

AUSTRALIA MINERALS

REALISE THE OPPORTUNITY

Critical minerals: from discovery to downstream

Chair: Tom Wise
Acting Director
Geological Survey of South Australia



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Questions?

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Australia Day Q&A
#3563140



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Tasmania's critical minerals

Geology, action, opportunity

Dr Rebecca Sproule
Chief Government Geologist
Minerals Resources Tasmania



Lutruwita/Tasmania

The 'Island State'

- 0.9% of Australia's landmass
- Due to its complex geological setting, Tasmania hosts an abundance of critical, strategic and precious materials
- Products of mining and mineral processing constitute >65% per cent of mercantile exports
- Supportive government with established approvals processes
- Robust infrastructure and skilled workforce
- Sustainable energy – net zero in emissions

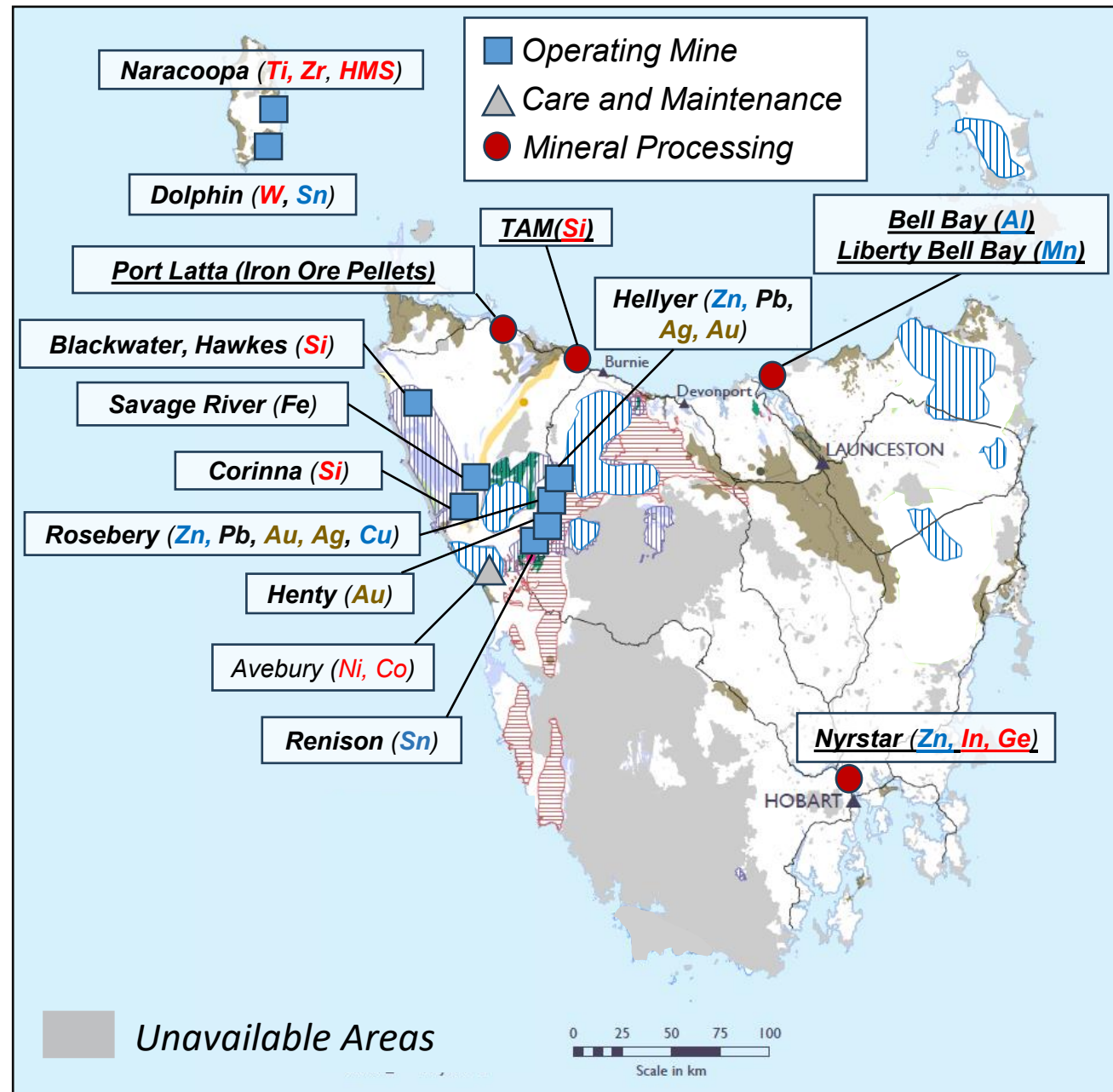


Current production & processing

Primary and by-product **production** and processing in a range of strategic, critical and precious minerals

-  **Cu, Zn, Pb, Au, In, Ge, Sb**
-  **Sn, W, F, Sb, Cu, As**
-  **Fe (magnetite), REE, Cu, Au, Mg**
-  **Ni, Co, Cu, PGE, Cr**
-  **Si (silica flour)**
-  **REE, Ti, Zr**

Production in bold
Processing underlined
Strategic minerals in blue
Critical minerals in red
Precious metals in brown



Tasmanian Government Support



Office of the Coordinator-General

First point of contact for
business in Tasmania



Downstream Processing

Ongoing Landmark Study -
Common User Processing
Facility (CUPF) for critical
minerals




Mineral Resources Tasmania

- Precompetitive Datasets
- Exploration Drilling Grant Initiative (A\$5 million since 2018)
- Critical Minerals Initiative
- A\$3 million over 3 years
- Prospectivity Maps
- Critical Mineral Deposit Atlases
- Increased 3D models
- Sampling historic core
- Critical mineral deposit research



A pipeline of opportunities

- Exploration pipeline of developing projects in a range of commodities and further potential in prospective belts

