway (Q3 2026)	Exploration licences granted	TBD	Rare Earth Elements
			Secondary Commodity(s) Yt, Ga

Project overview

Jupiter is Critica Limited's flagship rare earth development project within the 100 per cent-owned Brothers Rare Earth Project near Yalgoo in Western Australia. It hosts a JORC 2012 Inferred Mineral Resource of 1.78 Bt at 1,651 ppm TREO using a 1,000 ppm TREO cut off, including a higher-grade component of 0.52 Bt at 2,169 ppm TREO using a 1,800 ppm cut off. Magnet rare earths comprise of neodymium, praseodymium, dysprosium and terbium and represent approximately 23 per cent of TREO.

Jupiter is a broad, shallow, clay- and saprolite-hosted mineral system extending across approximately 40 km². Pilot beneficiation has demonstrated up to approximately 14× grade uplift and approximately 90–95 per cent mass rejection, materially reducing the volume reporting to downstream processing, with strong magnet REO recoveries demonstrated through optimisation programs. Critica has also produced an approximately 58 per cent TREO Mixed Rare Earth Carbonate and a 97.1 per cent TREO Mixed Rare Earth Oxide.

The project is located in an established Western Australian mining region with access to regional roads, energy infrastructure and the Port of Geraldton. Sedgman, Snowden Optiro and SRK Consulting are advancing the Scoping Study and updated Mineral Resource work, targeted for completion during Q3 2026. Significant exploration upside remains across the broader Brothers Project.

Project details

- Shallow mineral system: Mineralisation is broad, near surface and hosted within clay and saprolite across an approximately 40 km² resource footprint, with further exploration potential across the broader Brothers Project.
- Product pathway demonstrated: Critica has produced an approximately 58 per cent TREO Mixed Rare Earth Carbonate and a 97.1 per cent TREO Mixed Rare Earth Oxide, with product qualification and downstream engagement underway.
- Beneficiation advantage: Pilot work has delivered up to approximately 14× grade uplift and approximately 90–95 per cent mass rejection before downstream processing, with strong Magnet REO recoveries demonstrated through optimisation program.
- Government-supported advancement: Critica has secured a combined A\$300,000 in non-dilutive funding from the Minerals Research Institute of Western Australia (MRIWA) and the RTCM Trailblazer program for Jupiter metallurgical research. The updated Mineral Resource Estimate and Scoping Study are targeted for Q3 2026.

Resource Category	Cut off Grade (ppm)	Tonnage (Bt)	TREO Grade (ppm)	MREO Grade (ppm)
Inferred	1,000 TREO	1.78	1,651	383
Higher-grade component	1,800 TREO	0.52	2,169	499

Contact details

Jacob Deysel

Phone

+61 8 6278 9428

Email

jacob@critica.limited

Website

critica.limited

Gifford Creek Carbonatite Project

Dreadnought Resources Ltd (ASX: DRE)

Seeking

Strategic partnership | Government support | Equity | Offtake partners



Project Status	Tenement Status	Capital cost	Primary Commodity
Resource estimates completed (2023)	Exploration licences granted	TBD	REE (Nd, Pr, Sm, La, Ce)
Scoping Study underway	Mining Lease submitted		Secondary Commodity(s) Nb, Ti, Sc, Zr, P

Project overview

The Gifford Creek Carbonatite Project stands out as a premier opportunity for investment, featuring one of the largest carbonatite complexes globally, with more than 50 Mt of defined critical metal resources and promising exploration targets. This project demonstrates significant exploration upside, as initial drilling has only covered less than 25 per cent of the carbonatite complex, revealing multiple zones of mineralisation rich in critical metals, including niobium (Nb), REE, scandium (Sc), titanium (Ti), zirconium (Zr) and phosphate (P).

Project details

- Genuine scale potential: The Gifford Creek Carbonatite is one of the largest carbonatite complexes globally with over 50 Mt of defined critical metal resources and exploration targets, primarily in REE and Nb.
- Significant exploration upside: wide-spaced drilling over <25 per cent of the approximate 17 km long Gifford Creek Carbonatite has already identified multiple zones of mineralisation containing Nb-REE-Sc-Ti-P-Zr.
- Attractive critical metal mix: Thick and high-grade accumulations of rare earths, niobium, scandium, titanium and zirconium identified in drilling to date.
- Positive metallurgical and mineralogical results: Metallurgical work from Yin prospect has produced attractive MREC and monazite concentrates with favourable recoveries and strong NdPr:TREO ratios.
- Located in a Tier 1 jurisdiction with access to major infrastructure, including roads, highways, ports at Onslow and Geraldton, gas pipeline infrastructure, operational airstrips and identified water resources, with strong support from local communities, Traditional Owners and government.

Yin Ironstone Complex - Resources at 0.20 per cent TREO cut off (Nov 2023)

Type	Measured			Indicated			Inferred			Total			
	Tonnage (Mt)	TREO (%)	TREO (kt)	Tonnage (Mt)	TREO (%)	TREO (kt)	Tonnage (Mt)	TREO (%)	TREO (kt)	Tonnage (Mt)	TREO (%)	TREO (kt)	Nd:Pr TREO Ratio (%)
Oxide	2.47	1.61	39.7	13.46	1.06	142.6	1.51	0.75	11.2	17.44	1.11	193.6	29
Fresh	2.70	1.09	29.5	7.67	0.95	72.8	2.17	0.75	16.3	12.54	0.95	118.7	29
Total	5.17	1.34	69.3	21.13	1.02	215.4	3.68	0.75	27.6	29.98	1.04	312.3	29

Gifford Creek Carbonatite - Inferred Resource (Aug 2023) (various %TREO cut offs)

Cut off (%TREO)	Resource (Mt)	TREO (%)	NdPr: TREO (%)	Nb ₂ O ₅ (%)	P ₂ O ₅ (%)	TiO ₂ (%)	Sc (ppm)	Contained TREO (t)	Contained Nb ₂ O ₅ (t)
0.7	10.84	1	21	0.22	3.5	4.9	85	108,000	23,700

Contact details

Dean Tuck

Phone

+61 447 789 847

Email

dtuck@dreres.com.au

Website

www.dreadnoughtresources.com.au



Browns Range Heavy Rare Earths Project

Northern Minerals Limited (ASX: NTU)

Seeking

Debt funding | Equity funding for construction

Project Status	Tenement Status	Capital cost	Primary Commodity
Definitive Feasibility Study completed (2025)	Mining Lease granted	~US\$420M (pre-production)	Heavy Rare Earths (Dy, Tb, Y)
Final Investment Decision underway (due Q3 2026)	Primary approvals granted		Secondary Commodity(s)
	Native Title arrangements signed		Yttrium

Project overview

Northern Minerals owns 100 per cent of the Browns Range Heavy Rare Earths Project in East Kimberley, one of the world's most significant dysprosium (Dy), terbium (Tb) and yttrium (Y) projects outside China. These critical rare earth elements are essential for high-performance NdFeB permanent magnets used in EVs, renewable energy, defence and advanced technologies. The company's flagship Wolverine Deposit is among Australia's highest-grade Dy–Tb–Y deposits and forms the foundation of an 11-year proposed mining operation. Browns Range hosts a Mineral Resource of 7.3 Mt at 0.96 per cent TREO and an Ore Reserve of 5.18 Mt at 0.88 per cent TREO, supporting planned production of approximately 181,000 tonnes of rare earth concentrate.

A completed DFS has confirmed a proven processing flowsheet capable of upgrading ore more than 30 times to produce a concentrate grading approximately 25 per cent TREO. NTU is advancing project financing discussions, including with Export Finance Australia and US EXIM, to support development.

The project is strategically aligned with Iluka Resources' Eneabba Rare Earths Refinery through a supply agreement for heavy rare earth-rich feedstock. All major approvals, native title agreements and critical tenure are in place, positioning Browns Range to target first concentrate production in late 2028 / early 2029 and become a secure, non-China source of critical heavy rare earths.

Project details

- Government funding support: Support from US EXIM and Export Finance Australia for potential project funding (non-binding, conditional).
- Strategic Heavy Rare Earths: Dy, Tb and Y contribute ~78 per cent of basket value. Potential upside from Y price appreciation following China's export controls not reflected in DFS economics.
- Near-Term Development: FID target of 30 September 2026 with first production targeted Q4 2028 / Q1 2029 (subject to project funding), average TREO concentrate production (steady state) ~17,500 tpa.
- Strong Economics: A\$592M estimated capex yielding potential A\$705M NPV8, 21 per cent IRR (pre-tax; Divergence Case) and A\$187M NPV8, 12 per cent IRR (pre-tax; Base Case).
- Development / Shovel Ready: Key primary approvals and tenure in place, DFS completed and construction FEED underway. Funding negotiations continuing with FID targeted for September 2026, subject to funding.

