

Critical Mineral Opportunities in Australia's Northern Territory |

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Australia's Northern Territory



World class mineral deposits, including critical minerals



Resources-driven economy



High quality pre-competitive geoscience data on mineral opportunities



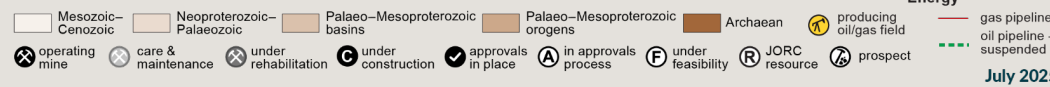
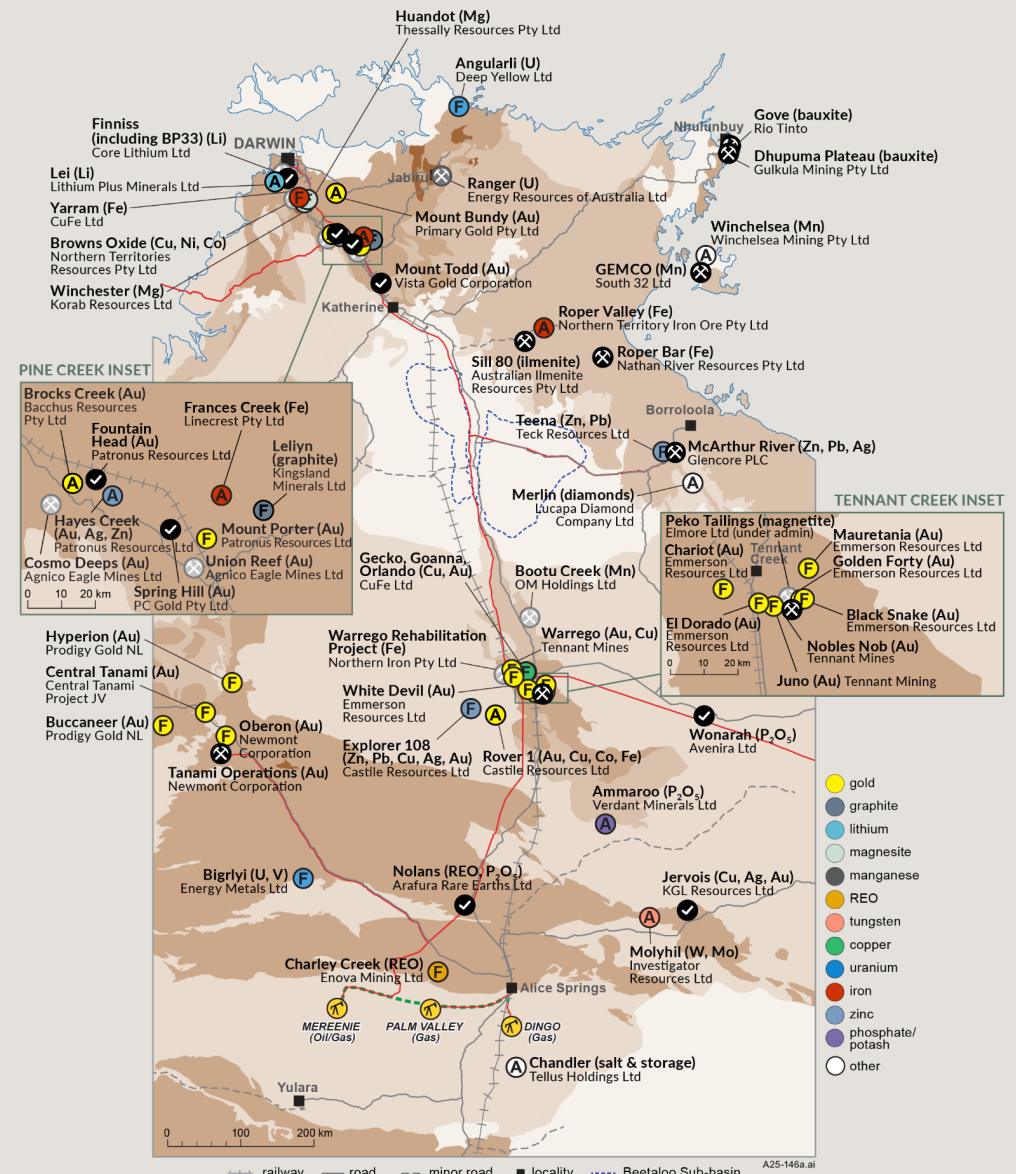
Small jurisdiction – responsive and ready access to key decision makers



