AMEC

Investment Opportunities 2021

Australia's Critical Minerals

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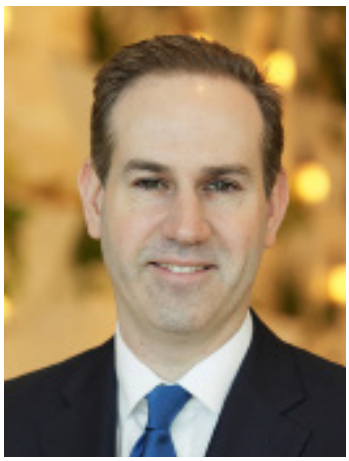
Contents

Foreword 3
Minister's Foreword from the Hon. Keith Pitt MP 4
Minister's Foreword from the Hon. Bill Johnston MLA 5
Minister's Foreword from the Hon. Dan van Holst Pellekaan 6
Minister's Foreword from the Hon. John Barilaro MP 7
Minister's Foreword from the Hon. Scott Stewart MP 8
Company Profiles 10
- ActivEX – Copper, Gold 10
- Aeon Metals – Copper, Cobalt 11
- Alumtek Minerals – Rare Earth Elements 12
- Andromeda Metals – Halloysite-Kaolin 13
- Arafura Resources – Rare Earth Elements 14
- Ardea Resources Limited – Nickel, Cobalt 15
- Atlantic Vanadium – Vanadium 16
- Australian Vanadium – Vanadium 17
- Barra Resources – Cobalt, Nickel Oxide 18
- Chalice Gold Mines – Nickel, Copper, PGE 19
- Cobalt Blue Holdings – Cobalt 20
- Coda Minerals Ltd – Copper 21
- Core Lithium – Lithium 22
- Element 25 – Manganese 23
- Encounter Resources – Copper, Cobalt 24
- EQ Resources – Tungsten 25
- Essential Metals – Nickel, Gold, Cobalt, Lithium, Caesium 26
- Graphene Manufacturing Group – Graphene 27
- Hammer Metals – Copper, Molybdenum, Gold, Rhenium 28
- Havilah Resources – Copper, Gold, Cobalt 29
- Hexagon Energy Materials – Graphite, Nickel, Copper, PGM 30
- IGO – Nickel, Copper, Cobalt 31
- KGL Resources Limited – Copper, Gold, Silver 32
- King River Resources – HPA, Vanadium 33
- Legend Mining Limited – Nickel, Copper, Zinc, Silver 34
- Lincoln Minerals – Graphite 35
- Liontown Resources – Lithium, Tantalum 36
- Metallica Minerals – Silica Sands, Bauxite, Gold, Base Metals, Graphite 37
- Metalsearch – Kaolin 38
- Mineral Commodities – Graphite 39
- Multicom Resources – Vanadium 40
- Neometals – Nickel, Lithium, Titanium, Vanadium, Iron 41
- Novonix – Graphite 42
- Pilbara Minerals – Lithium, Tantalum 43
- Pure Minerals – Nickel, Cobalt 44
- QEM Limited – Vanadium, Oil Shale 45
- Quantum Graphite – Graphite 46
- RareX – Rare Earth Elements 47
- Renascor Resources – Graphite 48
- Strategic Metals – Lithium, Caesium, Tantalum 49
- Technology Metals Australia – Vanadium 50
- Tempest Minerals Ltd – Copper, Zinc, Gold 51
- Transition Resources – Gold, Tungsten, Rare Earths, Cobalt, Scandium 52
- Tungsten Mining NL – Tungsten 53
- Vecco Group – Vanadium 54
- Venturex Resources – Copper, Zinc 55
- VRX Silica – Silica Sand 56
- Woomera Mining – Lithium, Nickel, Copper, PGE 57

Foreword



Critical minerals underpin the advancement of technological developments. In 1991, Sony's commercialisation of the lithium-ion rechargeable battery sparked a surge in the demand for renewable batteries. The demand for critical minerals, particularly lithium and other battery minerals, has grown exponentially as battery production costs fell, and mobile phone and electric car demand continues to boom.

Australia's long and successful history of mining is renowned worldwide. With a successful history as a substantial producer of most minerals, Australia consistently ranks in the top five jurisdictions considered in the international Fraser Institute Survey. This high-ranking reflects that Australia's minerals attractiveness is not solely based on rich and diverse geology, but a combination of advanced mining and exploration technologies, a skilled workforce, favourable geographic positioning, and low sovereign risk.