Wolverine Total Mineral Resource Estimate

Mineral Resource estimate for the Wolverine deposit as of 15 January 2025 reported above a 0.15 per cent TREO cut off grade.

	Classification	Tonnage (Mt)	TREO (%)	Dy ₂ O ₃	Y ₂ O ₃	Tb ₄ O ₇	HREO/TREO (%)	TREO (t)
Mineral Resources (Jan 2025)	Measured	0.1	0.91	0.84	5.40	0.12	92	1,000
	Indicated	4.9	1.13	1.00	6.72	0.14	91	54,400
	Inferred	2.4	0.63	0.54	3.60	0.08	87	15,100
	Total	7.3	0.96	0.85	5.68	0.12	89	70,500

Contact details

Shane Hartwig

Phone

+61 8 9481 2344

Email

shartwig@northernminerals.com.au

Website

northernminerals.com.au

Cummins Range Project

RareX Limited (ASX: REE)

Seeking

Strategic partnership



Project Status	Tenement Status	Capital cost	Primary Commodity
Scoping Study completed (2022)	Mining Leases granted	US\$300M (2022)	REE
Pre-Feasibility Study underway	Native Title signed		Secondary Commodity(s) Ga, P, Sc

Project overview

Cummins Range is RareX's 100 per cent-owned flagship project in the Kimberley region of Western Australia, positioned as Australia's largest undeveloped rare earth project, with rare earths as the primary target alongside gallium, scandium and apatite-hosted phosphate as valuable byproducts.

The Western Australian Government has granted RareX Mining Lease M80/648 over the project, giving the company the statutory right to develop a mining operation and moving the asset beyond the exploration and tenure-risk phase, representing a major project development milestone.

Tenure was underpinned by a native title settlement: RareX signed a Mining Heritage Protection Agreement with the Jaru Traditional Owners' Prescribed Body Corporate, the first mining agreement entered into by the Jaru since 2018, clearing the way for the Mining Lease grant.

With tenure secured, near-term work has narrowed to metallurgical optimisation, process flowsheet development and value maximisation across the multiple mineral streams, with the company evaluating commercial pathways, including potential strategic partnering opportunities, as it positions the project for its next development phase.

Project details

- Mining Lease M80/648 granted — the statutory approval to develop a mining operation
- Native title settled — a Mining Heritage Protection Agreement was signed with the Jaru Traditional Owners' Prescribed Body Corporate (the first such agreement since 2018), clearing the path to the lease grant.
- Multi-commodity profile — rare earths as the primary target, with gallium, scandium and apatite-hosted phosphate as valuable byproduct streams.
- Current focus is metallurgical optimisation — flowsheet development and value maximisation across the mineral streams, with RareX evaluating commercial pathways, including strategic partnering, for the next development phase:
 - Stage 1 (DSO): A\$45M capex, producing 300,000 tpa phosphate over three years, low-risk operating platform.
 - Stage 2: A\$304M flotation beneficiation plant producing 550,000 tpa of phosphate-rare earth mineral concentrate.
 - Stage 3: A\$63M plant upgrade after the first decade, plus A\$41M allocated for mine closure.
 - 18-year mine life overall, built on the updated resource (524 Mt at 0.32 per cent TREO / 4.6 per cent P₂O₅).

	Classification	Tonnage (Mt)	TREO (ppm)	P ₂ O ₅ (%)	NdPr (ppm)	Nb ₂ O ₅ (ppm)	HREO (ppm)
Mineral Resource (2024)	Indicated	77.4	4,650	6.7	1,020	780	280
	Inferred	446.9	2,860	4.2	620	550	170
	Total	524.3	3,120	4.6	670	580	190

*2.5% P₂O₅ cut off grade.

Contact details

James Durrant

Phone

–

Email

james@rarex.com.au

Website

rarex.com.au

North Stanmore Project

Victory Metals Limited (ASX: VTM)

Seeking

Offtake partners | Strategic downstream partners | Downstream government strategies



Project Status	Tenement Status	Capital cost	Primary Commodity
Pre-Feasibility Study completed (2026)	Not disclosed	~US\$100M	Yttrium (HREC)
Definitive Feasibility Study underway			Secondary Commodity(s) Dy, Tb, Hf, Sc

Project overview

North Stanmore is Victory Metals' 100 per cent-owned, development-stage clay-hosted heavy rare earth and critical minerals project, located 6 km north of Cue, in the Murchison Goldfields. A Pre-Feasibility Study and Mineral Resource upgrade establish an approximately 20-year development case based on a 48.4 Mt Probable Ore Reserve and 70.7 Mt Measured Mineral Resource with 278 Mt total JORC Mineral Resource (Measured, Indicated and Inferred).

The base-case 2.4 Mtpa operation is expected to produce approximately 29,000 wtpa of HREO-enriched flotation concentrate grading approximately 7.1 per cent TREO, with an HREO/TREO ratio of approximately 40 per cent. Indicative economics include A\$155 million capital expenditure, a post-tax NPV8 of A\$1.211 billion and an approximately 1.5 years payback.

Recent indicative TIMA mineralogical analysis demonstrates distinctive secondary-phosphate deportment: 86 per cent of dysprosium, 82 per cent of terbium and 96 per cent of yttrium report to combined churchite, rhabdophane and associated interphase secondary-phosphate groups. These hydrated minerals host most of the project's heavy and magnet rare earth value, supporting flotation-led beneficiation and potentially differentiating North Stanmore from primary monazite- and xenotime-dominated systems that commonly require mineral cracking before leaching. The project is positioned as a secure Australian source of critical materials for defence, clean energy and advanced manufacturing.

Project details

- 7.1 per cent TREO Mineral Concentrate (40 per cent Heavy Rare Earth ratio).
- Heavy Rare Earths deporting to hydrated rare earth phosphate.
- Proven flotation processing demonstrated at pilot scale.
- Low capital and operating costs.
- EXIM funding confirmed.

Economic cutoff ≥300ppm TREO	Classification	Tonnage (Mt)	TREO (ppm)	HREO (ppm)	LREO (ppm)
Mineral Resources (August 2026)	Measured	70.7	535.07	192.27	342.80
	Indicated	84.1	509.60	180.24	329.36
	Inferred	124.0	434.50	153.52	280.98
	Total	278.8	482.64	171.40	311.24
Ore Reserves (August 2026)	Probable	48.4	672	240	432
	Total	48.4	672	240	432

Numbers are rounded to reflect the appropriate precision of an estimate.

Contact details

Andrew Bell

Phone

+61 421 083 289

Email

a.bell@victorymetalsaustralia.com

Website

victorymetalsaustralia.com

Mt Edon Critical Minerals Project

Everest Metals Corporation Ltd (ASX: EMC) (51 per cent) / Entelechy Resources Pty Ltd (49 per cent)

Seeking

Offtake | Equity and debt funding | Export credit agency support | Strategic partnerships



Project Status	Tenement Status	Capital cost	Primary Commodity
Engineering Scoping Study underway	Mining Lease submitted	Not disclosed	Rubidium
	Mining Development and Closure Proposal (MDCP) submitted		Secondary Commodity(s)
			Li

Project overview

The Mt Edon Critical Mineral Project represents one of the most significant standalone rubidium resources globally and has the potential to establish Australia as a strategically important supplier of rubidium products to domestic and international markets.

EMC has made substantial progress in advancing the commercial development of rubidium. Metallurgical test work has demonstrated rubidium recoveries of up to 97 per cent using its proprietary Direct Rubidium Extraction (DRE) process. EMC is now progressing process optimisation, pilot-scale development and engineering studies to support future commercial production of RbCl, while securing intellectual property protection to underpin a fully integrated domestic rubidium supply chain. EMC retains the right to earn up to a 100 per cent interest and retains 100 per cent ownership of downstream rubidium processing technologies.

Significant progress has been made in advancing permitting and development activities, and mining approval is targeted by the end of 2026. EMC continues to work with leading Australian research institutions to strengthen Mt Edon's technical credentials and commercial potential as a strategically significant, non-Chinese source of rubidium. Engagement with the US Defense Industrial Base Consortium (DIBC) and European Union's Raw Materials Mechanism (RMM) further enhances Mt Edon's international profile and positions EMC to lead the establishment of Australia's first primary rubidium industry.

Project details

- The only dedicated primary-rubidium development in Australia.
- The MRE includes a high-grade subset of 1.56 Mt at 0.31 per cent Rb₂O and 0.10 per cent Li₂O, representing nearly 49 per cent of the total contained Rb₂O tonnes.
- Mt Edon amenable to open-cut mining with a low stripping ratio.
- Mineralisation remaining open along strike and at depth, providing opportunities for further resource expansion through follow-up drilling.
- Planning production of 100–250 tpa RbCl.