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



July 2025

Northern Territory's minerals sector



8 operating mines

World-class manganese, zinc-lead, gold and bauxite mines

Uranium mining permitted



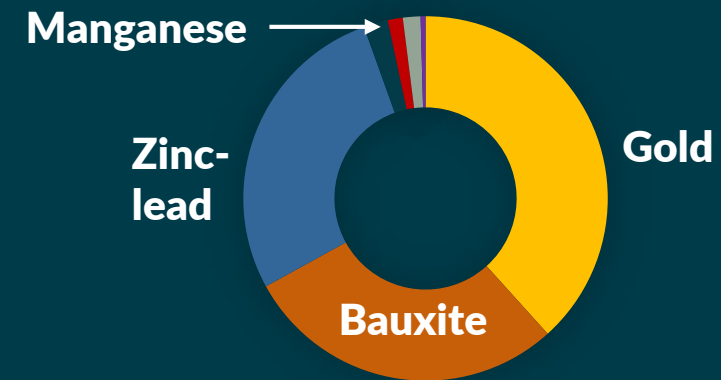
19 developing mining projects

\$6.2 billion in estimated CAPEX

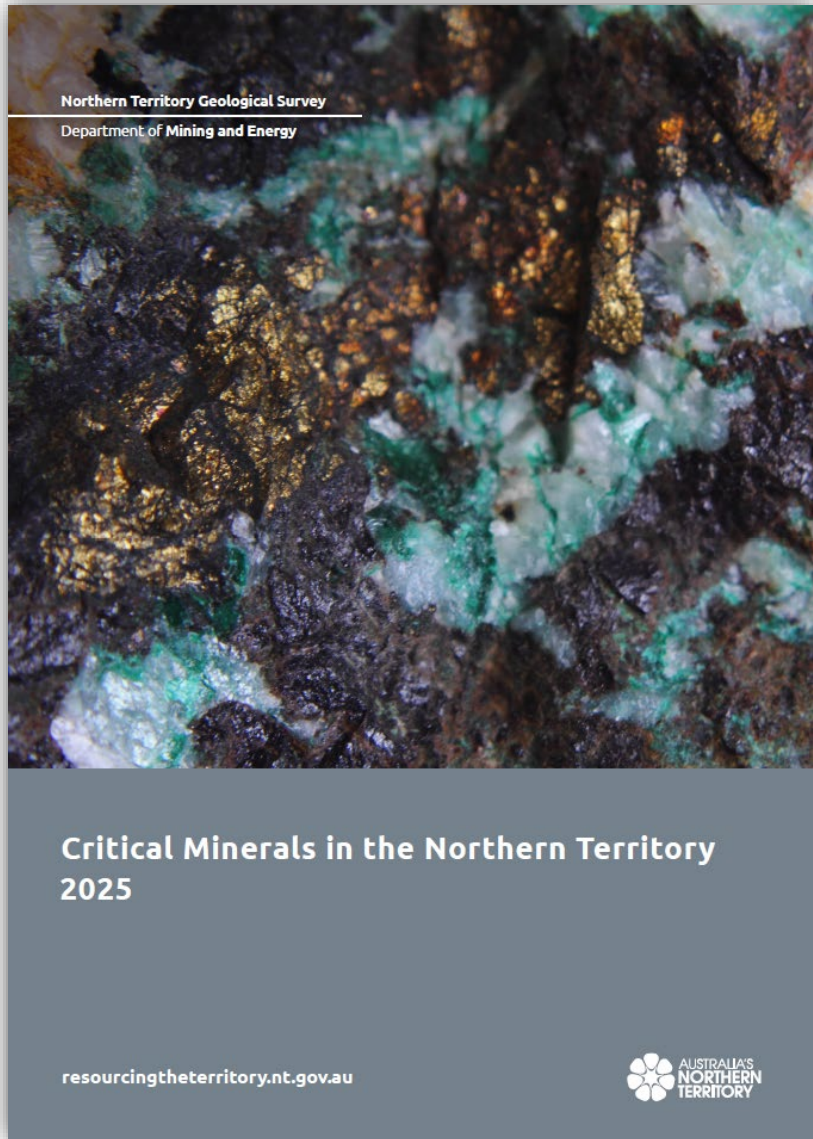
Primarily for copper, critical minerals and gold - mainly junior ASX-listed companies