The opportunity to invest in Australia's critical minerals sector is tremendous. Australia has numerous projects currently exploring, developing and producing critical minerals. Governments have recognised the importance of critical minerals, and the significant opportunities for Australian companies to develop these critical minerals at all stages of the supply chain. As the demand for critical minerals continues to grow across the globe, Australia's critical minerals sector is ready to meet increasing demand.

An independent report prepared for AMEC identified that at the time the report was written, the $165 billion global lithium value chain was expected to grow to a conservatively estimated $2 trillion by 2025. To meet this growing demand, the need for more critical minerals projects to be developed is more important than ever.

Australia's critical minerals opportunities are second to none. AMEC has compiled a range of information to pique investor and company interests in this sector, presented in this cohesive investment opportunities document. A range of companies at various stages of development, all open for investment, have submitted their project(s) information to us. Investors are encouraged to peruse the information in the document, and directly contact these companies to discuss opportunities.

We hope this document will spur greater consideration of Australia's outstanding critical minerals potential and encourage investment into our nation's minerals exploration and mining sector.

Through quick action from industry, the majority of Australian mining operations were able to continue during the onset of the COVID-19 pandemic, and as we slowly emerge from this crisis, the opportunities to discover and develop the mines of the future are a fantastic investment opportunity.

Warren Pearce
Chief Executive Officer
Association of Mining and Exploration Companies

Minister's Foreword

The energy and resources sector has long been a key driver of Australia's economic growth. Australia's attractiveness as an investment destination has been built on our high-quality mineral reserves, world-class geoscience information, highly skilled and productive workforce; world-leading mining equipment, technology and services (METS) sector and supportive and stable government policies.

There is an international buzz around critical minerals and the potential for Australia to play a significant role as a supplier of these sought after commodities that will power our high-tech future. This includes elements like lithium, tungsten, cobalt and rare earth elements that are used in a variety of high-tech applications such as new battery technologies, smartphones, medical equipment, defence capability, aerospace and electric vehicles.

The coronavirus pandemic has further reinforced the need to diversify the highly concentrated supply chains of many critical minerals; and for Australia to seize opportunities to move further up the value-chain by supplying more than just raw materials to global markets.

Australia is already the largest producer of lithium in the world; the largest rare earths producer outside China; and the third largest producer of cobalt. We also have some of the largest resources of other critical minerals, including manganese, tantalum, titanium, tungsten, vanadium and zirconium. This resource endowment, coupled with our mining capability and existing infrastructure means that, with the right supporting framework, we are well placed to provide a secure, ethical and sustainable supply of critical minerals to the world.

There is also enormous potential in Australia to tap into currently undiscovered resources. Our established mining areas cover just 20 per cent of the Australian landmass, leaving 80 per cent of the continent largely unexplored with vast potential for future finds.

Australia's Critical Minerals Strategy, released in March 2019, sets out a vision for Australia as a world leader in exploration, extraction, production and processing of critical minerals. This is a vision that the Australian Government remains absolutely committed to and is working hard to deliver.

In January 2020, the Critical Minerals Facilitation Office was established to serve as a central coordination point, driving national action at home to grow the sector, and internationally to secure demand for Australian resources. This work includes boosting the critical minerals research and development activities of our national science agencies CSIRO, ANSTO and Geoscience Australia, including the development of an online Critical Minerals Portal that will demonstrate our significant untapped reserves of critical minerals.

The Critical Minerals Facilitation Office has also been working closely with Austrade to identify critical minerals investment and off-take opportunities for Australian projects, including producing an updated Australian Critical Minerals Prospectus 2020 to further facilitate investment into the Australian critical minerals sector.

The Future Battery Industries Cooperative Research Centre, which includes a host of our critical mineral companies, along with world-leading academics, also commenced this year. The CRC has received a $25 million grant from the Government to contribute to help tackle industry identified gaps in the battery industries value chain, support battery deployment and optimise the circular economy for battery waste recycling.

The Government's goal is to continue to build resilient supply chains and invest in job-generating industries as we recover from the coronavirus pandemic, and critical minerals will be a key component of that.

The Hon. Keith Pitt MP
Minister for Resources, Water
and Northern Australia

Minister's Foreword

The security and reliability of critical minerals supply chains is increasingly an issue of international importance. Governments and industry depend on a secure and consistent supply of critical minerals to produce the technologies the world relies on.

The economic challenges in the wake of COVID-19 have clearly demonstrated that greater supply chain diversity is needed to support strategic industries including defence, aerospace and advanced manufacturing.

Western Australia is remarkably well positioned to step up in these challenging times and meet the needs of global clients.