	Classification	Tonnage (Mt)	Rb ₂ O (%)	Contained Rb ₂ O (t)	Li ₂ O (%)	Contained Li ₂ O (t)	Mica (%)	Feldspar (%)	Quartz (%)
	Indicated	2.7	0.23	6,300	0.11	2,900	13.3	53.3	32.8
	Inferred	1.5	0.22	3,500	0.09	1,500	14.8	51.9	31.7
	Total	4.3	0.23	9,800	0.10	4,400	13.9	52.8	32.1

Mt Edon Mineral Resource Estimate (May 2026; 0.10% Rb₂O cut off).

Arrowsmith North Project

VRX Silica Limited (ASX: VRX)

Seeking

Debt | Equity finance



Project Status	Tenement Status	Capital cost	Primary Commodity
Bankable Feasibility Study complete (2026)	Mining Lease granted	US\$60M	High Quality Silica Sand
Final Investment Decision underway	Native Title ongoing		Secondary Commodity(s)
	Environmental approvals ongoing		Nil

Project overview

The Arrowsmith North Silica Sand project is VRX Silica's most advanced project, with production scheduled to commence in 2027 subject to final environmental approvals and project financing. Arrowsmith North is located approximately 270 km north of Perth, and adjacent to the Brand Highway, giving the company a direct connection to the Geraldton Port.

Arrowsmith North has a Total Mineral Resource of 513 Mt at 98.0 per cent SiO_2 , and a Total Ore Reserve of 221 Mt at 99.5 per cent SiO_2 . The company has published a Bankable Feasibility Study based on an initial 25-year mine life, with the potential to operate for more than 100 years. Primary markets for the Arrowsmith North product are expected to be South-East Asian foundry and coloured glass markets.

Arrowsmith North Mineral Resource Estimate						
	Classification	Tonnage (Mt)	SiO_2 (%)	Fe_2O_3 (%)	Al_2O_3 (%)	LOI (%)
Mineral Resources (2023)	Measured	10	95.9	0.7	1.9	0.7
	Indicated	237	97.7	0.4	1.0	0.5
	Inferred	266	98.4	0.3	0.7	0.4
	Total	513	98.0	0.3	0.9	0.4

Contact details

Tony Swiericzuk

Phone

+61 8 9226 3780

Email

info@vrxsilica.com.au

Website

vrxsilica.com.au

Muchea Project

VRX Silica Limited (ASX: VRX)

Seeking

Offtake partners | Strategic partnerships



Project Status	Tenement Status	Capital cost	Primary Commodity
Bankable Feasibility Study completed (2019)	Mining Lease approved	US\$50M	High Purity Silica Sand
Final Investment Decision underway (Q4 2027)	Permitting and approvals underway		Secondary Commodity(s)
			Nil

Project overview

The Muchea Silica Sand Project is located 50 km north of Perth and benefits from proximity to bulk transport routes, reliable energy supplies, the Brand Highway and a rail connection to Kwinana Port.

Muchea is one of the few world-class silica sand projects with an outstanding grade of 99.9 per cent SiO_2 purity. This level of purity, and critical low-iron content, is perfectly suited to supply sand for the booming ultra-clear, solar panel flat glass industry. Muchea has a total Indicated and Inferred Mineral Resource of 208 Mt at 99.6 per cent SiO_2 , and an Ore Reserve of 18.7 Mt at greater than 99.9 per cent SiO_2 , with a mine life of more than 25 years through the initial study.

Mineral Resource statement for Muchea						
	Classification	Tonnage (Mt)	SiO_2 (%)	Fe_2O_3 (%)	Al_2O_3 (%)	LOI (%)
Mineral Resources (2020)	Indicated	29	99.6	0.03	0.09	0.22
	Inferred	179	99.6	0.02	0.05	0.23
	Total	208	99.6	0.02	0.06	0.23

Medcalf Project

Audalia Resources Limited (ASX: ACP)

Seeking

Offtake partners | Funding partners



Project Status	Tenement Status	Capital cost	Primary Commodity
Pre-Feasibility Study completed (updated 2026)	Mining Lease granted	A\$31.1 – \$120.9 M	Titanium
Final Investment Decision underway (due Q3 2026)	Environmental approvals ongoing		Secondary Commodity(s) V, Fe

Project overview

The Medcalf Project is a direct shipping titanium-iron-vanadium project. The project will utilise conventional hard-rock open pit mining methods to recover ore at a low stripping ratio from hard ridges located above the regional water table. Drill and blast techniques will be used to fragment the hard rock prior to mining by a conventional mining fleet, with ore stockpiled before processing. The ore will be crushed and screened to produce a blended, size-specific final product that will be transported to Esperance Port via a 74 km private access road connecting to the Coolgardie-Esperance Highway, 54 km south of Norseman.

The project is expected to operate for approximately 10 years, with disturbed areas rehabilitated on completion.

Project details

- January 2026 updated PFS has annualised final product shipped of approximately 1 million tonnes.
- Simple mining of shallow open cut pits to approximately 50 m deep, above the water table. Low strip ratio 0.6:1.
- Project is low technical risk, involving no chemical treatment of the mined ore prior to shipping to offshore customers.
- Primary CAPEX driver is developing the private 74 km access road from the Coolgardie-Esperance Highway to the Project site. CAPEX estimates range from A\$31.1M to A\$120.9M depending on this access road build.
- Project approvals require offset area establishment and associated research on flora species impacted by project

Resource Classification	Tonnage (Mt)	TiO ₂ (%)	V ₂ O ₅ (%)	Fe ₂ O ₃ (%)
Indicated	20.3	10.17	0.54	51.5
Inferred	3.8	7.85	0.38	43.1
Total	24.2	9.80	0.52	50.2

Ore Reserve Category	Tonnage (Mt)	TiO ₂ (%)	V ₂ O ₅ (%)	Fe ₂ O ₃ (%)
Proven	0	0.00	0.00	0.0
Probable	11.77	11.01	0.61	53.8
Total	11.77	11.01	0.61	53.8

Figures rounded; totals may not sum exactly due to rounding.

Contact details

Brent Butler

Phone

+61 8 9321 0715

Email

brent.butler@audalia.com.au

Website

www.audalia.com.au

Pitfield Project

Empire Metals Ltd (AIM: EEE, OTCQX: EPMLF) (70 per cent) / Century Minerals Pty Ltd (30 per cent)

Seeking

Offtake partners | Strategic partnerships



Project Status	Tenement Status	Capital cost	Primary Commodity
Advanced exploration underway	Exploration Licences granted	TBD	Titanium
Early-stage development underway			Secondary Commodity(s) Nil

Project overview

Empire Metals is advancing the Pitfield Project in Western Australia, a world-class, sediment-hosted titanium discovery that combines exceptional scale, grade and favourable mineralogy: an upgraded MRE confirms a resource of 8.16 Bt at 4.3 per cent TiO_2 for 349 Mt of contained TiO_2 . This MRE positions Pitfield as the largest, and one of the highest-grade, titanium deposits globally.

Metallurgical testwork has demonstrated a conventional processing flowsheet capable of producing high-purity (99 per cent+) TiO_2 , with optionality for titanium sponge feedstock and a high-grade alumina co-product. The flowsheet offers structural cost advantages through lower acid consumption, lower leach temperatures, acid recycling and reduced waste generation compared to conventional ilmenite processing routes.

Located in Western Australia's Mid West, 320 km from Perth, Pitfield benefits from established infrastructure, access to road, rail and port facilities, nearby power and gas networks and a skilled mining workforce. Empire is now progressing continuous pilot-scale test work, engineering and economic studies and product development as it advances Pitfield towards commercialisation, with the objective of becoming a secure Western supplier of high-purity titanium products for pigment and titanium metal markets.

Project details

- Globally significant discovery: Unprecedented scale, hosting the largest titanium resource reported globally, with a MRE totalling 8.16 billion tonnes at 4.3 per cent TiO_2 for 349 million tonnes of contained TiO_2 , representing only 20 per cent of the known mineralised footprint.
- High-purity product potential: Early metallurgical work has produced 99 per cent+ TiO_2 suitable for premium markets such as pigment and titanium metal, critical for defence and aerospace and in short supply.
- Tier-1 jurisdiction and infrastructure: strategically located with road and rail connections to Geraldton port, and excellent access to both renewable (solar, wind) and traditional energy sources.
- Superior alternative to existing ilmenite feedstocks: high-grade anatase and rutile requires less processing, resulting in the potential for lower carbon footprint, capital cost, and waste without compromising end product purity.
- Rapid advancement: delivered one of the world's largest titanium Mineral Resource Estimates, a metallurgical flowsheet and a product within 30 months from first drillhole.