\$4.36 billion mineral production in 2024-25



Critical minerals potential in the Territory



The Territory's critical minerals

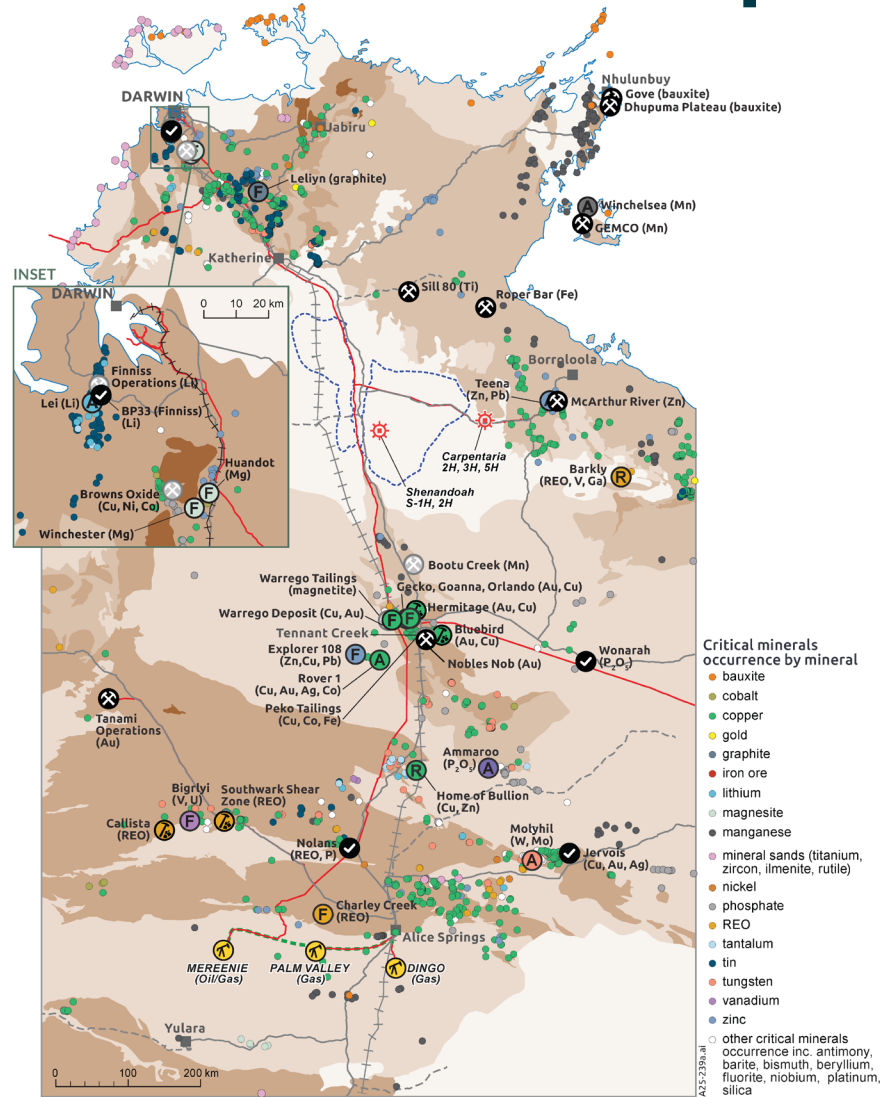
¹³ Al Aluminium	²⁷ Co Cobalt	²⁹ Cu Copper	³¹ Ga Gallium	⁶ C Carbon (graphite)	³ Li Lithium	¹² Mg Magnesium
²⁵ Mn Manganese	⁴² Mo Molybdenum	²⁸ Ni Nickel	¹⁵ P Phosphate	Rare earth elements	²² Ti Titanium	⁷⁴ W Tungsten
²³ V Vanadium	³⁰ Zn Zinc	⁴⁰ Zr Zirconium	Producing or demonstrated Mineral Resources			