 **Cu, Zn, Pb, Au, In, Ge, Sb**

 **Sn, W, F, Sb, Cu, As**

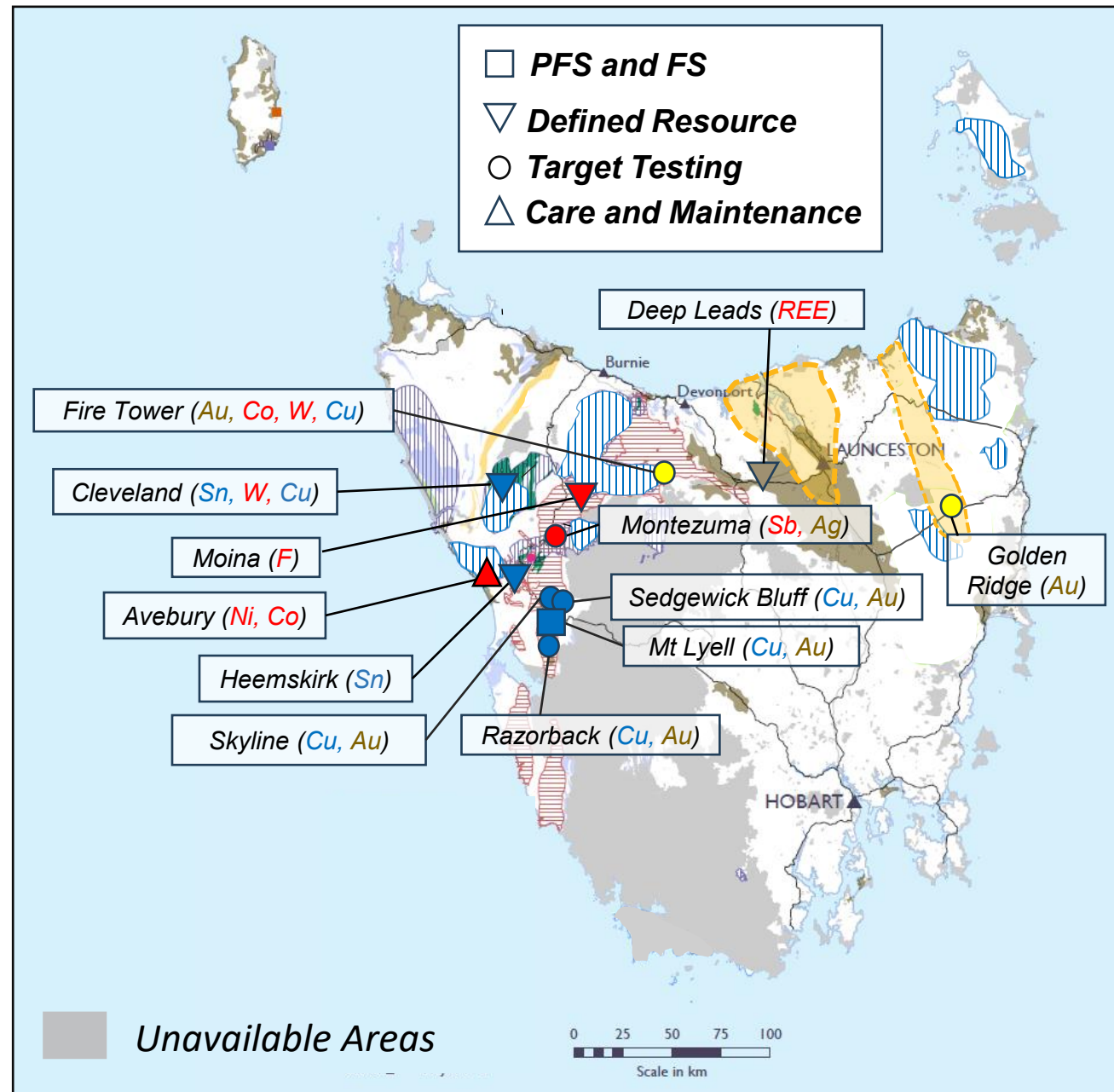
 **Au, Ag, Sb**

 **REE, Ti, Zr**

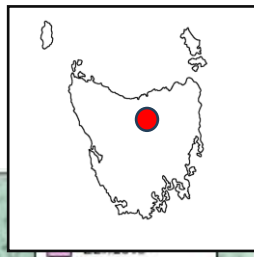
Strategic minerals in blue

Critical minerals in red

Precious metals in brown

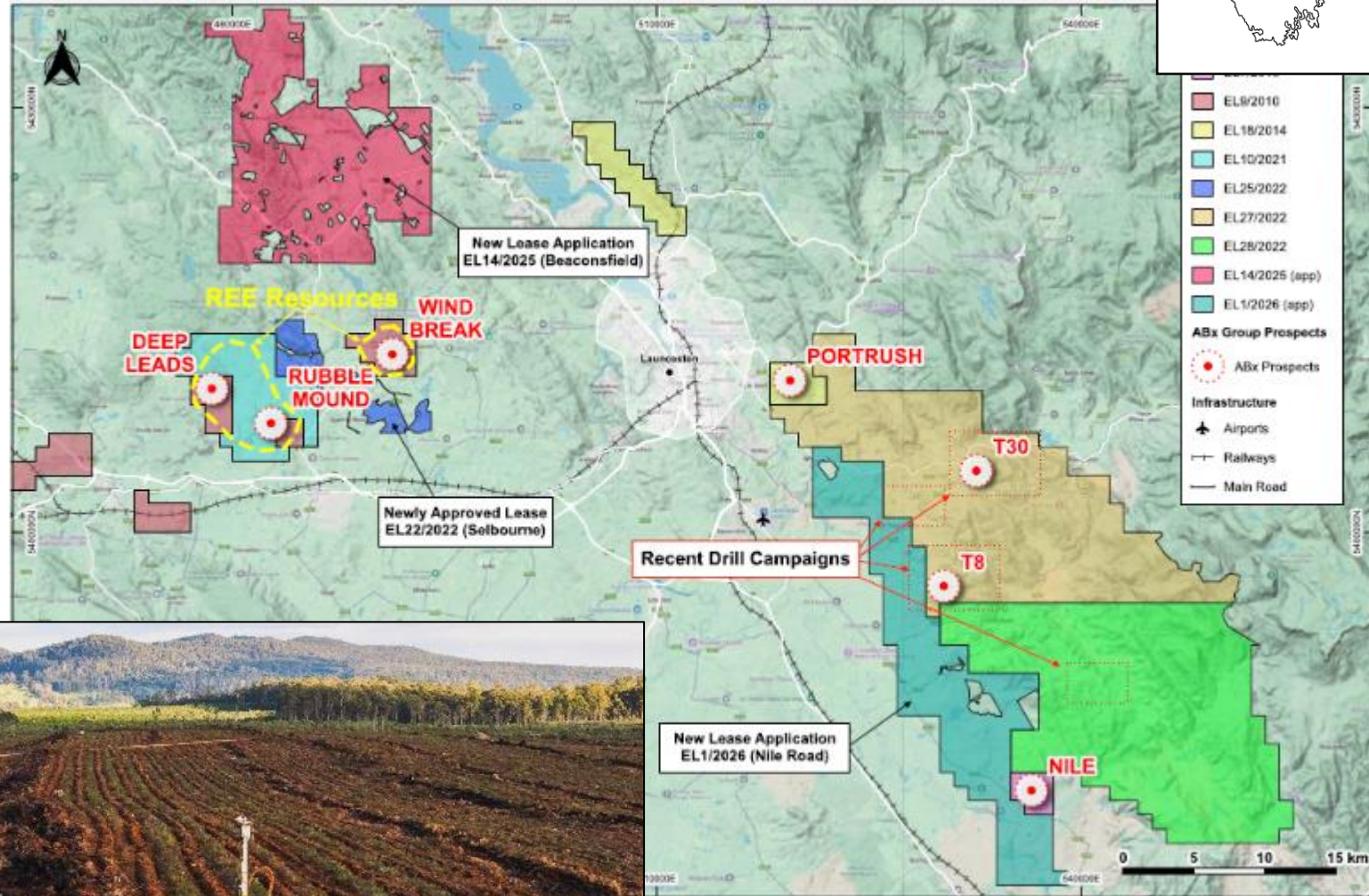


Project Pipeline: ABx Group – Deep Leads



Rare earth elements

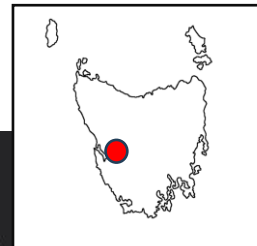
- 89 Mt at 844 ppm TREO
- Ionic adsorption clay (IAC) type with among the highest Dy and Tb proportions of any IAC worldwide
- Highly favourable test work with high rare earth extraction at pH4 or above in less than 30 minutes. No acid is required
 - Lower reagent costs, lower impurity removal cost and lower rare earth losses
- ABx Deep Leads MREC (mixed rare earth carbonate) has 2.8 to 4.7 times the proportion of Dy+Tb compared to peer MRECs
- New discovery (Temple Bar) 50 km to east



ABx Group Feb 2026



Project Pipeline – Stellar Resources – Heemskirk



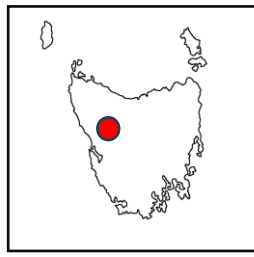
Tin

- Total resource of 9.5 Mt @ 0.93% Sn (88,100 kt contained Sn)
- Resource open at depth with new intercepts
- Favourable metallurgy (97% cassiterite) with 69% recovery in 2019, anticipated to increase to 75%
- Pre-feasibility studies in progress
- Off-take unencumbered



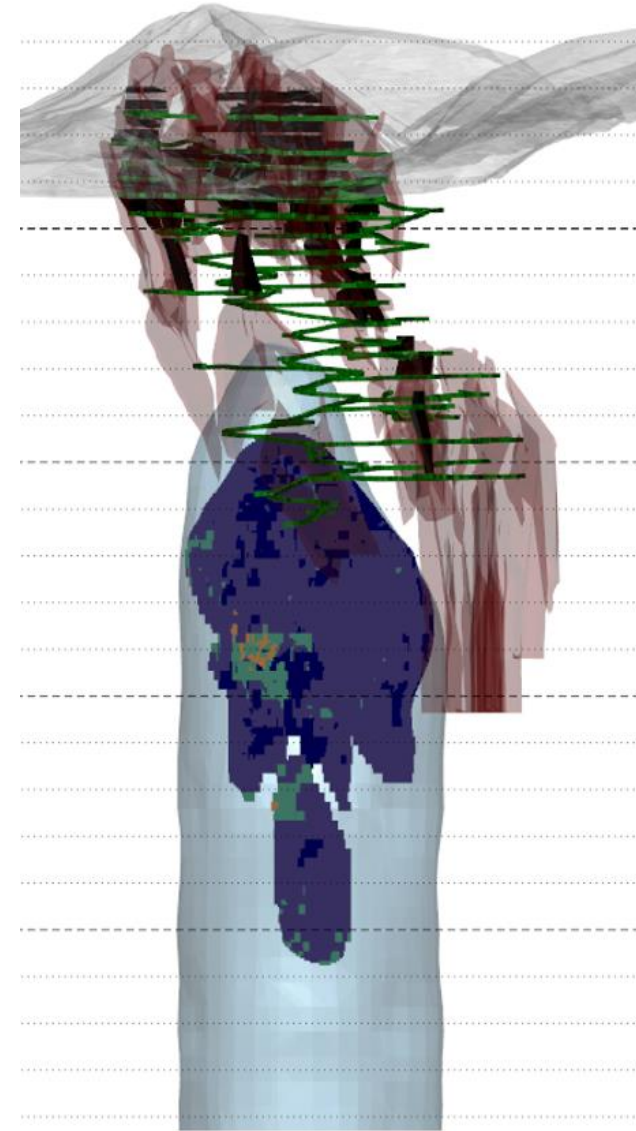
Project Pipeline: Elementos – Cleveland

ELEMENTOS



Tin, Copper and Tungsten

- **Total UG JORC Resources:**
 - 7.47 Mt @ 0.75% Sn (and 0.30% Cu)
 - 8.49 Mt @ 0.24% WO₃
- **Tailings JORC Ore Reserve (Historic Tailings)**
 - 3.70 Mt @ 0.29% Sn (and 0.13% Cu)
- **Exploration Target**
 - 32 Mt @ 0.24%WO₃ – 90 Mt 0.17%WO₃
- Resource open at depth with new intercepts
- Critical Minerals co-mineralised in Tungsten
 - Rubidium (Rb), Fluorspar (F), Molybdenum (Mo)
- Ore Sorting (Tungsten ore) upgrades 411–680%



Legend
Datum: GDA94 MGA55

- Foley's Drillhole
- Cleveland Historic Decline
- Historic Mined Out Stope
- Topography
- Foley's 2026 Tungsten Exploration Target
- Foley's 2026 Tungsten Block Model
- Cleveland Tin/Copper Resource

Lithology

- Ultramafic/Basalt
- Shale/Siltstone
- Sandstone
- Chert
- Quartz vein >1m

0 100



Tungsten (Wolframite) (ELT ASX release 03 October 2024)

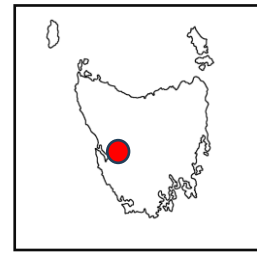
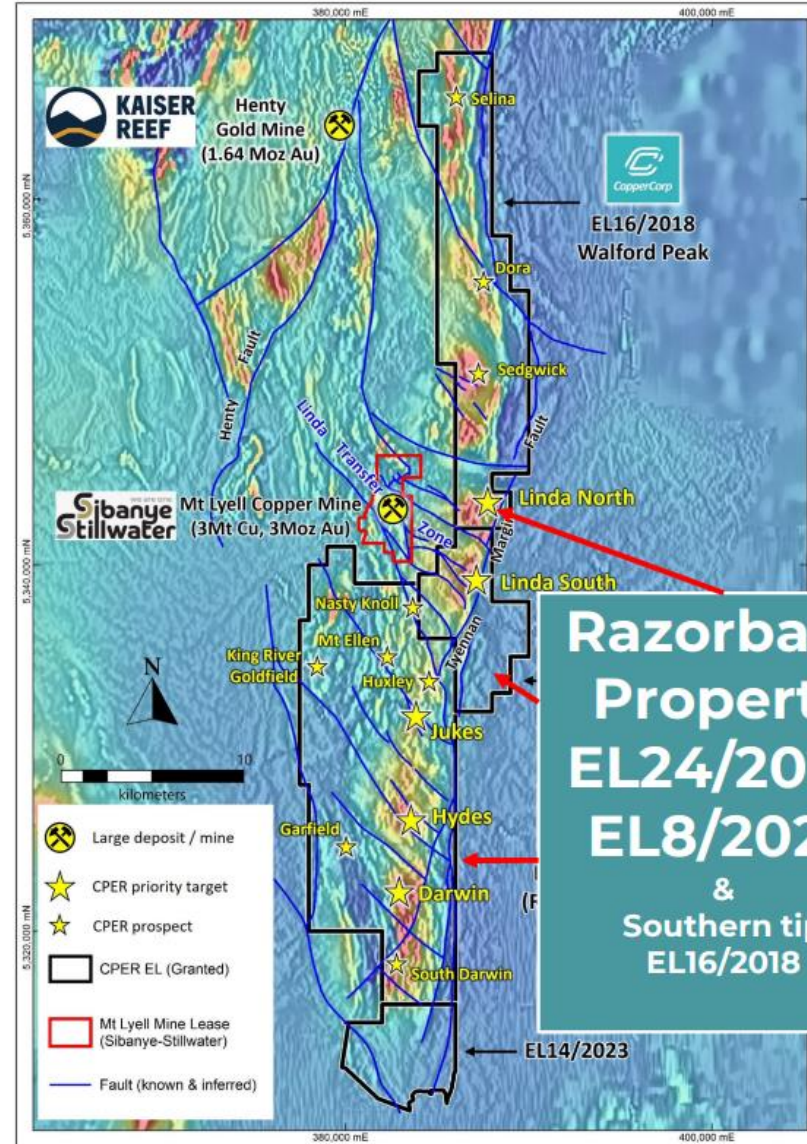