Combined Mineral Resource estimates for the Pitfield project (Cosgrove and Thomas deposits) – August 2026

Domain Material type	Measured			Indicated			Inferred			Total Mineral Resource		
	Tonnage (Mt)	Grade (%)	Tonnage (kt TiO_2)	Tonnage (Mt)	Grade (%)	Tonnage (kt TiO_2)	Tonnage (Mt)	Grade (%)	Tonnage (kt TiO_2)	Tonnage (Mt)	Grade (%)	Tonnage (kt TiO_2)
Laterite	17	4.3	700	169	3.6	6,082	64	3.7	2,367	249	3.7	9,167
Saprolite	73	5.8	4,200	677	4.4	30,050	152	4.4	6,639	903	4.5	40,928
Weathered	225	6.0	13,600	2,214	4.4	97,904	795	4.1	32,945	3,235	4.5	144,419
Fresh	58	5.3	3,100	525	3.9	20,619	3,189	4.1	130,999	3,772	4.1	154,729
Total	374	5.8	21,600	3,585	4.3	154,654	4,200	4.1	172,950	8,159	4.3	349,244

All tonnages reported are dry metric tonnes. Cut off grade is 2.5% TiO_2 for all mineral types. Minor discrepancies may occur due to rounding.

Contact details

Shaun Bunn

Phone

+61 8 6285 8188

Email

info@empiremetals.com

Website

www.empiremetals.com

O'Callaghans Project

Greatland Resources Limited (ASX: GGP)

Seeking

Strategic partnerships | Offtake partners | Downstream processing collaboration |
Development pathway options | Joint ventures | Divestment structures



Project Status	Tenement Status	Capital cost	Primary Commodity
Pre-Feasibility Study completed (2014)	Mining Leases granted	TBD	Tungsten
			Secondary Commodity(s) Cu, Zn, Pb

Project overview

O'Callaghans tungsten-copper-zinc-lead deposit is located on an existing mining lease (M45/203) within Greatland's Paterson Province portfolio in the East Pilbara region, approximately 485 km by road south-east of Port Hedland and just 10 km south of Greatland's 100 per cent-owned Telfer gold and copper operations. O'Callaghans' proximity to Telfer offers potential synergies with existing site infrastructure, including non-processing infrastructure, power and logistics, which may enhance future development options.

In March 2026, Greatland released a Mineral Resource Estimate for O'Callaghans (as at 31 December 2025). Approximately 95 per cent of the resource is in the higher confidence Indicated category. The tungsten resource of 246,000 contained WO_3 makes O'Callaghans one of the world's largest high-grade tungsten deposits. Furthermore, the significant copper, zinc and lead byproduct credits provide significant optionality and additional value.

O'Callaghans has previously been reported as a Mineral Resource and Ore Reserve under prior ownership (Newcrest and subsequently Newmont). The project was the subject of a 2014 Pre-Feasibility Study that demonstrated the technical and economic viability of a 2.0 Mtpa operation using long-hole open stoping with decline truck haulage. The proposed processing flowsheet comprised sequential flotation (copper, lead, zinc and pyrite), followed by magnetic separation and gravity recovery to produce a tungsten concentrate through a new on-site processing facility. The deposit is well drilled, with approximately 71,000 m of drilling across 184 holes at roughly 100 x 100 m spacing.

Project details

- Globally Significant: O'Callaghans is one of the largest high-grade tungsten deposits globally, benchmarked against ex-China/Russia/North Korea peers.
- Multi-Commodity: 70 Mt @ 0.35 per cent WO_3 / 0.30 per cent Cu / 0.57 per cent Zn / 0.28 per cent Pb for 246 kt contained WO_3 , 207 kt Cu, 371 kt Zn and 182 kt Pb with >95 per cent of the resource classified as Indicated, supported by ~71 km of drilling across 184 holes at ~100 x 100 m.
- Existing Infrastructure: Located 10 km south of Greatland's Telfer mine on a mining lease, with potential to share non-processing infrastructure.
- Historic PFS: Underpinned by a 2014 Pre-Feasibility Study demonstrating technical and economic viability.

	Classification	Tonnage (Mt)	Tungsten Trioxide (WO_3)		Cu		Zn		Pb	
			Grade (%)	Metal (kt)	Grade (%)	Metal (kt)	Grade (%)	Metal (kt)	Grade (%)	Metal (kt)
Mineral Resources (Dec 2025)	Indicated	65	0.35	232	0.30	195	0.58	358	0.28	176
	Inferred	4	0.31	14	0.28	12	0.39	13	0.19	7
	Total	70	0.35	246	0.30	207	0.57	371	0.28	182

Mineral Resources are reported as at 31 December 2025, grades are reported to two decimal places to reflect appropriate precision in the estimate, and this may cause apparent discrepancies in totals. Cutoffs for the O'Callaghans MRE are applied based on a NSR using metal prices of US\$25.74 lb W (equivalent to ~US\$450/MTU APT), US\$4.54 lb Cu, US\$1.27 lb Zn and US\$0.93 lb Pb.

Contact details

Rowan Krasnoff

Phone

–

Email

rowan.krasnoff@greatland.com.au

Website

www.greatland.com.au

Mt Mulgine Project

Tungsten Mining NL (ASX: TGN)

Seeking

Offtake partners | Debt and equity funding | Strategic partnerships



Project Status	Tenement Status	Capital cost	Primary Commodity
Pre-Feasibility Study underway	Mining Lease granted	~US\$350M	Tungsten
Definitive Feasibility Study underway	Miscellaneous licences granted		Secondary Commodity(s)
			Mo, Au, Ag, Cu

Project overview

Located 330 km north-east of Perth, Western Australia and situated around well-established infrastructure with several mines in proximity, Mt Mulgine is one of the largest tungsten deposits in the world. The project contains significant tungsten (WO_3) and molybdenum, with copper, gold and silver and other byproduct revenue potential. There has been significant expenditure on the asset to de-risk and move towards production, with over 110,000 m of drilling completed.

Project details

- Mt Mulgine ranks as one of the largest tungsten deposits outside China.
- Contains significant tungsten and molybdenum, with copper, gold and silver and other byproduct revenue potential.
- Significant expenditure on asset to date to de-risk and move towards production, over 110 km of drilling completed.
- 330 km north-east of Perth and 15 km north-east of Rothsay, situated around well-established infrastructure with several mines in proximity.
- 23-year LOM at 6 Mtpa, scalable to 15 Mtpa.

Mt Mulgine Mineral Resources Estimate (JORC) based on minimum cut off grade of 0.05 per cent WO_3 (May 2020)

Classification	Tonnage (Mt)	WO_3 (%)	WO_3 (kt)	Mo (ppm)	Mo (t)	Au (g/t)	Au (koz)	Ag (g/t)	Ag (Moz)	Cu (%)	Cu (kt)
Indicated	175	0.11	190	290	51	0.14	770	6	32	0.04	69
Inferred	72	0.11	80	250	18	0.10	230	5	12	0.03	24
Total	247	0.11	270	280	69	0.13	1,000	6	44	0.04	92



Contact details

Teck Wong

Phone

+61 8 9486 8492

Email

info@tungstenmining.com

Website

www.tungstenmining.com

Windimurra Vanadium Project

Atlantic Vanadium Pty Ltd (Atlantic) - private unlisted company

Seeking

Long-term offtake partners | Strategic and downstream partners | Project debt and/or equity funding



Project Status	Tenement Status	Capital cost	Primary Commodity
Definitive Feasibility Study completed	Mining Leases granted	Not disclosed	Vanadium
Final Investment Decision underway (due 2027)	Native Title signed		Secondary Commodity(s)
	Mining proposal approved		Nil

Project overview

Windimurra is a fully approved, long-life brownfield vanadium project approximately 600 km north-east of Perth and about 80 km by road from Mount Magnet. Atlantic owns 100 per cent of the project. More than A\$700 million has historically been invested in the mine, processing facilities and supporting infrastructure, including the open pit, rotary kiln, refinery, power station, gas connection, water infrastructure, tailings facilities and accommodation village. Redevelopment involves a new crushing, milling and beneficiation plant, refurbishment of retained infrastructure and refinery upgrades to remove historic bottlenecks.

Once operational, Windimurra is expected to produce approximately 7,600 tpa of high-purity vanadium pentoxide flake (V_2O_5) over an initial 31-year mine life. The project is positioned to provide a sovereign Western Australian source of vanadium for steel, chemicals and long-duration vanadium-flow-battery applications, with future potential for local vanadium electrolyte production.

Project details

- Advanced, fully permitted brownfield project with more than A\$700 million of existing mine, processing, energy, water, accommodation and logistics infrastructure.
- JORC 2012 Mineral Resource of 209.7 Mt at 0.50 per cent V_2O_5 and Ore Reserve of 87.5 Mt at 0.49 per cent V_2O_5 , supporting an initial 31-year mine life.
- Forecast steady-state production of approximately 7,600 tpa of high-purity V_2O_5 flake; first production targeted for August 2028, subject to FID and financing.
- Expected regional benefits include more than 400 construction jobs and approximately 200 ongoing operational roles, with local and Indigenous employment and contracting pathways.
- Atlantic is seeking offtake, debt/equity and strategic partners, complementary State and Commonwealth support, including demand/offtake facilitation and potential financing pathways.