Emerging critical minerals in the Territory

⁵¹ Sb Antimony	⁴ Be Beryllium	⁸³ Bi Bismuth	⁹ F Fluorine	³² Ge Germanium	High purity alumina	
⁴¹ Nb Niobium	Platinum group elements	²¹ Sc Scandium	¹⁴ Si Silicon	⁷³ Ta Tantalum	⁵² Te Tellurium	⁵⁰ Sn Tin



Critical minerals potential in the Territory



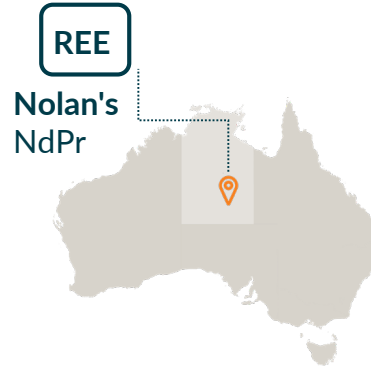
- Australia's only lithium production outside of Western Australia, with further undeveloped resources
- World-class rare earth project close to FID, with downstream processing to rare earth oxides
- Australia's largest graphite resource, suitable for production of purified spherical graphite
- World-class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

World-class Rare Earths project

- **Arafura Rare Earths Ltd** – Nolans 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)
- Conditional credit approvals received for debt funding > US\$1.0B
- 66% of binding offtake agreements with Hyundai Motor Co and Kia, Siemens Gamesa, Traxys
- Phase 2 assessing third-party processing

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



Nolans

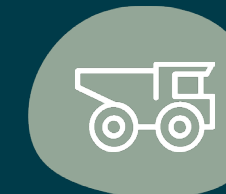
Arafura Rare Earths Ltd



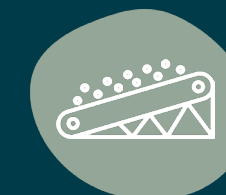
Fully permitted, FID in early 2026



Mineral Resource
56Mt @ 2.6% TREO and
11% phosphate (P₂O₅)



Ore Reserves
29.5Mt @ 2.9% TREO
and 13% phosphate
(P₂O₅)



NdPr Oxide 4,400 t/year
SEG/HRE Oxide 573 t/year
Fertilizer-grade phosphoric Acid
(54% P₂O₅) 144,393 t/year
38 year mine life



CAPEX US\$1,226M
After-tax NPV_{8%} US\$1,729
(base)
Average annual EBITDA
US\$460M (base)
Operating cost US\$28.6/kg
NdPr net of P₂O₅ credit

Globally significant graphite

- **Kingsland Minerals Leliyn deposit** - one of Australia's largest graphite deposits
- Two hours south of Darwin Port on NT's central infrastructure corridor
- September 2025 – **Scoping Study released** demonstrating globally competitive costs
- July 2025 – added **gallium** and **titanium** to JORC Exploration Target



Leliyn

Kingsland Minerals Ltd



Scoping Study released, Drilling planned to convert more MRE to Indicated to support feasibility studies



Mineral Resource 194.6 Mt @ 7.3% TGC
Exploration Target 700 – 1,100 Mt @ 7-8% TGC



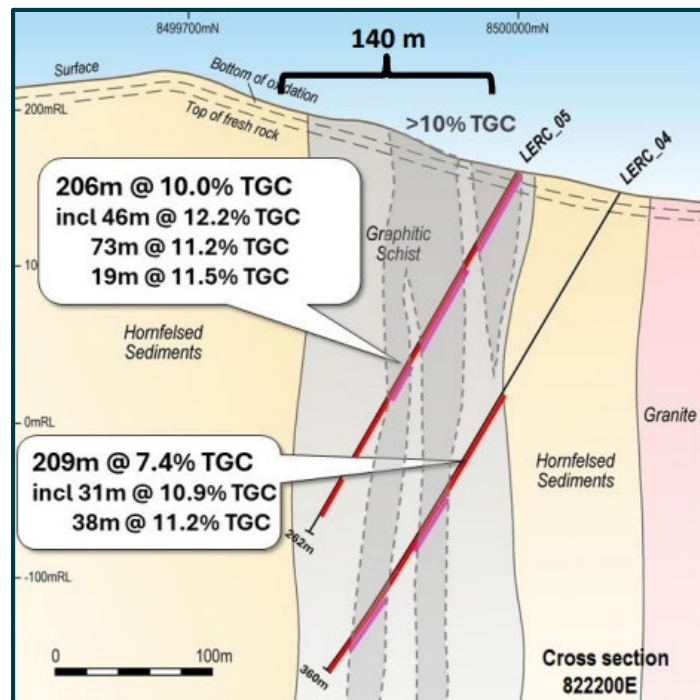
Evaluating simple open-cut mining, low strip ratio