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Project Pipeline – CopperCorp

Copper, Gold and Silver

- Skyline and Razorback projects along trend of world class Mt Lyell Cu-Au deposits
- 23 km of strike length
- Early exploration stage
- Highest priority targets at Jukes and Hydes
 - Jukes drilling
 - 132 m @ 0.35% Cu & 0.19g/t Au (JDD001)
 - 50 m @ 0.66% Cu & 0.27g/t Au (JDD002W1)
 - 12.6 m @ 0.78% Cu, 0.15g/t Au, 3.43g/t Ag (JDD004)
 - Hydes channel sampling
 - 24 m @ 0.74% Cu & 0.36g/t Au, including 14m @ 0.97% Cu & 0.56g/t Au

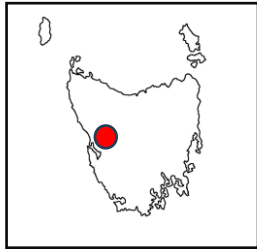


Jukes high grade

Razorback Property
EL24/2024
EL8/2023
 &
Southern tip
EL16/2018



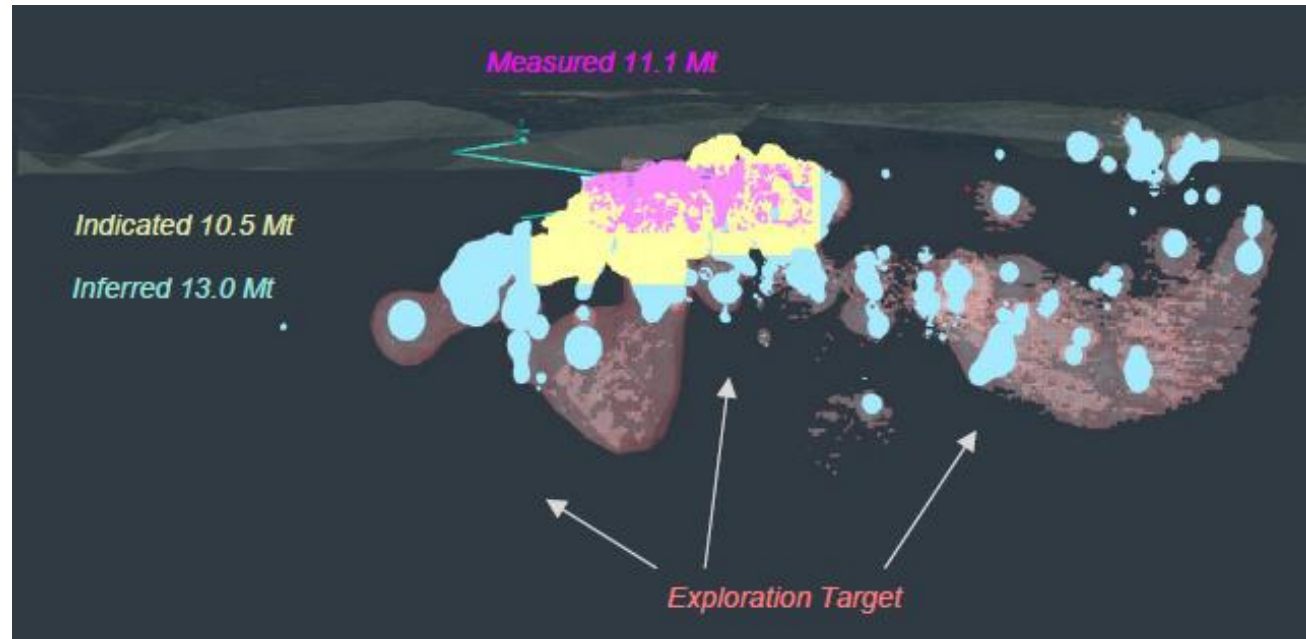
Care and Maintenance – Avebury – Hartree Capital



Hartree

Nickel and Cobalt

- Restart-ready operation
- High-quality, modern underground nickel sulfide mine with 6,000tpa Ni in concentrate
- 20-year Mining Lease, 30 Mt JORC Resource with significant upside
- Processing facility with capacity 900 ktpa expandable to 1.2 mtpa



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Thank you

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Resources for Net Zero: Victoria's Critical Minerals Roadmap

Jacqueline Leahy
Director, Critical Minerals Coordination Office
Resources Victoria



A new era in Victoria's mining future

The State of Victoria has a long and proud history of mining, from gold rush prosperity in the 19th century to global recognition



A new era in Victoria's mining future

Today, the state is an emerging region for critical minerals and rare earth elements.

In 2024, the Victorian Government launched its **Critical Minerals Roadmap**, marking a bold new chapter.

The Roadmap signals:

- a renewed commitment to responsible resource development
- a strategic focus on minerals essential to the global energy transition
- a clear message to industry – **Victoria is open for business.**



Our Critical Minerals Roadmap



Theme 1: Mapping the opportunities

Identify and promote new critical minerals opportunities using modern geoscience data and knowledge.



Theme 2: A modern regulatory regime

Establish a Victorian Critical Minerals Coordination Office to engage industry on processes and standards and reduce approvals timelines.



Theme 3: Critical minerals production and processing

Investigate potential economic and national supply security benefits from downstream processing facilities in Victoria.



Theme 4: Sharing the benefits of Victoria's minerals

Investigate benefit sharing models for local communities and Traditional Owners, balancing stakeholder interests to optimise social, environmental and economic outcomes.

What we've done



Seven **new critical mineral scientific studies**



Conceptualised benefit sharing models in partnership with Traditional Owners



Dedicated **local community engagement team** established



Approval timelines **reduced by 40%**



Two new mines approved. Groundbreaking **exploration decline approved**



Relationships deepened with **Commonwealth and international partners**



Mining pathways course funded for regional skills uplift



Critical Mineral **Advisory Group (CMAG) established** to guide downstream development

Creating conditions for investment

- Victoria is positioning itself as a global leader in sustainable critical minerals development.
- Our focus: unlocking investment through greater certainty and streamlined processes.



Creating conditions for investment

We are enabling investment and growth by:
fast-tracked and transparent approvals

- a strong pipeline of responsible projects
- rigorous licensing and environmental assessments
- partnerships with academia to investigate our ability to process materials in Victoria
- embedding benefit-sharing with communities and Traditional Owners to ensure ESG excellence and social licence.



















[This Photo](#) by Unknown Author is licensed under [CC BY](#)

Mineral Sands: Powering the net zero transition

- **Five active projects** ranging from advanced exploration to early development
- **Multiple long-life deposits**; billions of tonnes of mineral sands
- Rich in **Heavy Rare Earth Elements** and **Light Rare Earth Elements** (Dysprosium, Terbium, Neodymium, Praseodymium)
- Production expected as early as 2027



Advanced minerals sand projects

Project name	Ownership	Resource	Definitive Feasibility Study	Environmental Effects Statement	Mining Licence	Work Plan (final approval)
Donald Mineral Sands	Astron Corporation	2,634 Mt @ 4.6% HM				
Goschen	VHM Limited	685 Mt @ 3.7% HM				
Avonbank	WIM Resource	311.8 Mt @ 4.3% HM			 Under assessment	
Fingerboards	Gippsland Critical Minerals	1,170 Mt @ 0.5% Zr, 1% TiO ₂ , 0.05% TREO + Y ₂ O ₃	 Underway	 Commencing 2026		
Wimmera	Iluka Resources	2,204 Mt @ 5.7% HM	 Underway	 Underway		
Goschen Central	ACDC Metals	620 Mt @ 3.7% HM	 Scoping Study completed 2025			

A partnership-first approach with Traditional Owners and communities

- **Developing a benefit-sharing model** with Traditional Owners and local communities
- Early engagement to ensure lasting social, cultural and economic benefits
- Strong rehabilitation outcomes and broader returns beyond financial gain
- **True partnerships** built on trust, transparency and shared decision-making
- **ESG excellence** is our benchmark for the emerging sector
- **Our ethos:** Projects should be developed **with** communities, **not to** them



Downstream processing studies for antimony & rare earth elements

Victoria is well-positioned to host downstream processing due to its sources of critical minerals, infrastructure, technology and innovation industries, and strong environmental legislation.

Theme 3 **Critical minerals production and processing in Victoria**



Downstream processing studies for antimony & rare earth elements

- **The Victorian Government has launched the Advancing Antimony Grants.**
- This \$1 million initiative encourages industry, universities and researchers to explore the technical and commercial aspects of establishing a modern antimony processing facility in Victoria.
- Part of Victoria's Critical Minerals Roadmap the program helps unlock the state's antimony potential by developing a local antimony supply chain, supporting advanced manufacturing and regional jobs.



Victoria's vision

A world-leading responsible critical minerals sector that:

- Has timely approvals for development
- Forms strong and lasting partnerships with local communities and Traditional Owners
- Delivers significant economic benefits for regional communities
- Is environmentally responsible
- Contributes to the global energy transition
- Creates opportunities for future downstream industries



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Thank you

Let's continue the discussion at
Booth #410

To discover more about Victoria's
key resource opportunities, please visit:
resources.vic.gov.au