	Classification	Tonnage (Mt)	V_2O_5 grade (%)	Contained V_2O_5 (kt)
Mineral Resources (2019)	Measured	34.6	0.49	169
	Indicated	123.5	0.50	618
	Inferred	51.6	0.50	256
	Total	209.7	0.50	1,048
Ore Reserves (2019)	Proved	–	–	–
	Probable	87.5	0.49	429
	Total	87.5	0.49	429

Contact details

Ashley Martin

Phone

+61 8 6141 7100

Email

amartin@atlanticptyltd.com.au

Website

atlanticptyltd.com.au

The Australian Vanadium Project

Australian Vanadium Limited (ASX: AVL)

Seeking

Offtake partners | Debt and equity financing | Export credit agency | Strategic partners and customers



Project Status	Tenement Status	Capital cost	Primary Commodity
Bankable Feasibility Study completed (2022)	Mining Leases granted (one under application)	US\$560M (2022)	Vanadium pentoxide
Optimised Feasibility Study underway	Environmental and other project approvals underway		Secondary Commodity(s) Fe

Project overview

The Australian Vanadium Project is a proposed integrated vanadium development in Western Australia's Mid West. Following AVL's 2024 merger of two adjoining projects, the project now combines two globally significant vanadium resources and associated technical work to support a larger and more robust development.

The April 2022 Bankable Feasibility Study is based on an open-pit mine and crushing, milling and beneficiation plant at Gabanintha, approximately 43 km south of Meekatharra, with magnetite concentrate transported to a processing plant near Geraldton. The facility would produce high purity vanadium pentoxide (V_2O_5) for steel, energy storage, chemical and specialty markets, together with an iron concentrate coproduct for steelmaking.

The project underpins AVL's vertically integrated "pit-to-battery" strategy, including midstream production of high-purity vanadium oxides and vanadium electrolyte through its Perth facility and planned V-NOMAD™ modular electrolyte platform, and downstream vanadium flow battery (VFB) activities through VSUN Energy. AVL is progressing optimisation, approvals, commercial agreements and financing toward a future investment decision.

Project details

- Following the February 2024 merger of two adjoining projects, the combined project contains MRE totals 395.4 Mt at 0.77 per cent V_2O_5 , including 173.2 Mt at 1.09 per cent V_2O_5 in the high-grade domain (May 2024 JORC 2012).
- April 2022 BFS basis: initial 25-year mine life and average production of 11,200 tpa of 99.5 per cent V_2O_5 flake and 915,500 tpa of iron concentrate coproduct.
- April 2022 BFS economics: pre-tax NPV7.5 of A\$833 million, equity IRR of 20.6 per cent and initial capital of US\$560 million (A\$778 million).
- AVL's pit-to-battery strategy includes the operating Perth electrolyte facility, V-NOMAD™ modular electrolyte technology and VFB deployment through VSUN Energy; AVL-produced electrolyte has been deployed in an operating Horizon Power VFB.
- Government support includes an A\$49 million MMI-C grant, Australian Government Major Project Status and Western Australian Government Lead Agency support.

Estimate	Classification	Tonnage (Mt)	V_2O_5 (%)	Cut off/basis
Mineral Resources May 2024	Measured	30.6	1.13	Nominal 0.4% LG / 0.7% HG
	Indicated	136.6	0.85	Nominal 0.4% LG / 0.7% HG
	Inferred	228.2	0.66	Nominal 0.4% LG / 0.7% HG
	Total	395.4	0.77	Nominal 0.4% LG / 0.7% HG
Ore Reserves April 2022	Proved	10.5	1.11	0.7% V_2O_5
	Probable	20.4	1.07	0.7% V_2O_5
	Total	30.9	1.09	0.7% V_2O_5

JORC Code 2012. The May 2024 Mineral Resource uses nominal wireframed cut-offs of 0.4% V_2O_5 for low-grade material and 0.7% V_2O_5 for the high-grade zone. The April 2022 Ore Reserve cut off is 0.7% V_2O_5 . Mineral Resource and Ore Reserve estimates have different effective dates and study bases. Figures may not add precisely due to rounding.

Contact details

Todd Richardson

Phone

+61 8 9321 5594

Email

todd.richardson@avl.au

Website

www.avl.au



Australian
VANADIUM
LIMITED



Australian
VANADIUM
LIMITED

Victory Bore Vanadium Project

Surefire Resources NL (ASX: SRN)

Seeking

Outright sale | Financing | Offtake



Project Status	Tenement Status	Capital cost	Primary Commodity
Pre-Feasibility Study completed (2024)	Mining Lease under application	US\$498M (PFS Jan 2024)	Vanadium
Definitive Feasibility Study underway	Native Title process underway		Secondary Commodity(s)
	Environmental approvals underway		Ferrovanadium, Titanium Slag, Pig Iron, High Purity Iron Oxide pigment and High Grade Iron Ore

Project overview

The Victory Bore Critical and Strategic Minerals Project, is one of Australia's largest advanced critical minerals projects, containing a JORC-compliant resource of 464.6 Mt of vanadium-titanium-iron mineralisation. Located approximately 450 km north of Perth, the project is hosted within the Atley Intrusion, a large layered gabbroic body extending over 23 km along the Youanmi Fault.

The mineralisation occurs as broad, homogeneous vanadium, titanium and iron-rich layers within the intrusion, offering strong potential for long-term, large-scale mining operations. A PFS completed in January 2024 confirmed the project's technical and economic potential using conservative assumptions and reliable cost estimates.

A maiden Probable Ore Reserve of 93 Mt grading 0.35 per cent V_2O_5 , 5.2 per cent TiO_2 and 19.8 per cent Fe has been defined under the JORC Code (2012). Planned production is approximately 1.25 Mtpa of vanadium-titanium magnetite concentrate, supporting up to six value-added products, including high-purity vanadium, ferrovanadium, titanium slag, pig iron, iron oxide pigment and high-grade iron ore.

The project also hosts a maiden aluminium resource of 17 Mt at 23.1 per cent Al_2O_3 and has demonstrated the ability to produce high-purity alumina (HPA) at 99.99 per cent purity, creating additional opportunities in advanced technology and battery supply markets.

Project details

- Developing one of Australia's largest critical mineral deposits.
- 20 km of continuous vanadium, titanium and iron ore mineralisation at surface, close to infrastructure and power.
- Exploration target mineral resource of 1 billion tonnes.
- JORC Mineral Resource of 464.6 million tonnes.
- Ore Reserve of 93 million tonnes with vanadium recoveries of up to 93.7 per cent.

	Classification	Cut off (% V_2O_5)	Tonnage (Mt)	V_2O_5 (%)	TiO_2 (%)	Fe (%)	Al_2O_3 (%)	SiO_2 (%)
Mineral Resources 2024	Measured	0.15	25.3	0.35	4.96	19.20	17.0	34.9
	Indicated	0.15	113.2	0.32	4.70	18.19	17.4	35.9
	Inferred	0.15	326.1	0.28	5.28	17.41	16.0	36.4
	Total	0.15	464.6	0.30	5.12	17.70	16.4	36.2



Midstream Summaries

Kwinana Refinery.....	66
Wagerup Gallium Project.....	67
IG6 Collie Micronising Facility.....	68
HPA Project	69
Oakover Manganese Project	70
Cathode Active Material Facility.....	71
Vytas UHPQ Project.....	72
Vytas NPS Project	73

Kwinana Refinery

Cobalt Blue Holdings (ASX: COB)

Seeking

Offtake | Strategic partners | Equity/debt investment | Institutional and retail investors



Project Status	Tenement Status	Capital cost	Primary Commodity
Definitive Feasibility Study completed (2025)	Works Approval granted	US\$40M (November 2025)	Cobalt Sulphate
Final Investment Decision underway (2027)			Secondary Commodity(s) High-Purity Cobalt Metal

Project overview

The Kwinana Cobalt Refinery (KCR) is being developed by Cobalt Blue in partnership with Japan's Iwatani Corporation at East Rockingham, Western Australia. It will be Australia's first dedicated cobalt refinery, producing battery-grade cobalt sulphate for the lithium-ion battery industry, and high-purity alloy-grade cobalt metal for advanced manufacturing and defence applications.

KCR's initial production capacity targets 3,000 tpa of contained cobalt, approximately 2,000 tpa as cobalt sulphate and 1,000 tpa as cobalt alloy-grade metal, with a Stage 2 expansion to ~6,000 tpa subject to offtake and feedstock conditions. Feedstock will initially be sourced via a binding supply agreement with Glencore, with cobalt hydroxide drawn from the company's DRC operations. Once the Broken Hill Cobalt Project reaches production, domestic feedstock will progressively replace imported supply.