Conventional processing produces 99.97% purified spherical graphite



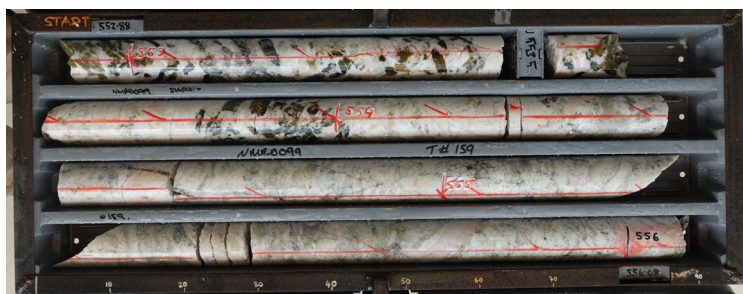
Equity, and binding offtake agreement
Quinbrook Infrastructure Partners, exploring downstream processing in Darwin



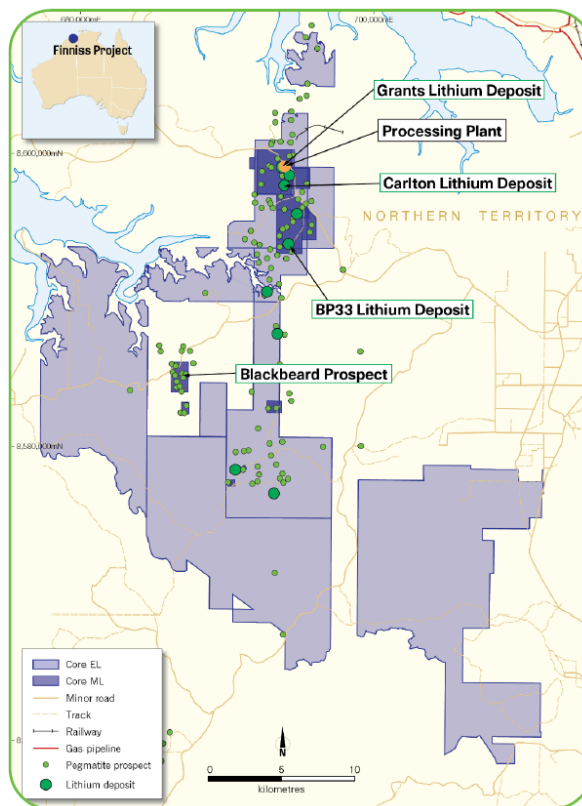
Lithium in the Territory

Core Lithium – Finniss Project

- Located 80km from Darwin Port
- 250% increase in contained Li since start of 2023
- Restart study shows significant cost reductions for mining and processing
- New discovery in 2024 at Blackbeard – 63m @ 1.67% Li₂O



Successful proof of concept demonstrated for direct-targeting blind pegmatites using ambient noise tomography generated models in Round 17 co-funded GDC program



Finniss (Li)

Core Lithium Ltd



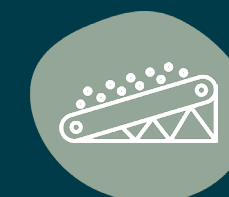
Fully permitted and positioning for a for restart



Mineral Resources
48.2 Mt @ 1.26% Li₂O



Ore Reserves
15.2 Mt @ 1.26% Li₂O



205Ktpa spodumene concentrate production for 10-year mine life, with potential for 20 years



CAPEX A\$175-200M
Life of Mine Cash Flow \$1.15-1.2B
AISC \$690-785/t for 6% spodumene concentrate