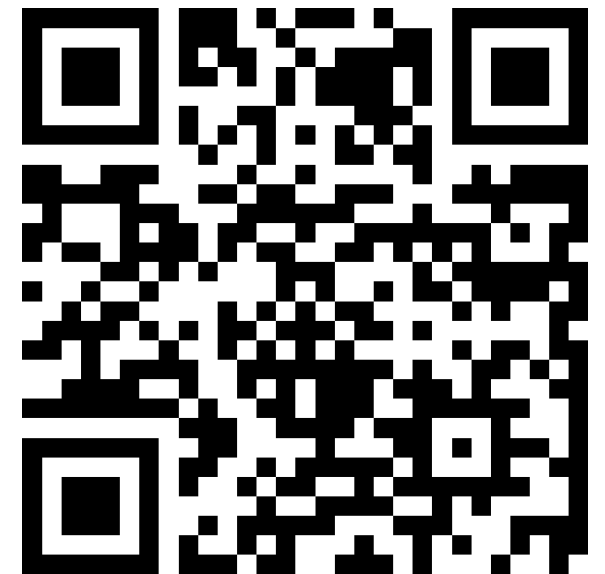


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Queensland

Our approach to critical minerals development

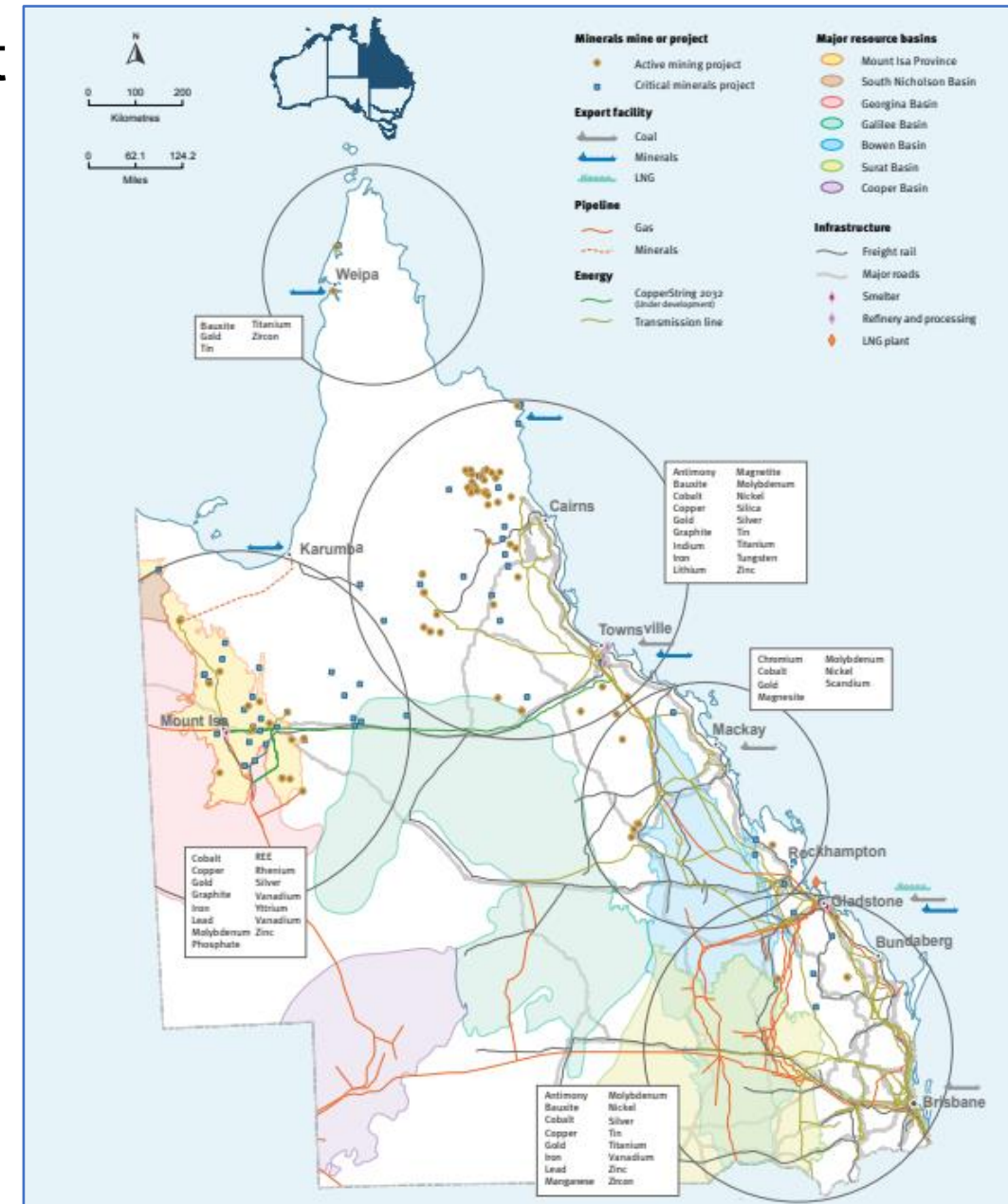
Tony Knight
Chief Government Geologist
Department of Natural Resources and Mines,
Manufacturing and Regional and Rural Development



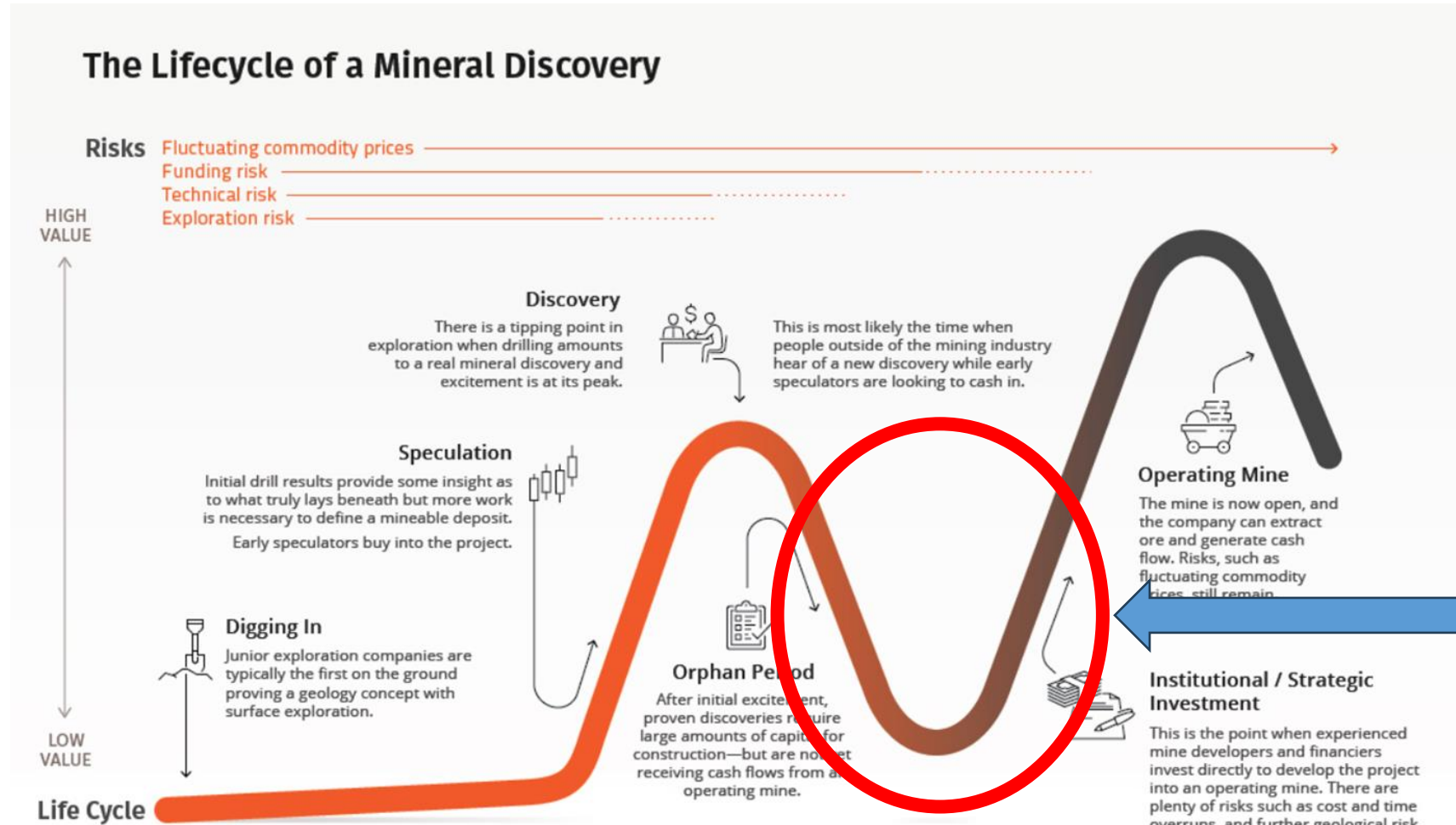
**Queensland
Government**
Australia

A history of energy & minerals development

- Bowen Basin
 - metallurgical coal export industry
- Surat Basin
 - coal seam gas to LNG export industry
- Northwest Minerals Province
 - base, precious and critical minerals
- Northeast Minerals Province
 - gold and critical minerals
- Cape York
 - bauxite
- Mineral processing & refining
 - copper, lead, zinc, aluminium & mineral sands processing & refining infrastructure at Mt Isa, Townsville, Gladstone & Brisbane



A clear role for government support to industry development



<https://www.visualcapitalist.com/visualizing-the-life-cycle-of-a-mineral-discovery/>

Where government can help:

Efficiency

- Time
- Capital
- Infrastructure
- Assessment & approval coordination

Support

- Government to government
- Off-take guarantees
- Attracting patient capital
- Market entry (e.g. pilot/demonstration scale infrastructure)
- Innovation & research programs

Queensland Government support

- Strategy, coordination and efficiency focus

Strategic leadership

Resources Cabinet Committee (RCC) provides cross-agency coordination to accelerate approvals and bring government focus to resolving issues impacting the industry.

Streamlined approvals

RCC oversight reduces duplication and speeds decision-making, supporting the A\$84B/year resources sector (25% of Queensland GDP) while boosting investor confidence and regional development.

Queensland Critical Minerals Strategy

Vision to position Queensland as a global leader in critical minerals, focusing on approval efficiency, investment attraction, value chain development, and ESG leadership. Delivered by Critical Minerals Queensland (CMQ).

Federal alignment

Queensland strategy complements the Australian Critical Minerals Strategy with shared goals of decarbonisation, sovereign capability, and global competitiveness.