Significant development milestones have been achieved: Works Approval was granted by the Western Australian Government (September 2025), cobalt sulphate samples produced at the Broken Hill Technology Centre have met customer trace metal specifications, and due diligence and independent reviews are nearing completion. A Final Investment Decision is targeted for early 2027.

Project details

- Location: East Rockingham, Western Australia, co-located at Iwatani Australia's Doral Fused Materials site.
- Products: Stage 1 – 3,000 tpa battery-grade cobalt sulphate and alloy-grade cobalt metal (both products successfully demonstrated at pilot-scale); Stage 2 expansion to ~6,000 tpa.
- Financial metrics (Stage 1 – 100 per cent owned, November 2025): NPV8 A\$155M, IRR 32 per cent, capital payback 3.8 years, US\$40M capex.
- Feedstock: Binding supply agreement with Glencore (cobalt hydroxide), with domestic BHCP feedstock to follow; facility designed to process multiple feedstock types (sulphides, nickel–cobalt intermediates, blackmass).
- Offtake: Iwatani committed to 30 per cent of production; advanced negotiations underway for remaining 70 per cent with EU, Japanese, Korean and US counterparties.

Contact details

Joel Crane

Phone

+61 2 8287 0660

Email

joel.crane@cobaltblueholdings.com

Website

cobaltblueholdings.com

Wagerup Gallium Project

Wagerup Gallium Joint Venture (JAGA) (50 per cent Japan Australia Gallium Associates / 50 per cent Australian Government, US Government and Alcoa) (NYSE: AA)



Seeking

Not disclosed

Project Status	Tenement Status	Capital cost	Primary Commodity
Final Investment Decision completed (2026)	All approvals granted	Not disclosed	Gallium
Construction underway			Secondary Commodity(s) Nil

Project overview

Gallium is one of the world’s most sought-after critical minerals for rapidly advancing modern technologies. It is needed to produce semiconductors and LEDs, and is used in advanced electronics, telecommunications, green energy, and defence technologies, among many applications.

Gallium typically does not occur at sufficient concentrations to mine on its own. It co-occurs within aluminium and zinc ores and is mostly extracted as an extension of refining bauxite into alumina.

A new gallium processing plant is being developed alongside Alcoa’s existing Wagerup Alumina Refinery, 120 km southeast of Perth. The facility will extract gallium from bauxite sourced from Alcoa’s existing mining and refining operations. No additional bauxite mining is required.

This joint venture project involves government and industry partners from Australia, Japan and the US. Japan Australia Gallium Associates (a joint venture between Japan Organisation for Metals and Energy Security [JOGMEC] and Sojitz Corporation) is providing 50 per cent of the project funding, while the remaining 50 per cent funding is being provided by the Australian and US governments, and Alcoa.

Alcoa will draw on its extensive minerals processing experience to help establish a new reliable source of this critical mineral, underscoring the strategic importance of the company’s existing Western Australian bauxite and alumina operations.

Project details

- Co-located at Alcoa’s Wagerup Alumina Refinery, 120 km southeast of Perth.
- Joint venture project involving government and industry partners in Australia, Japan and the US.
- Will extract gallium from the bauxite Alcoa already mines and refines to produce alumina, the feedstock for aluminium.
- Alcoa will construct and operate the plant, drawing on its extensive minerals processing experience.
- About 200 construction jobs and 20 permanent roles will be created.

IG6 Collie Micronising Facility

International Graphite Limited (ASX: IG6)

Seeking

Strategic partnerships | Offtake partners | Project investment



Project Status Construction underway (targeted Q2 2027) Commissioning targeted Q3 2027	Tenement Status All regulatory approvals granted	Capital cost US\$5.6M	Primary Commodity Micronised graphite products
			Secondary Commodity(s) Nil

Project overview

The IG6 Collie Micronising Facility is Australia's first commercial-scale graphite micronising operation and is currently under construction in Collie, approximately 200 km south of Perth. The facility will produce specialised and superfine graphite powders for industrial, energy storage, advanced manufacturing, technology and defence applications.

The facility forms the Australian hub of International Graphite's midstream graphite processing network, which also includes a joint venture development in Europe. Both facilities are expected to be in production by the end of 2027. International Graphite has operated a qualification-scale research and development facility at Collie since 2022, producing micronised and spheroidised graphite for customer acceptance testing.

The commercial facility will produce a range of standard, high-purity and superfine graphite products, with production capability of 4,300 – 6,400 tpa across product grades ranging from 5 to 45 µm. The facility is supported by one of Australia's biggest graphite deposits at Springdale. Springdale represents a substantial Australian feedstock source, with a Mineral Resource Estimate of 49.3 Mt at 6.5 per cent TGC, and an estimated mine life of more than 30 years. It underpins IG6's aspiration to build an integrated mine-to-market graphite supply chain in Western Australia.

Project details

- Australia's first commercial graphite micronising facility: Commissioning targeted for mid-2027 and built on established product qualification and development capability.
- Specialised, high-value materials: Production capability of 4,300 – 6,400 tpa across standard, high purity and superfine graphite products ranging from 5 to 45 µm.
- Building a global platform: Non-binding Heads of Terms with Wogen Pacific provide a pathway for Asia-Pacific product sales (minimum of 3,000 tpa) and future graphite feedstock supply (up to 10,000 tpa), while the Alkeemia / IG6 Joint Venture provides a European processing base at Porto Marghera, Italy.
- Government support: A\$17.2 million in funding from the Australian and Western Australian Governments.
- Pathway to integrated growth: Supported by the Springdale Graphite Project, one of Australia's largest graphite deposits, providing long-term Australian feedstock optionality.

Contact details

Andrew Worland

Phone

+61 8 9380 9277

Email

aworland@ig6.com.au

Website

www.internationalgraphite.com.au

HPA Project

Cadoux Limited (ASX: CCM)

Seeking

Funding | Finance options



Project Status	Tenement Status	Capital cost	Primary Commodity
Definitive Feasibility Study completed (2021)	Mining Lease granted for 100 per cent for HPA feedstock supply	US\$201M (2021 DFS)	High Purity Alumina (HPA)
Final Investment Decision underway (Q2 2027)			Secondary Commodity(s) Critical Minerals

Project overview

Cadoux's HPA Project will produce 4N–5N high purity alumina, marketed under the premiumHPA® trademark, for applications including battery separator coatings, LEDs and MicroLED displays, electronics and semiconductor components. The HPA refinery will be located within the Kwinana Industrial Area, leveraging established infrastructure, port access and a skilled local workforce. The process flowsheet is designed for high efficiency, ultra-low impurities and tight particle size control, with embedded ESG measures such as reagent recycling, water and energy efficiency, and pathways to lower power use and lower carbon production. After an extensive two-year program of electrochemical performance, thermal stability, cycle life and safety testing, Cadoux achieved the successful qualification of its premiumHPA® by the European SAFELOOP consortium, providing independent validation that the Company's product meets the performance standards required for advanced battery applications. Subject to approvals, financing and offtake, development will proceed in modular phases to manage risk and capital.

Project details

- Developing a high purity alumina (HPA) project in Kwinana, Western Australia, focused on supplying critical materials for advanced technology applications and industries.
- Targeting the production of premium 4N and 5N HPA products used in batteries, LEDs, semiconductors and advanced ceramics.
- Designed with a focus on sustainability, including low-carbon production processes, resource efficiency and ESG principles.
- Supported by the Western Australian government through A\$3 million in funding under the Industry Attraction Fund scheme, administered by the Department of Energy and Economic Development. The project is positioned to benefit from growing global demand for HPA driven by electric vehicles, energy storage, electronics and clean energy technologies.
- The 2021 DFS outlines a HPA production scenario of 10,000 tpa of 4N and 5N premiumHPA®.

Contact details

Roland Hill

Phone

+61 8 6313 3920

Email

roland.hill@cadoux.com.au

Website

www.cadoux.com.au

Oakover Manganese Project

Firebird Metals Limited (ASX: FRB)

Seeking

Strategic partnerships



Project Status	Tenement Status	Capital cost	Primary Commodity
Scoping Study completed (2023)	Mining Lease granted, Environmental work ongoing	Mn - US\$80M (2023)	Manganese Concentrate
HPMSM Feasibility Study completed (2024)		HPMSM - US\$83.5M	Secondary Commodity(s) High Purity Manganese Sulphate (HPMSM), p-CAM and CAM

Project overview

Firebird Metals Limited is an Australian critical minerals and battery materials company developing an integrated Concentrate-to-Cathode business to support the global transition to electric vehicles and energy storage. The company's strategy is built on three complementary pillars: Resource, Technology and Commercialisation. Through the Oakover Manganese Project, Firebird has established a long-term manganese resource base to support future battery materials production. Since 2023, the company has undertaken an extensive research and development program to develop proprietary processing technologies and advanced cathode materials, including High Purity Manganese Sulphate Monohydrate (HPMSM), precursor cathode active materials (p-CAM), Lithium Manganese Iron Phosphate (LMFP) and Lithium Manganese Rich (LMR). To commercialise these technologies, Firebird is developing an Australian Demonstration Plant (ADP) in Perth, which will validate proprietary processes, optimise manufacturing, produce customer qualification material and generate operational data to support future commercial deployment. By integrating high-quality manganese resources, proprietary technology and advanced battery materials manufacturing, Firebird is positioning itself as a globally competitive supplier of sustainable battery materials while helping establish a resilient Western battery supply chain.