Large lithium resources continue to grow

- **Bynoe pegmatite field:** to date lithium resources have been defined for 10 individual pegmatite-hosted deposits
- **Central Australia:** Numerous early stage exploration projects in the Barrow Creek and Anningie pegmatite fields. New discovery spodumene pegmatites in the Mt Stafford tin field (attracting farm-in agreement with SQM Australia)

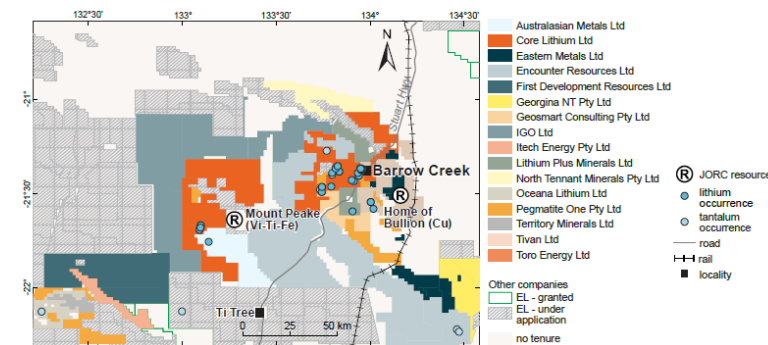
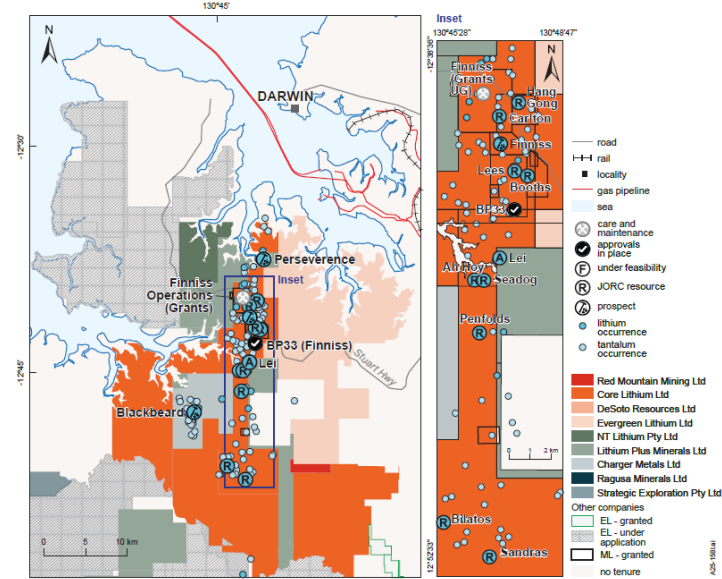
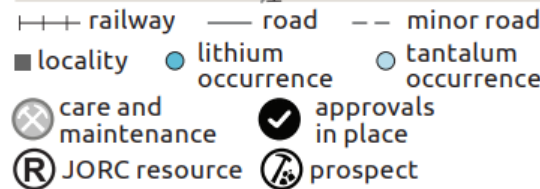
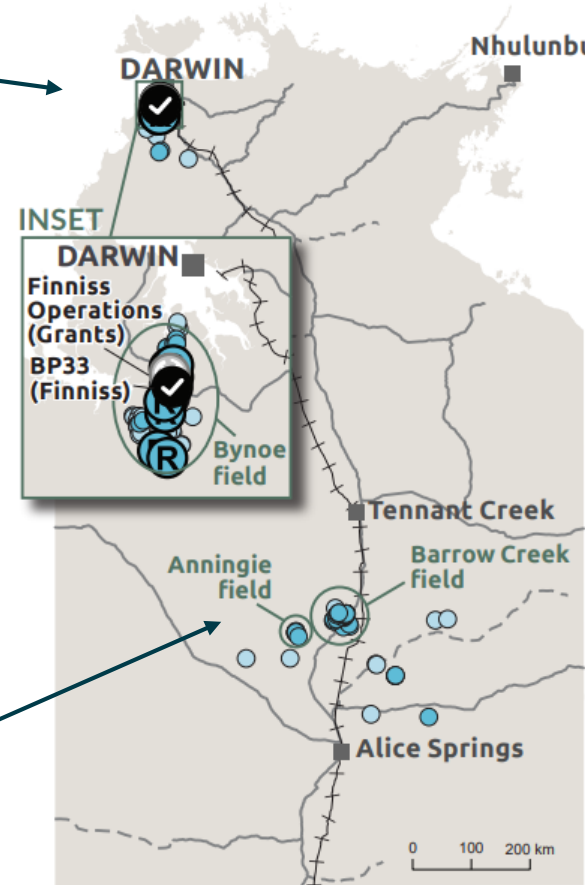