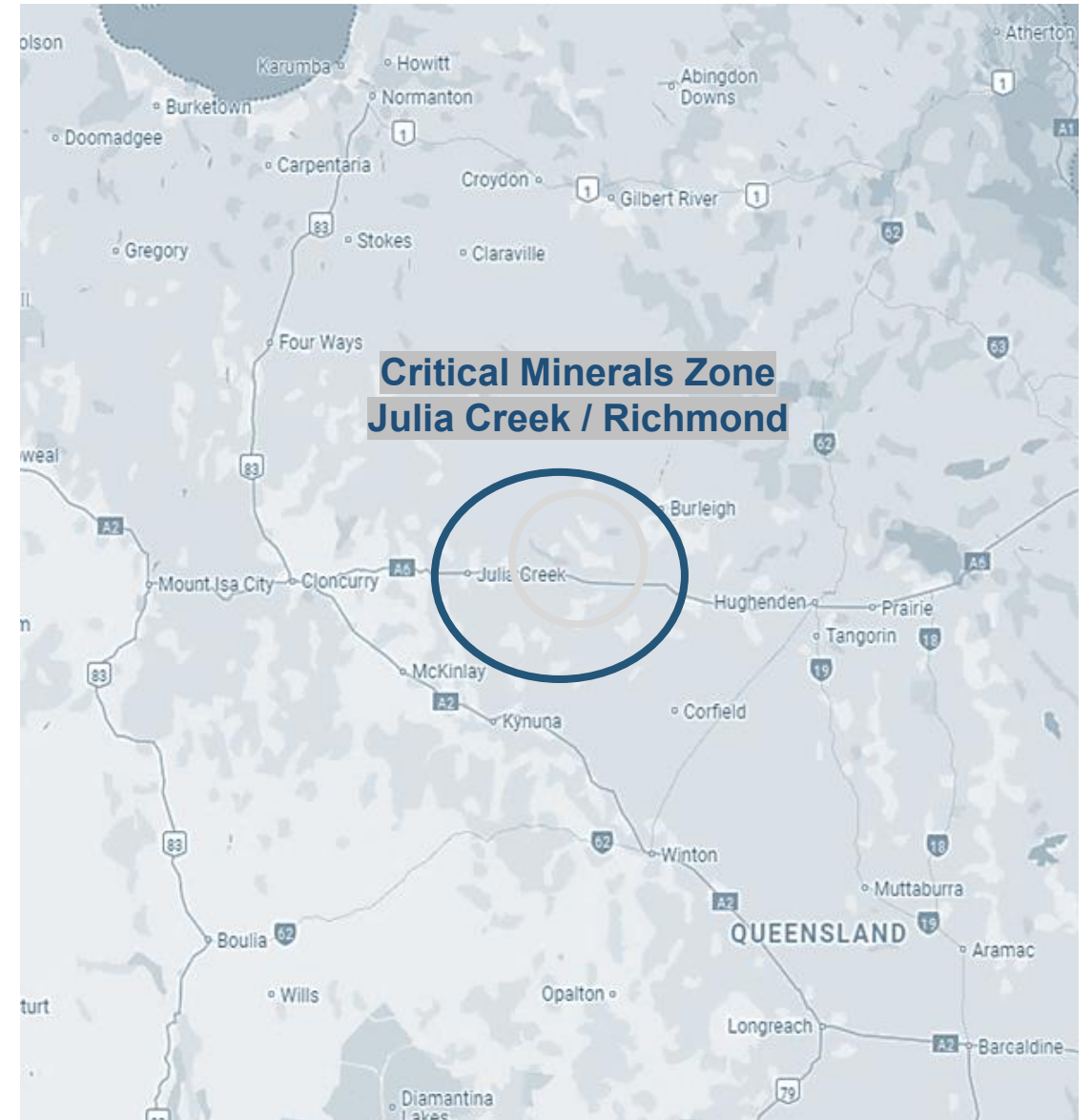
World-class mineral assets

- Copper: Mount Isa region (50% of Australia's copper)
- Graphite: Esmeralda and Millennium Projects
- Other: Zinc, Lead, Bauxite, Rare Earths, Vanadium, Cobalt

New industry development support

Critical minerals 'zones'

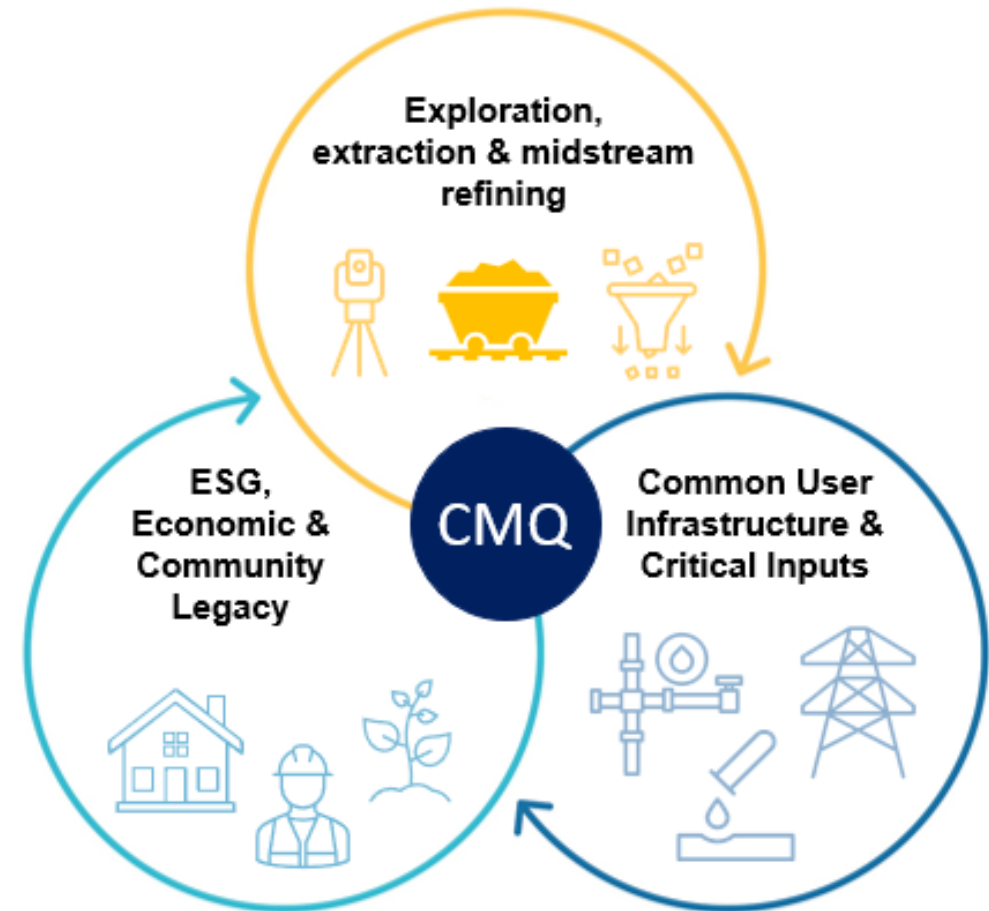
- Nine projects, one region
- Streamlined coordination & approvals
- Common-user infrastructure
- Community impact assessment & planning
- Research to support environmental assessment and conditioning
- Basic objective to help realise capital and time efficiencies



'Critical Minerals Queensland' office (Townsville)

Strategic focus areas

- ✓ Move faster, smarter
- ✓ Maximise investment
- ✓ Build value chains
- ✓ Foster research and ESG excellence

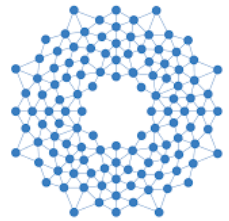


Just a few of the companies active in Qld...



Letter of Interest
from U.S EXIM
Bank for support up
to US\$860M

Tungsten



Alpha **HPA**

Strong growth
trajectory – significant
government support in
early stages

Silica



Hear more today!