Project details

- Integrated battery materials platform – Firebird is developing a vertically integrated Concentrate-to-Cathode business combining the Oakover Manganese Project, proprietary processing technologies and an Australian Demonstration Plant (ADP) to produce high-value manganese battery materials.
- Advanced battery materials – The company is developing technologies to produce HPMSM, precursor cathode active materials (p-CAM) and next-generation cathode active materials (CAM), including LMFP and LMR.
- Australian Demonstration Plant – The ADP, located in Perth, will validate proprietary technologies, produce customer qualification material and support the transition to future commercial-scale production. Initial production capacity is expected to be approximately 10 kg/day of HPMSM, with smaller campaign-scale production of p-CAM and CAM for product qualification.
- Government support – The ADP has received A\$2 million in funding under the Australian Government's ARENA Battery Breakthrough Initiative, supporting the commercialisation of advanced battery materials technologies.
- Commercialisation strategy – Firebird is progressing multiple commercialisation pathways, including technology licensing, strategic partnerships, joint ventures and future commercial battery materials production.

Cathode Active Material Facility

Austvolt

Seeking

Equity raise | Strategic partnership



Project Status	Tenement Status	Capital cost	Primary Commodity
Feasibility underway (TBD)	N/A	US\$250M	Nickel-based NCM battery precursors and cathode active material
			Secondary Commodity(s) Co, Mn

Project overview

Austvolt has developed technology capable of producing up to 90 per cent nickel-cobalt-manganese (NCM) precursors for high-performance electric vehicle batteries. The project was originally designed to source nickel sulphate feedstock from BHP's Nickel Refinery and produce up to 40,000 tpa of battery precursor materials in Kwinana. Following the closure of domestic nickel sulphate supply, the company is reviewing alternative feedstock and development pathways to support commercialisation of the technology. Austvolt is currently evaluating partnerships and potential manufacturing opportunities in international markets, particularly those located close to established automotive manufacturing hubs.

Project details

- Developed technology capable of producing up to 90 per cent nickel-cobalt-manganese (NCM) battery precursor materials for high-performance electric vehicle batteries, supporting battery ranges of up to 600 km on a single charge.
- Scale B Pilot facility supported by the Western Australian Government through a A\$3 million grant.
- Federal Government provided A\$5.4 million in grant funding to support development of the Scale C facility.
- Evaluating strategic partnership opportunities in India to support commercialisation of the technology.
- Initial production capacity of 10,000 tpa, with potential expansion to 40,000 tpa.

Contact details

Peeyush Mathur

Phone

–

Email

peeyush.mathur@austvolt.com

Website

www.austvolt.com

Vytas UHPQ Project

Vytas Limited – Public unlisted company

Seeking

Offtake partners | Investment



Project Status	Tenement Status	Capital cost	Primary Commodity
Process development	N/A	N/A	Ultra-high Purity Quartz
Experimental scale-up			Secondary Commodity(s)
Customer qualification underway			Nil
Final Investment Decision targeted (2027)			

Project overview

Vytas Ltd is developing an Australian ultra-high purity quartz (UHPQ) project in Perth, Western Australia, targeting growing global demand for critical high-purity materials used in the solar photovoltaic and semiconductor industries. The project is underpinned by Vytas' quartz resources and proprietary purification technology, with the objective of producing a range of premium UHPQ products. UHPQ is an essential material in the manufacture of fused-quartz crucibles used for silicon ingot production – a critical step in solar photovoltaic and semiconductor supply chains. It also has potential applications in other high-value markets, including specialty glass, fibre optics and advanced technologies. Through the project, Vytas aims to establish a secure, scalable and internationally competitive Australian supply of this strategically important material.

The Vytas UHPQ Project is currently in the development stage, with process development, experimental scale-up and customer qualification activities progressing in parallel. Vytas has commenced pre-qualification testing with several quartz crucible manufacturers while advancing the design and development of its proposed demonstration-scale processing plant. These activities are expected to continue throughout 2026, supporting commercial supply and offtake discussions, and informing subsequent feasibility studies. Subject to successful technical development, customer qualification and feasibility outcomes, a Final Investment Decision is targeted for 2027.

Project details

- Vytas is developing an Australian ultra-high purity quartz (UHPQ) project in Perth, targeting global solar photovoltaic and semiconductor markets.
- The project is underpinned by Vytas' quartz resources and proprietary purification technology, with the objective of producing premium UHPQ products to meet a range of customer specifications.
- The project is being developed toward a targeted commercial production capacity of approximately 25,000 tpa of UHPQ.
- UHPQ is a critical input for fused-quartz crucibles used in silicon ingot production – an essential manufacturing step in solar photovoltaic and semiconductor supply chains.
- The project is currently in the development stage, with process scale-up and pre-qualification testing underway with several quartz crucible manufacturers, with Final Investment Decision targeted for 2027.

Vytas NPS Project

Vytas Limited – Public unlisted company

Seeking

Offtake partners | Investment



Project Status	Tenement Status	Capital cost	Primary Commodity
Pilot-scale production underway (2026)	N/A	N/A	Nanoporous Silicon
Application testing underway (2026)			Secondary Commodity(s)
			Nil

Project overview

Vytas Ltd is developing a proprietary nanoporous silicon (NPS) technology platform targeting next-generation silicon-anode materials for lithium-ion batteries. The project is based on Vytas' proprietary materials and processing platform, with the objective of producing advanced silicon materials designed for integration into higher-performance battery anodes. Vytas is progressing experimental process development, independent product evaluation and qualification activities with battery-industry participants, alongside preparations for pilot-scale production and future commercial development. With growing global demand for higher-performance batteries across electric vehicles, consumer electronics, drones and other advanced applications, the project provides exposure to a strategically important battery-materials market and an opportunity to establish an Australian supply of advanced silicon-anode materials.

The Vytas NPS Project is progressing through technical development and pre-commercial validation, with the next steps focused on process optimisation, independent product evaluation, qualification testing with battery manufacturers, experimental scale-up and engineering development. Pilot-scale production and application testing are expected to progress during 2026–27, supporting commercial partnerships, potential offtake discussions and subsequent feasibility and investment decision activities. Subject to successful technical development, customer qualification, feasibility and funding outcomes, project execution is targeted within two years.

Project details

- Vytas is developing a proprietary nanoporous silicon (NPS) technology platform targeting next-generation silicon-anode materials for lithium-ion batteries.
- The project leverages Vytas' naturally occurring nanoporous silica feedstock and proprietary processing technology to produce advanced silicon materials with a distinctive three-dimensional porous structure.
- The NPS platform is positioned to benefit from growing global demand for higher-performance batteries across electric vehicles, consumer electronics, drones and other advanced applications.
- The project is progressing through development and commercial validation, including process optimisation, independent product testing and qualification activities with battery manufacturers.
- The project provides an opportunity to establish a secure Australian supply of advanced silicon-anode materials, supporting greater diversification and resilience within global battery-material supply chains.