High-grade resource defined at Lei:
4.1 Mt @ 1.43% Li₂O

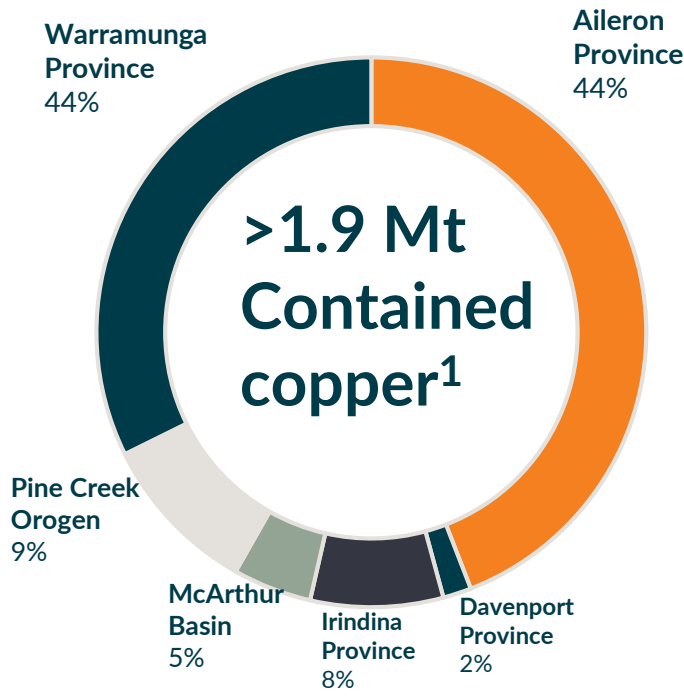
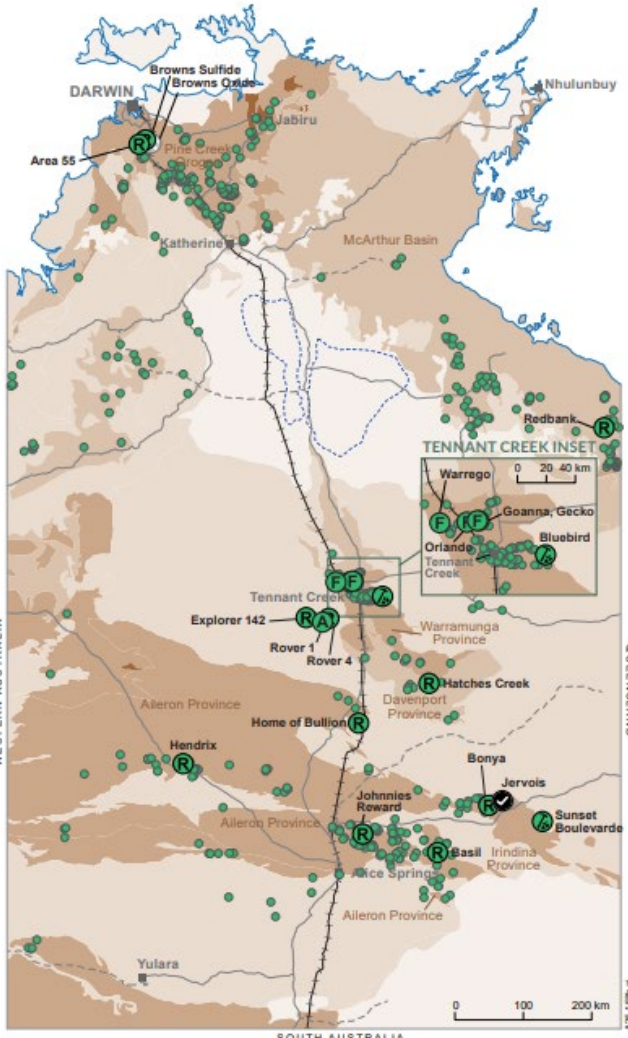
Advancing environmental approvals and mining studies