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QR Code



Thank you

Tony Knight
Chief Government Geologist
Geological Survey of Queensland



**Queensland
Government**
Australia

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Government-backed growth

Co-investing in Western Australia's Critical Minerals

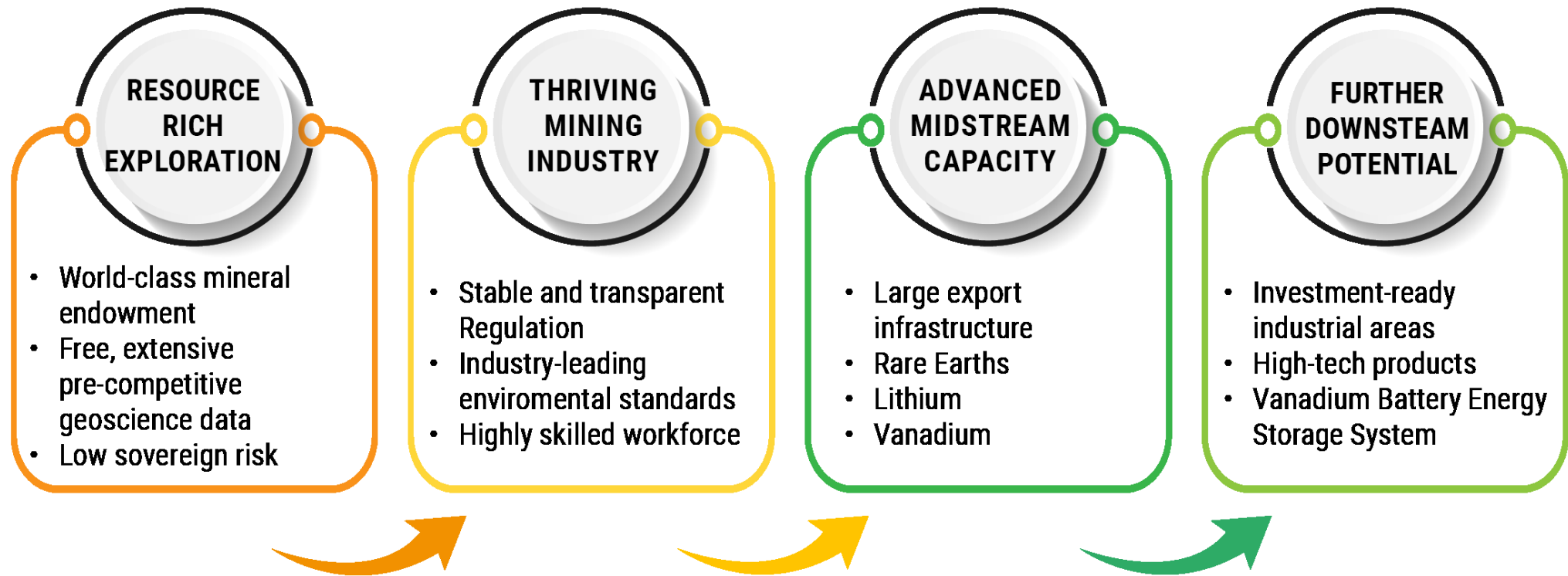
Michele Spencer
Executive Director

Department of Mines, Petroleum and Exploration

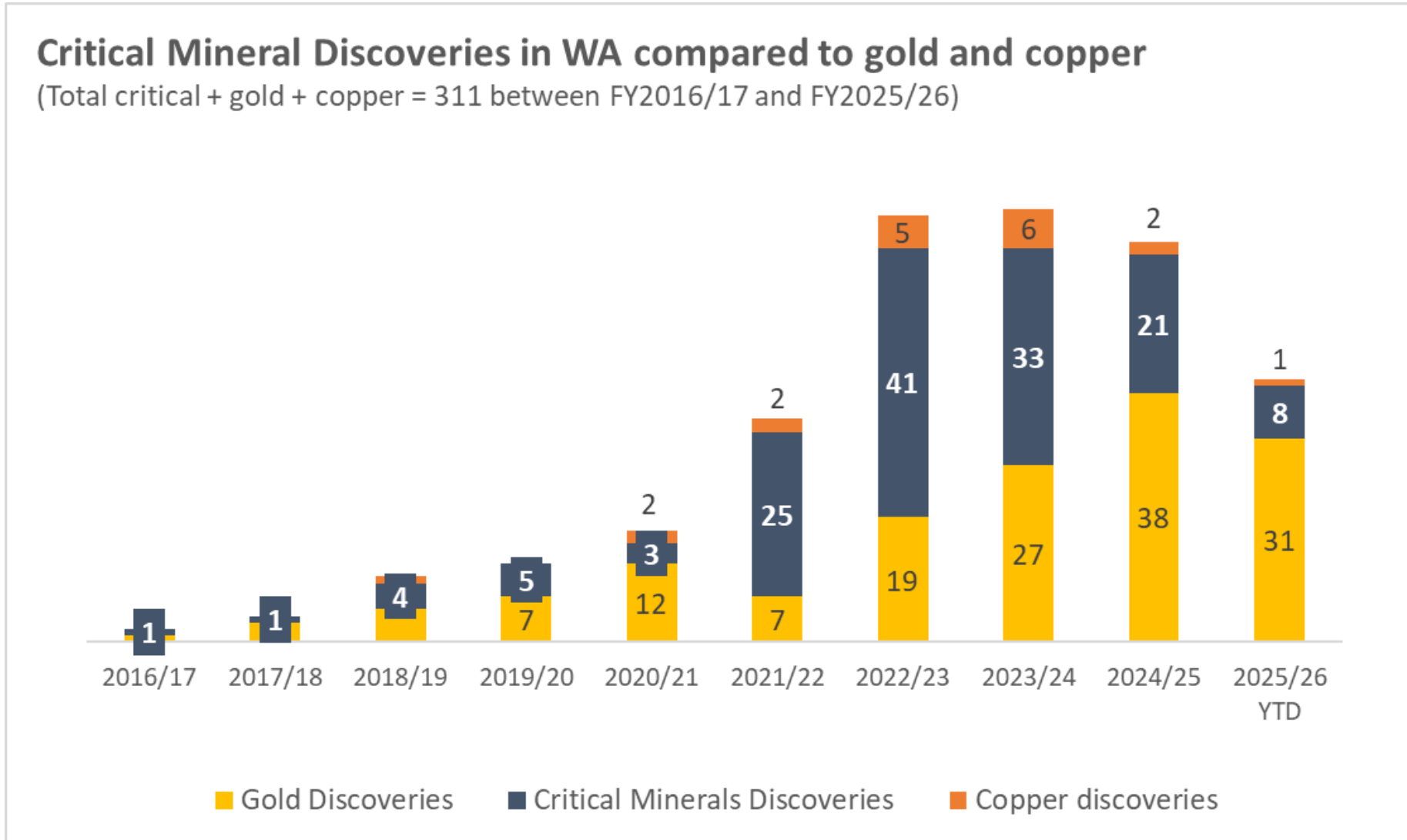


Department of **Mines,
Petroleum and Exploration**

Evolution of the Western Australian Mining Sector



Exploration and Discovery



Exploration and Discovery

Recent discoveries

- Terra Metals – Dante and Dante Southwest Project (Ti-V-Cu-Co-PGE)
- Wildcat Resources – Bolt Cutter (Li)
- Western Yilgarn NL – Ida Holmes (Ga-Te)
- Trek Metals - Christmas Creek (Mn)
- Emerald Resources – Stables (Au)
- Black Canyon – North Manganese Corridor (Mn)
- Nimy Resources – Sneaky Squirrel (Cu-Zn-Au-Mo-Bi)
- Encounter Resources – Aileron (Cu-REE-Nb)

Government co-investment

- A\$18M per annum Exploration Incentive Scheme (EIS)
- A\$40M Sustainable Geoscience package
- A\$30m WA Array

Mining and Processing


Australia's Critical Minerals List:

Sb, Be, Bi, Cr, Co, Ga, Ge, C, Hf, He, In, Li, Mn, Mg, Nb, PGE, REE, Re, Sc, Ta, Ti, W, V, Zr

Western Australia mines or has resources for all **bold** critical minerals and has resource potential for the remaining six.



For more information on projects, operating status and ownership, scan the QR code.



Mining and Processing

Government co-investment

- Royalty relief rebates
 - Industry-wide rebates have been available for potash, lithium and nickel
- Lower 2.5% vanadium royalty cap to help grow the industry
- A\$150m industry support package for lithium
 - Waiver on fees for downstream processing
 - Waiver on port fees and charges
 - A\$50m loan facility

Midstream Processing – Operating

Critical Mineral	Proponent(s)	Project	Midstream/Downstream Product	Stage
Lithium	Tianqi Lithium Energy Australia (Tianqi Lithium and IGO)	Kwinana lithium hydroxide plant	Lithium Hydroxide	Operating
Lithium	Covalent Lithium (SQM and Wesfarmers)	Kwinana lithium hydroxide plant	Lithium Hydroxide	Operating
Nickel and Cobalt	Glencore	Murrin Murrin nickel refinery	Nickel and cobalt briquettes	Operating
Rare Earth Elements	Lynas Rare Earths	Kalgoorlie Rare Earths Processing Facility	Rare earths carbonate	Operating
Silicon	Simcoa	Kemerton silicon smelter	Silicon metal	Operating
Titanium	Tronox	Bunbury and Kwinana Pigment Plants	Titanium dioxide pigment	Operating
Zirconium	Doral	Rockingham fused zirconia plant	Fused zirconia	Operating
Vanadium	Australian Vanadium	Wangara vanadium electrolyte facility	Vanadium electrolyte	Operating
Rare Earth Elements	Iluka Resources	Eneabba Rare Earths Refinery	Rare Earth Oxides	Under construction
Nickel	BHP	Kalgoorlie Nickel Smelter	Nickel matte	Care and maintenance
Nickel	BHP	Kwinana Nickel Refinery	Nickel powder, briquettes, and sulphate	Care and maintenance
Lithium	Albemarle Corporation	Kemerton lithium hydroxide plant	Lithium Hydroxide	Care and maintenance

Midstream Processing – Planning and Feasibility

Critical Mineral	Proponent(s)	Project	Midstream/Downstream Product	Stage
Lithium	Alkemy Capital Investments	Port Hedland Lithium Sulphate Plant	Lithium Sulphate	Feasibility Study
Gallium	Alcoa	Wagerup Gallium	Gallium metal	Pre-Final Investment Decision
Cobalt and nickel	Cobalt Blue Holdings and Iwatani Corporation	Kwinana Cobalt Refinery	Cobalt sulphate and nickel metal	Feasibility Study
Graphite	International Graphite	Collie Commercial-scale Battery Anode Material Facility	Battery Anode Material	Scoping Study
High Purity Alumina	Cadoux	Kwinana HPA Refinery	High Purity Alumina	Definitive Feasibility Study
High Purity Alumina	Impact Minerals	Lake Hope	High Purity Alumina	Pre-Feasibility Study
Nickel and Cobalt	Ardea Resources, Sumitomo Corporation and Mitsubishi Corporation	Kalgoorlie Nickel Project (3.5Mtpa)	Mixed Hydroxide Precipitate	Pre-Feasibility Study
Nickel and Cobalt	Nico Resources	Wingellina	Mixed Hydroxide Precipitate	Pre-Feasibility Study
Nickel and Cobalt	Alliance Nickel	NiWest	Nickel sulphate and cobalt sulphate	Definitive Feasibility Study
Nickel and Cobalt	Sabre Resources	Sherlock Bay	Mixed Hydroxide Precipitate	Scoping Study
Rare Earth Elements	Wyloo and Hastings Technology Metals	Yangibana - Stage 2	Rare Earth Carbonate	Definitive Feasibility Study
Rare Earth Elements	Victory Metals	North Stanmore	Rare Earth Carbonate	Scoping Study
Rare Earth Elements	Tronox	Cracking and Leaching Plant	Rare Earth Carbonate	Pre-Feasibility Study
Vanadium	Atlantic	Windimurra	Vanadium Pentoxide	Scoping Study
Vanadium	Australian Vanadium	Australian Vanadium	Vanadium Pentoxide	Bankable Feasibility Study

Midstream processing and value adding

Government co-investment

- Investment Attraction Fund (IAF) – New Energies Industries
- A\$100m State Government funding Critical Minerals Advanced Processing (CMAP) facility and:
 - Contingent equivalent A\$100m Federal Government support for CMAP
 - *State Development Act (2025)*
 - Lead Agency Framework
 - Strategic Industries Fund (A\$1b)
 - Strong bilateral support – Federal Government
 - Export Finance Australia
 - National Reconstruction Fund

Downstreaming, innovation and future opportunities

Projects

- Vanadium Battery Energy Storage System in Kalgoorlie
- Battery Precursors and Cathode Materials Pilot Plants
- Rare Earth Advanced Products Research
- POSCO Critical Minerals R&D Lab in Perth
- Global Advanced Industrial Hub
- South-West Advanced Manufacturing Hub

Government co-investment

- A\$150m Kalgoorlie Energy Storage
- Carbon Innovation Grants (CIG)
- Clean Energy Future Fund (CEFF)
- A\$8M Wind Turbine Manufacturing Initiative
- Investment into Advanced Manufacturing Hubs through:
 - Strategic Industries Fund
 - Local Industries Development Fund

Image credit: Muflih Hidayat, Discovery Alert 25/11/2025

The List

State government

- Lithium Industry Support Package (A\$150m)
- Exploration Incentive Scheme (A\$18m per year)
- A\$40M Sustainable Geoscience Investment
- WA Array A\$30m
- Investment Attraction Fund (up to A\$15m per project)
- Strategic Industries Fund (A\$1b over 10 years)
- Critical Minerals Advanced Processing Facility (A\$100m)
- Carbon Innovation Grants
- Clean Energy Future Fund
- *State Development Bill 2025*
- Lead Agency Framework
- Royalty relief

Federal government

- Future Made in Australia (A\$22.7b over 10 years)
 - Innovation Fund (A\$1.5b)
- Critical Minerals Production Tax Incentive (A\$17.6b over 14 years)
- Resourcing Australia's Prosperity (A\$566.1m over 10 years)
- Export Finance Australia – Critical Minerals Facility (A\$5b – loans and financing)
- Critical Minerals Strategic Reserve
- Northern Australia Infrastructure Facility (A\$7b lending facility)
- National Reconstruction Fund Corporation (A\$1b)
- Critical Minerals National Productivity Initiative (A\$10.2m)
- Major Projects Status

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Thank you

Michele Spencer
Executive Director
Department of Mines, Petroleum and Exploration



Department of **Mines,
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Critical minerals and copper projects and opportunities in Australia's Northern Territory

Ian Scrimgeour
Senior Executive Director
Northern Territory Geological Survey



Australia's Northern Territory



World class mineral deposits, including critical minerals



Resources-driven economy



High quality pre-competitive geoscience data on mineral opportunities



Small jurisdiction – responsive and ready access to key decision makers

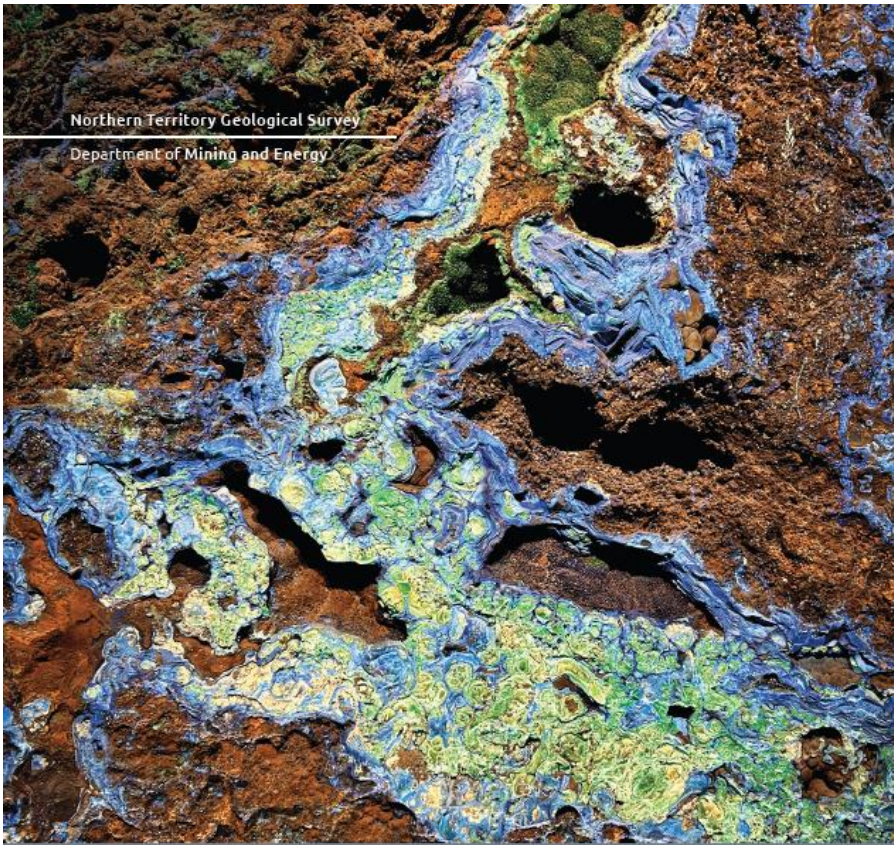


Deep water harbour in proximity to markets in East Asia



Globally significant onshore gas resources and a high level of solar irradiance provide potential for secure, cost competitive power generation