Contact details

Conrad Mulherin

Phone

+61 418 910 747

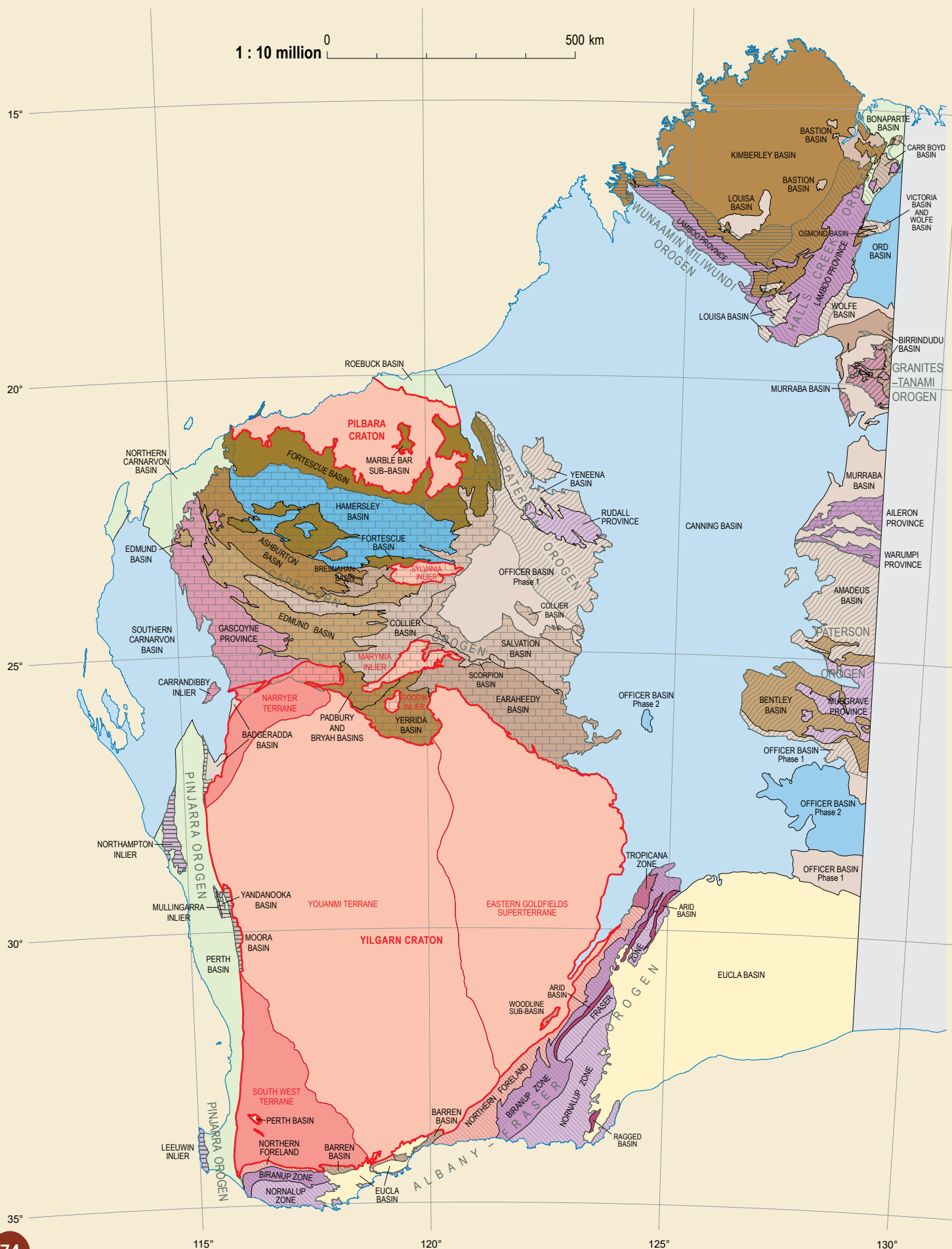
Email

admin@vytas.com.au

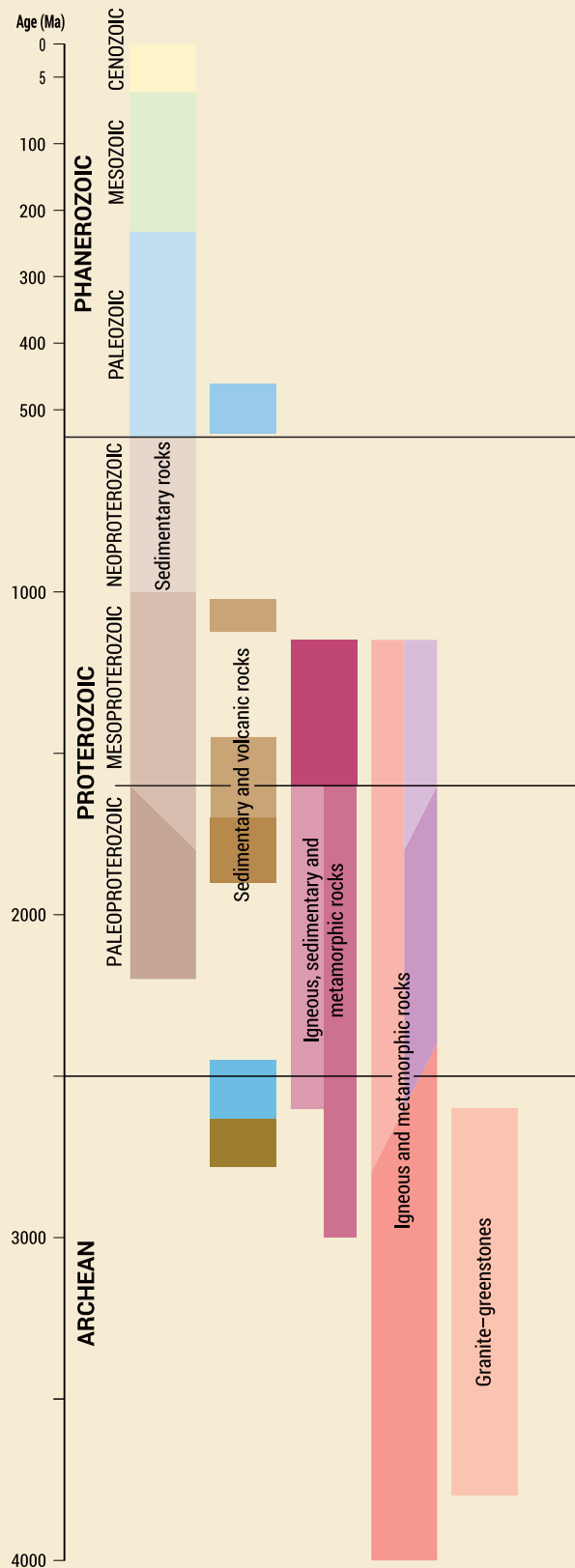
Website

www.vytas.com.au

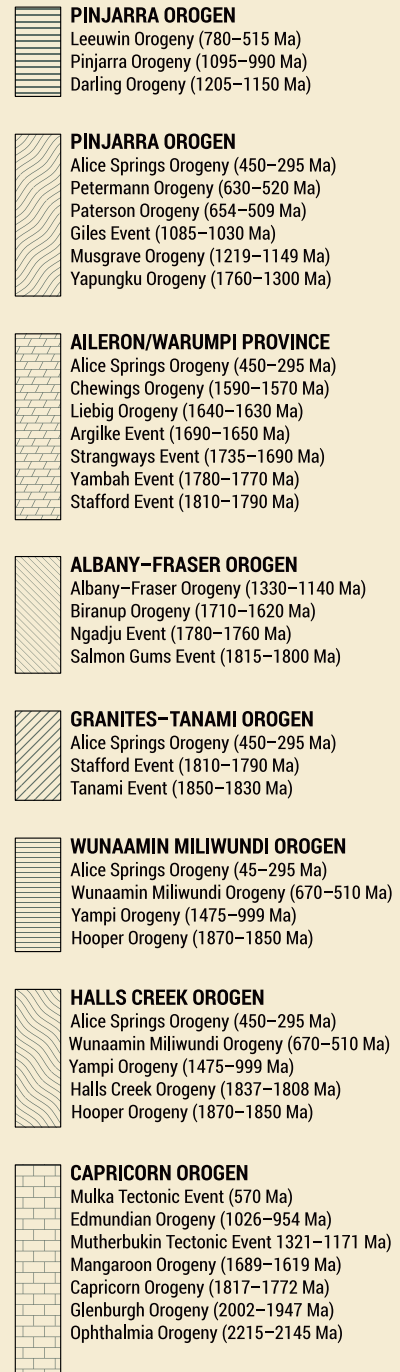
Western Australia: Tectonic Map



TECTONIC UNITS



OROGEN/PROVINCE



Patterns represent the extent of major orogenic events.
Compiled by Geological Survey of Western Australia, 2021.
Derived from Martin, DMCB, Hocking, RM, Riganti, A and Tyler, IM 2015,
1:500 000 Tectonic units of Western Australia, 2015: Geological Survey
of Western Australia.
View detailed data at <www.dmpe.wa.gov.au/geoview>

Notes



Copyright Agreement

The Government of Western Australia supports and encourages the dissemination, exchange and reuse of public sector information. All data and other material produced by DMPE constitute Crown copyright.

Unless otherwise noted, and with the exception of the Western Australian Government logo, images, and other material or devices protected by a trademark, all copyright content of this publication is licensed under a Creative Commons Attribution 4.0 International (CC BY 4.0) licence.

Under this licence you are free, without having to seek our permission, to use this publication in accordance with the licence terms. You must keep intact the copyright notice and attribute the State of Western Australia as the source of the publication.

Note: Some content in this publication may have different licence terms as indicated.

Photographs used in this prospectus include images supplied by companies in relation to their listed projects and photographs courtesy of GSRSD staff.



Department of Mines, Petroleum and Exploration

Mineral House, 100 Plain Street, East Perth
Whadjuk Noongar Country
Western Australia 6004

Telephone: (08) 9222 3333
National Relay Service: 13 36 77
publications@dmpe.wa.gov.au



www.dmpe.wa.gov.au



Follow the QR code to access
most up-to-date prospectus
information online.