ASX: ITM



Growing copper potential in the Territory



¹ Publicly announced JORC 2004, JORC 2012 or NI43-101 Inferred, Indicated and Measured Mineral Resources

- Potential for copper (+ gold, cobalt, bismuth) production from Tennant Creek mineral field.
- More than 500kt of contained copper in recent resource upgrades:
- Tennant Mines – 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
- Approvals in place for NT’s largest and most advanced copper project at Jervois 27.45 Mt @ 1.87% Cu, 25.3 g/t Ag, 0.24 g/t Au
- Exploration in the greater McArthur Basin for large-scale sediment hosted-copper deposits.

Northern Territory Government Support

NT Geological Survey supports the exploration industry through *Resourcing the Territory* program:

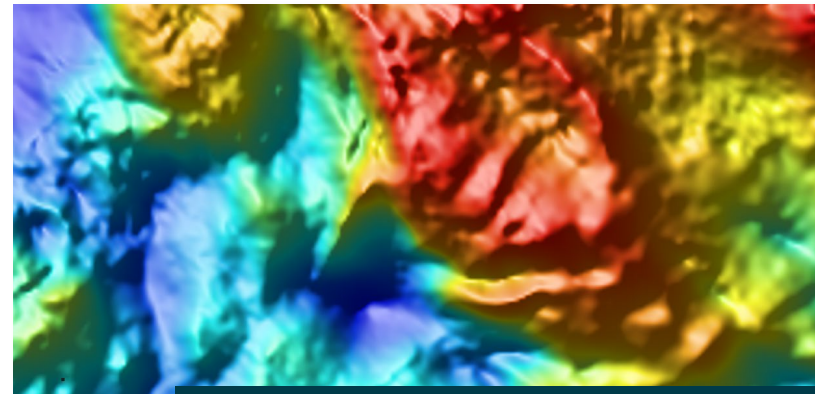
- Undertaking geoscience studies to improve the understanding of geological and resource potential across the Territory
- Improving regional-scale geophysical datasets
- Delivering more digital legacy exploration data
- Providing up to \$4M annually to co-fund exploration grants to support and de-risk exploration
- New team Engagement and Advice team focused on monitoring industry activity, maximizing the outcomes from the exploration grants program and promoting the resource potential of the Territory



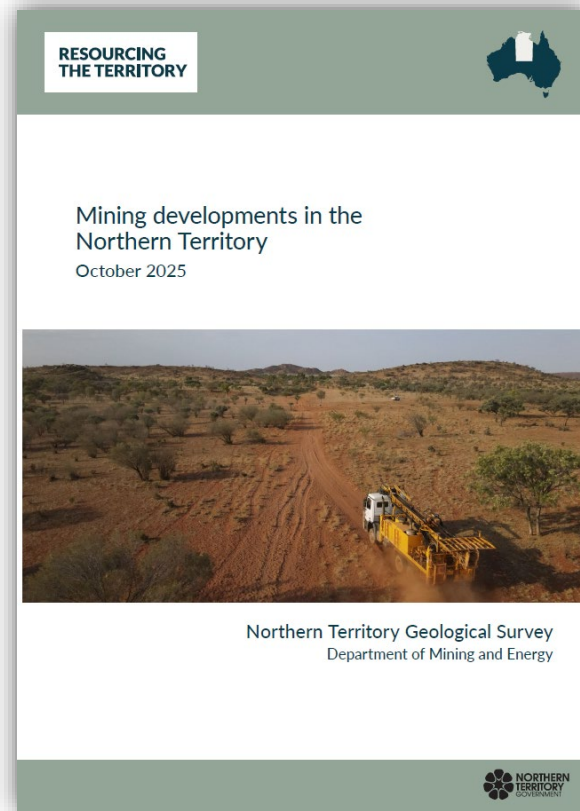
For more information



Providing competitive exploration grants



Undertaking precompetitive geoscience to de-risk exploration



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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Booth **H17** in the Expo