Northern Territory Geological Survey
Department of Mining and Energy

Critical Minerals and Gold in the Northern Territory 2026

resourcingtheterritory.nt.gov.au



Critical minerals in the Northern Territory

- Australia's only lithium production outside of Western Australia, with further undeveloped resources
- World-class rare earth project close to FID, with downstream processing to rare earth oxides
- Australia's largest graphite resource, suitable for production of purified spherical graphite
- Undeveloped tungsten resources
- Emerging fluorite and magnesium projects
- Substantial bismuth and cobalt associated with copper-gold deposits
- World-class operating manganese mine on Groote Eylandt
- Australia's largest undeveloped phosphate resources

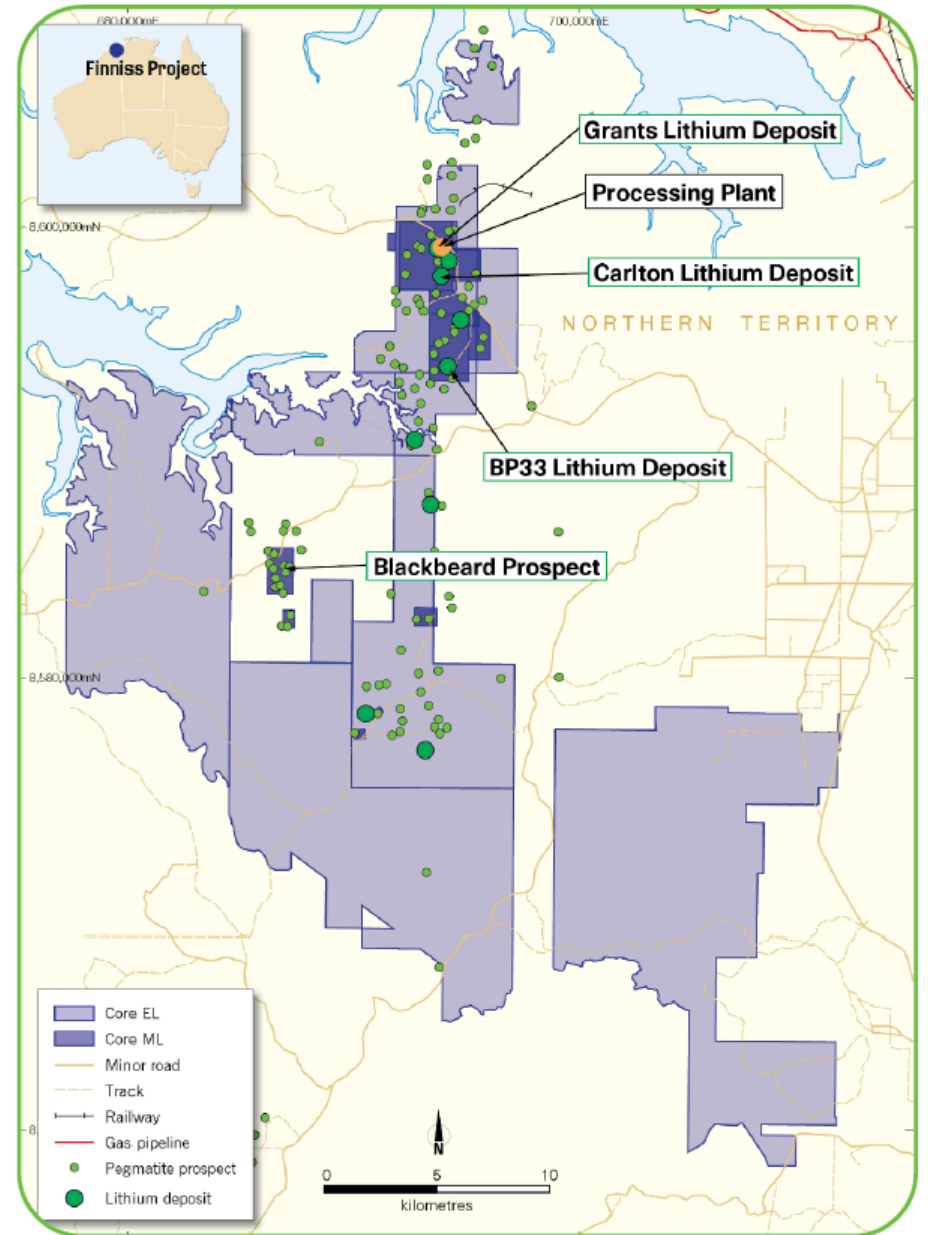
Lithium

Core Lithium – Finiss

- NT's first lithium mine, opened in 2022
- Entered temporary care and maintenance in June 2024
- 250% increase in contained Li since start of 2023
- Mineral Resource upgraded to **48.5 Mt @ 1.26% Li₂O**
- New discovery in at Blackbeard – 63 m @ 1.67% Li₂O

Updates in past year:

- All future offtake now unencumbered
- Restart study released showing significant cost reductions for mining and processing; predicted unit operating costs for 6% spodumene concentrate of A\$690–785/t
- Planning up to 205,000 tpa spodumene concentrate production in 10 year mine life, with potential for 20 years
- Potential for rapid restart with FID planned for 2026



Rare Earths (NdPr)

Arafura Rare Earths Ltd – Nolans

World-class resource of magnet-feed rare earths (NdPr), 130 km north of Alice Springs near railway

- On-site downstream processing to produce separated rare earths (including NdPr oxide)
- 66% of off-take secured with binding agreements with Hyundai Motor Co and Kia, Siemens Gamesa, Traxys
- Debt funding secured – US\$1.05B debt package
- Approvals in place, targeting FID 2026

Barkly Rare Earths Ltd – Barkly

Recently discovered resource of NdPr-rich REE and vanadium in regolith profile on Carpentaria Basin

Discovered through NT Government co-funded drilling
40 Mt @ 0.21% TREO including 690 ppm NdPr

Why the Nolans Project?

- ✓ Fully-permitted¹
- ✓ Construction-ready³
- ✓ Single-site ore-to-oxide
- ✓ Tier 1 location
- ✓ Potential for Phase 2 expansion and third-party processing hub, preliminary study underway



Copper

Potential for copper (+ gold, cobalt, bismuth) production from Tennant Creek mineral field

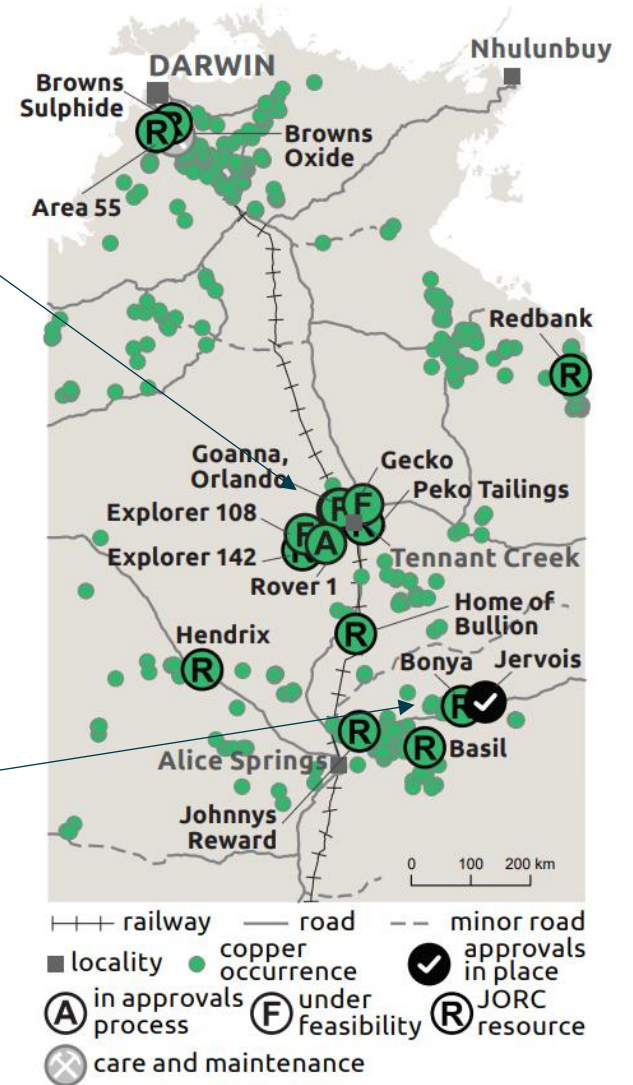
- Multiple companies assessing consolidation and development options including multi-user processing for copper, gold and critical minerals from multiple high-grade deposits (Tennant Mines, Emmerson Resources, CuFe Ltd, Tennant Minerals, Castile Resources)

More than 500kt of contained copper in recent resource upgrades

- Tennant Mines Pty Ltd – Warrego:** 16.5Mt @ 1.3% Cu, 1.1g/t Au
- CuFe Ltd – Gecko-Orlando:** 24.3 Mt @ 1.8% Cu, 0.56 g/t Au

