

critical minerals

Invest in Queensland

Located in the north-eastern part of Australia, Queensland is a premier resource investment destination with the critical minerals the world needs to tackle climate change and drive advancements in manufacturing, defence, scientific research sectors and more.

On offer are some of the world's richest mineral-producing areas, with major deposits of copper, lead, zinc, nickel, cobalt, tungsten, graphite, vanadium, as well as silver, phosphate and rare earths.

Queensland's critical minerals also come with strong foundations to build our ESG credentials, stable and reliable federal and state governments and a growing supply chain and infrastructure links.

This document captures the opportunities on offer in Queensland as we move forward and confirm our place as a global supplier of critical minerals.



Why Queensland?

Queensland has a long and proud history of turning its rich mineral and energy resource endowment into world-class opportunities.



North Queensland export terminal.

Investment destination for resources

Stable government and economy

Australia's federal and state governments are stable and reliable, and encourage foreign investment.

In 2022, Australia had the 12th-largest economy in the world, and despite worldwide economic uncertainty, is still predicted to experience economic growth throughout 2023.

Over the past two decades, Queensland's economic growth has also exceeded the national average. Investors can benefit from being part of one of the best-performing state economies in Australia. Business and consumer confidence is also strong, and business conditions have been among the highest in the country.

Global partnerships

Australia has signed partnership agreements with the United States, India and South Korea on critical minerals to improve understanding and to strengthen supply and demand of critical minerals between Australia and each partnership country.

Australia has also joined the Minerals Security Partnership along with the United States, Canada, Finland, France, Germany, Japan, the Republic of Korea, Sweden, the United Kingdom and the European Commission. The partnership seeks to develop and secure global supply chains for critical minerals that are crucial to clean energy technology and decarbonisation.

Further, Australia is a signatory to 11 free-trade agreements with individual countries or groups of countries. Three of these agreements—with China, Korea and Japan—cover more than half of Australia's exports.

Environmental, social and governance credentials

Queensland's resources industry has a strong economic and community legacy. This is underpinned by a rigorous regulatory framework. Many of these regulatory requirements support indices that are measured, globally, across the various ESG standards.

This strong track record, together with a commitment to continue to respond to emerging ESG needs, ensures investors can confidently mitigate their investment risks and know there is an abundance of opportunities.



Innovation and skills

Queensland's intellectual capability in geoscience and mining is well established, and has generated capacity for the benefit of investors, manufacturers, retailers and customers along the supply chain.

The Queensland Government has invested more than A\$3.6 billion in research, development and innovation during the past two decades, and supports around 40 research institutions.

Queensland also boasts academic hubs specialising in mining and critical minerals, including James Cook University in Townsville, Resources Centre of Excellence in Mackay and the Sustainable Minerals Institute at The University of Queensland.

Investing in Queensland resources: Queensland Government commitments

The Queensland Government backs the resource industry and is working with industry to build supply chains through investment including:

- A\$300 million to improve the connection from the state's world-class minerals province to the Port of Townsville, where the majority of bulk products are exported
- A\$30 million for geological data and exploration
- A\$22.6 million to supercharge exploration for critical minerals
- at least A\$10 million for a common user infrastructure facility for processing of vanadium and other critical minerals.

Making evidence-based investment



The Geological Survey of Queensland provides invaluable, world-leading intelligence through publications, maps and digital data products to drive innovation and create opportunities.

Supporting Australia's resources: Australian Government commitments

The Australian Government is accelerating the growth of the critical minerals sector by building our downstream processing capabilities and diversifying existing critical minerals supply chains through:

- up to A\$1 billion under the National Reconstruction Fund for a Value-Adding in Resources Fund
- A\$50.5 million for the Australian Critical Minerals Research and Development Hub to build valuable intellectual property in critical minerals processing
- A\$99.8 million for the Strategic Critical Minerals Development Program to assist critical minerals producers to progress strategically significant projects.

The Australian Government is also developing a new National Critical Minerals Strategy to set out a clear vision for the sector. It will complement the National Battery Strategy and the Electric Vehicle Strategy to diversify supply chains and help drive growth in the critical minerals sector, including rare earths. The strategy will be developed in consultation with industry and community stakeholders, including Aboriginal and Torres Strait Islander Traditional Owners.

Investing in Queensland's critical minerals offers unrivalled opportunities to thrive as part of a supply chain in the fastest growing region of the world with a politically, economically and socially stable base.

Queensland.

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| | | | | | | | | | | 18 VIIIA | | | | | |
| | | | | | | | | | | 2 He Helium 4,0026 | | | | | |
| | | | | | | | | | | 13 IIIA | 14 IVA | 15 VA | 16 VIA | 17 VIIA | |
| | | | | | | | | | | 5 B Boron 10,81 | 6 C Carbon 12,011 | 7 N Nitrogen 14,007 | 8 O Oxygen 15,999 | 9 F Fluorine 18,998 | 10 Ne Neon 20,180 |
| | | | | | | | | | | 13 Al Aluminium 26,982 | 14 Si Silicon 28,085 | 15 P Phosphorus 30,974 | 16 S Sulfur 32,06 | 17 Cl Chlorine 35,45 | 18 Ar Argon 39,948 |
| 10 VIII B | 11 IB | 12 IIB | | | | | | | | | | | | | |
| 28 Ni Nickel 58,693 | 29 Cu Copper 63,546 | 30 Zn Zinc 65,38 | 31 Ga Gallium 69,723 | 32 Ge Germanium 72,630 | 33 As Arsenic 74,922 | 34 Se Selenium 78,971 | 35 Br Bromine 79,904 | 36 Kr Krypton 83,798 | | | | | | | |
| 46 Pd Palladium 106,42 | 47 Ag Silver 107,87 | 48 Cd Cadmium 112,41 | 49 In Indium 114,82 | 50 Sn Tin 118,71 | 51 Sb Antimony 121,76 | 52 Te Tellurium 127,60 | 53 I Iodine 126,90 | 54 Xe Xenon 131,29 | | | | | | | |
| 78 Pt Platinum 195,08 | 79 Au Gold 196,97 | 80 Hg Mercury 200,59 | 81 Tl Thallium 204,38 | 82 Pb Lead 207,2 | 83 Bi Bismuth 208,98 | 84 Po Polonium (209) | 85 At Astatine (210) | 86 Rn Radon (222) | | | | | | | |
| 110 Ds Darmstadtium (281) | 111 Rg Roentgenium (282) | 112 Cn Copernicium (285) | 113 Nh Nihonium (286) | 114 Fl Flerovium (289) | 115 Mc Moscovium (290) | 116 Lv Livermorium (293) | 117 Ts Tennessine (294) | 118 Og Oganesson (294) | | | | | | | |
| 64 Gd Gadolinium 157,25 | 65 Tb Terbium 158,93 | 66 Dy Dysprosium 162,50 | 67 Ho Holmium 164,93 | 68 Er Erbium 167,26 | 69 Tm Thulium 168,93 | 70 Yb Ytterbium 173,05 | 71 Lu Lutetium 174,97 | | | | | | | | |
| 96 Cm Curium (247) | 97 Bk Berkelium (247) | 98 Cf Californium (251) | 99 Es Einsteinium (252) | 100 Fm Fermium (257) | 101 Md Mendelevium (258) | 102 No Nobelium (259) | 103 Lr Lawrencium (266) | | | | | | | | |

Rich in resources, ready for the future

The Queensland Government has a 30-year plan to grow and diversify the resources industry.

The Queensland Resources Industry Development Plan (QRIDP) provides the way forward to transform the state's resources industry. Through the QRIDP we confirm our place on the global resources stage as a competitive destination for opportunities spanning discovery, production and manufacturing.

The resources and critical minerals industry in Queensland will be backed by strong local demand for renewable energy equipment, which is needed to meet the Queensland Government's commitment to renewable energy and net zero emissions. A Queensland Battery Industry Strategy—currently in development—will help grow Queensland's local industry for battery minerals, chemicals and advanced manufacturing.