KGL Resources Ltd – Jervois

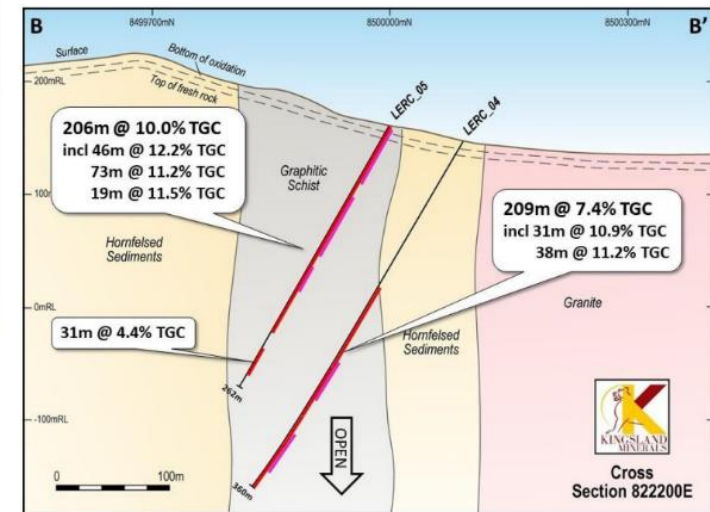
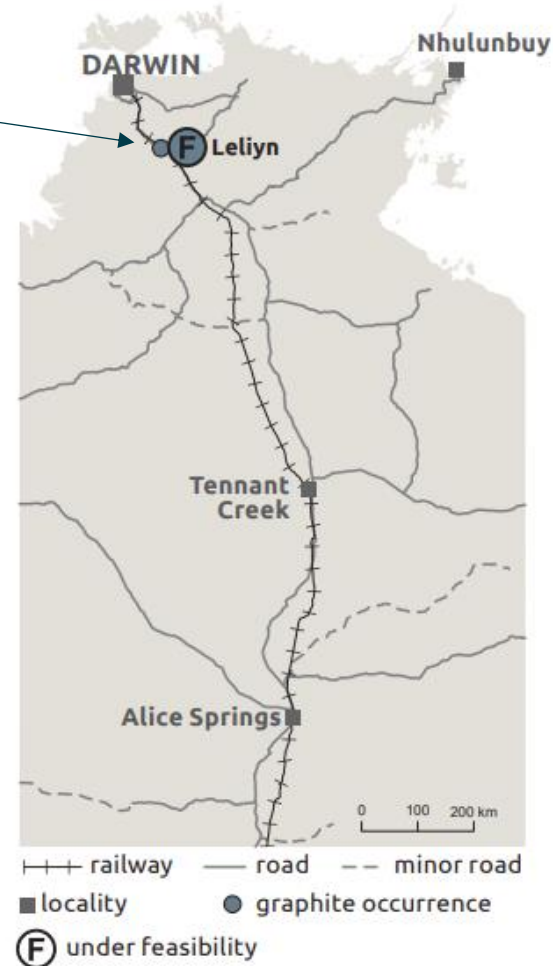
- NT's largest and most advanced copper project
- 27.45 Mt @ 1.87% Cu, 25.3 g/t Ag, 0.24 g/t Au**
- Proposed 10+ year mine, producing 30,000 tpa Cu (in concentrate).
- Revised feasibility study released February 2025
- Fully approved, seeking project finance and FID



Graphite

Kingsland Minerals Ltd – Leliyn

- 200 km from port, close to rail.
- Australia’s largest graphite resource – discovered in 2023.
- Indicated & Inferred Resource: **192.5 Mt @ 7.3% TGC**
- High grade graphite over substantial widths
Exploration Target 700-1100 Mt @ 7–8% TGC
- Metallurgical testwork demonstrates production of 99.97% purified spherical graphite, suitable for anode material
- Assessing gallium and rutile as by-products
- Strategic partner Quinbrook investigating downstream graphite processing facility near Darwin.



Other opportunities

Magnesium

High-grade magnesite deposits located close to Darwin port (*Thessally Resources Pty Ltd*)

Phosphate

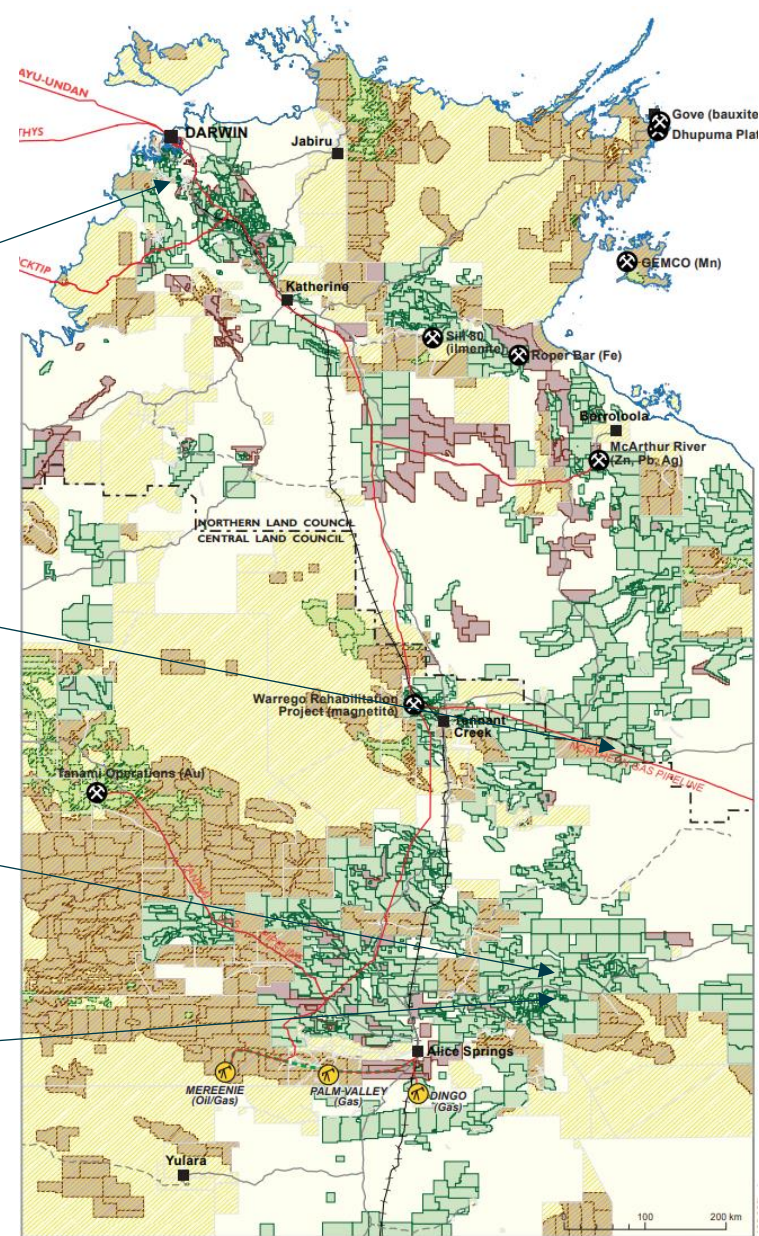
Australia's largest undeveloped phosphate deposits (*Avenira Ltd and Verdant Minerals Ltd*)

Tungsten

Plans to rapidly advance Molyhil W-Mo project towards development (*Tivan Ltd*)

Fluorite

Emerging high-grade fluorite project in central Australia (*Tivan Ltd*)



Exploration
licences in the
NT
Green = granted
Red = applications

Northern Territory Government support

Northern Territory Geological Survey

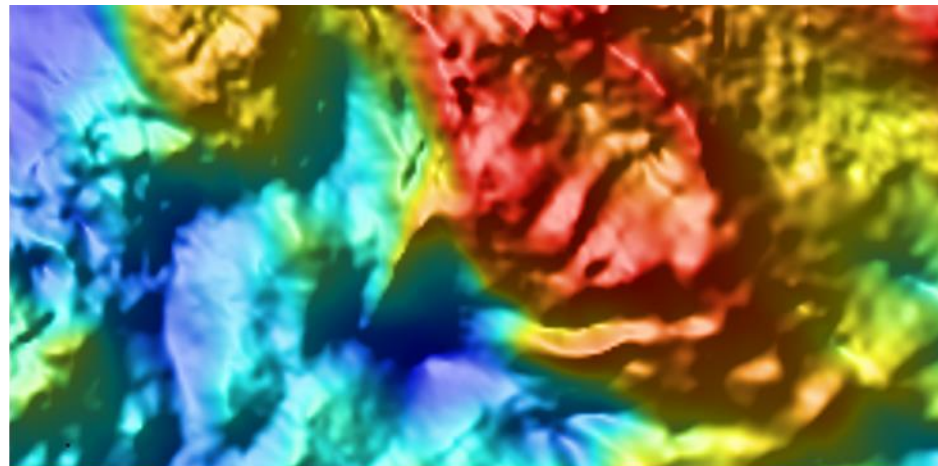
- High-quality, free of charge geoscience data
- Competitive exploration grant scheme available to industry to support and de-risk exploration

Mining royalty reforms

- New mineral royalty regime (5% for concentrates; 3.5% for processed materials)

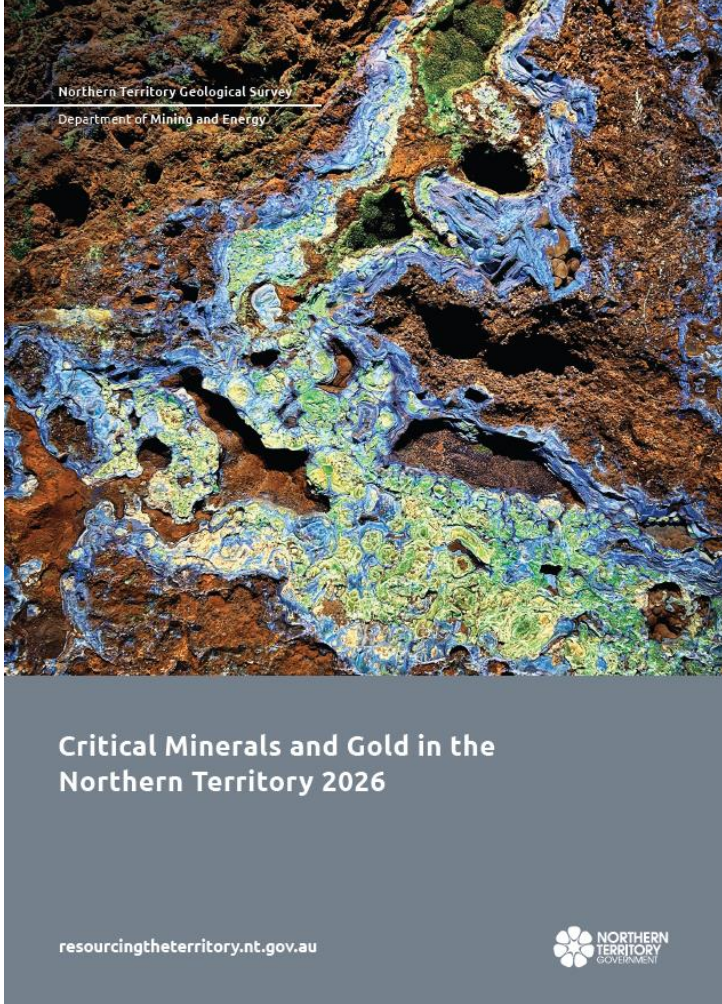


Providing competitive exploration grants



Undertaking precompetitive geoscience to de-risk exploration





Critical Minerals
and Gold in the
Northern Territory



Mining developments in the
Northern Territory
February 2025



Northern Territory Geological Survey
Department of Mining and Energy



Mining
Developments
in the Northern
Territory



Resourcing the Territory website
www.resourcingtheterritory.nt.gov.au

Geoscience data and products
gemis.nt.gov.au
or email: geoscience.info@nt.gov.au

Geoscience and titles web mapping
strike.nt.gov.au

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Australia Day Q&A
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AUSTRALIA MINERALS

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Minerals investment opportunities in Australia

Chair: Shannon Brown
Acting Manager, Exploration and Development
Geological Survey of Victoria