The Queensland Government has kept energy assets in public hands so Queensland has the power to ensure a secure transition to renewable energy and provide domestic demand for products manufactured in Queensland.

Queensland's critical mineral offering

Queensland has 51 of the world's most sought after critical minerals.

With a diverse resource endowment, proven capability and capacity to bring a resource to market, and a responsible operating environment, Queensland is an attractive investment jurisdiction. We offer these opportunities for the next big investment in 2023 and beyond.

Queensland's investment opportunity

- Queensland's critical minerals industry is made up of many small, experienced companies who are seeking partnership and investment connections.
- There are multiple opportunities to invest in upstream supply chain operations, including through providing inputs such as acid for mineral processing and in enabling infrastructure.
- Queensland offers the perfect opportunity for innovative operating models to improve the financial viability of our many smaller-scale, high-value resource deposits.
- Critical minerals in Queensland are distributed in both geographic and geological terms, providing companies the opportunity to scale.

Today's strength

Vanadium

An abundance of supply: we have some of the world's largest known reserves of vanadium.

Secure geopolitical environment: Australia has transparent regulatory frameworks and a stable government that offers a reliable investment alternative to current global suppliers of vanadium.

A maturing supply chain: we have emerging suppliers and projects, as well as a processing facility currently in development.

Cobalt

An abundance of supply: Australia has around 19 per cent of the world's cobalt reserves.

Secure geopolitical environment: Australia has transparent regulatory frameworks and offers a socially responsible investment alternative to current global suppliers of cobalt.

A maturing supply chain: we have new projects at various stages of development, with significant additional potential from mine tailings, wastes and abandoned mine sites.

Copper

An abundance of supply: Queensland's minerals province is a proven world-class host of large and long-lived copper mining activities.

Secure geopolitical environment: Australia has transparent regulatory frameworks and a stable government that offers a reliable investment alternative to current global suppliers of copper.

A maturing supply chain: New discoveries and developments are being successfully progressed, and with inward investment by Japanese trading houses.

Tomorrow's opportunity

High-purity alumina

Production of high-purity alumina is expected to reach a significant spike over the coming decade thanks to its use in LED lighting and glass for smartphones and watches.

High-purity alumina projects in Queensland are showing early success and companies are ready for new partners.

Rare-earth elements

Primary deposits of rare-earth elements are found in multiple sites across Queensland and secondary deposits are being unearthed in various conditions such as mine tailings and bauxite residue.

Queensland is an attractive destination for investment in the development of processing infrastructure for rare earth elements.

Metallurgical silicon

Demand, and therefore the price, continues to rapidly increase for metallurgical silicon as a major input into the production of electronics and solar products.

Queensland has several quality silica sand projects that are either in production or progressing through the exploration and development process.

Where to start?



Queensland Government



Trade & Investment Queensland (TIQ) is the Queensland Government's dedicated global business agency, with representatives

in 16 locations across the world. TIQ has specialist responsibility for ensuring that international investors have the information and support needed to take advantage of the many opportunities Queensland offers.

TIQ assists potential investors by providing a range of business and investment services including sharing detailed industry knowledge, preparing business cases, arranging site visits, facilitating introductions to industry and service providers, liaising with government, and providing market intelligence. TIQ also partners with local councils, economic development agencies and private service providers to identify projects ready for investment.

Contacts

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The **Department of Resources** is the Queensland Government's advisor on the state's renewable and non-renewable land, mineral

and energy resources. The department works closely with the resources industry, and across the government to assess, negotiate and advise on innovation, enterprise and industry-wide proposals. The department also has a regulatory role for existing operations to ensure all activities are managed fairly, responsibly and sustainably.

The department is a key facilitator of economic development in Queensland.

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Australian Government

The Australian Government sets the regulatory environment for investment in Australia, including:



- National environmental law
- Trade and customs
- Taxation
- Foreign investment

There is a wealth of information online to support investors entering the Australian market.



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