Our State has abundant reserves of critical minerals including nickel, cobalt, lithium, and rare earth elements. Western Australia also has proven expertise in mining innovation and efficiency, being a world-leader in the adoption of mining and processing technology.

Our resources and expertise, coupled with our world leading regulatory framework has given Western Australia the reputation as an ethical and sustainable supplier of critical minerals. The demands for Environmental, Social and Governance (ESG) compliance by customers and investors make us the pre-eminent option for the responsible and ethical supply of critical minerals.

The Western Australian Government understands that fostering international partnerships is key to developing supply chain resilience and diversification. Western Australia is ready to work with international investors and customers to identify opportunities with our local industry for partnerships in downstream processing or securing supply with offtake partners.

The Western Australian Government has recently announced an incentive program to attract producers of Cathode Active Material to construct new facilities in the State to meet the growing global demand for this product.

Western Australia is the perfect location for processing facilities, such as CAM processing, as a tier 1 province which provides secure supply of materials and is also well practiced in handling the waste products resulting from processing.

Western Australia is ready to meet the world's critical mineral needs.

I welcome this initiative by the Association of Mining and Exploration Companies in showcasing our resource and investment potential, and look forward to the benefits Western Australia can provide through investment in our local critical minerals industry.

The Hon. Bill Johnston MLA
Minister for Mines and Petroleum;
Energy; Industrial Relations

Minister's Foreword

South Australia's vibrant exploration and mining industries are a natural fit for a thriving critical minerals sector.

South Australia is a world leader in clean energy, which requires an abundance of copper resources and speciality minerals. As a global centre of excellence – attracting international partners in renewable energy pairing battery storage technologies, remote area systems technologies, defence, space and high-tech industries – our operators are well connected to supply chains pursuing critical minerals. South Australia offers strong manufacturing and processing capabilities and latent capacity from two major mineral processing precincts at Port Pirie polymetallic processing facility and Whyalla.

The emphasis for ethically sourced minerals has become a core market expectation coming from investors, consumers and manufacturers. A green supply chain begins at the mine and South Australia's miners are first-movers in taking advantage of new energy solutions to reduce their carbon footprint.

The State is endowed with two thirds of Australia's copper and quality graphite resources, and hosts the world's largest zircon mine at Jacinth Ambrosia in the State's far west, also bearing rutile. Frontier provinces are prospective for nickel, cobalt, rare earths, and magnesium.

The State's $10 million Accelerated Discovery Initiative, providing co-funding opportunities for explorers, sets a new scope and dimension to stimulate further discovery. Numerous projects are pursuing the discovery of cobalt, copper and rare earths, particularly in the Curnamona Province and Gawler Craton.

Our universities are at the cutting edge of geoscience and processing research resources. We support the University of Adelaide in establishing the new Critical Minerals Research Centre to combine world-class expertise in geoscience and engineering and working with industry to develop new resources and solutions.

Australia's Critical Minerals strategy gives great impetus to focus our attention. We proudly support the goal to be a leading nation in the exploration, extraction, production and processing of critical minerals and are very pleased to partner with AMEC in this endeavour.

The Hon. Dan van Holst Pellekaan
Minister for Energy and Mining
South Australia

Minister's Foreword

The New South Wales (NSW) Government is grateful for the ongoing work by the Association of Mining and Exploration Companies (AMEC), promoting investment opportunities across the Australian mining sector.

The mining sector generates thousands of jobs in NSW, especially in regional areas, supporting the social and economic wellbeing of many of our communities. Many regional communities in NSW have recently been affected by drought, bushfires and the COVID-19 pandemic, and new mining investment offers an opportunity to help them rebuild and strengthen with more diverse industries.

NSW has a proud history of mining stretching back over 150 years and is a globally significant supplier of coal, gold, copper, lead, zinc, silver and heavy mineral sands. The State is currently experiencing record levels of mineral exploration activity, driven by a surge in new copper and gold discoveries in the NSW Central West and emerging opportunities for a wide range of critical metals. The State currently boasts 45 critical metal projects across 17 different commodities. Ten of these projects are at an advanced stage and cover rare earth elements, cobalt, scandium, antimony, titanium and zirconium.

The NSW Government strongly supports our minerals sector and the responsible development of our mineral resources. Our goal is to make NSW the number one State for new exploration and resources investment across the nation. To achieve this goal, we are delivering world class precompetitive geoscience that highlights the geological potential of the State, improving the way we authorise and manage new projects, including through our new Titles Management System, cutting red tape, and providing incentives to invest in regional NSW, including through our Special Activation Precincts.

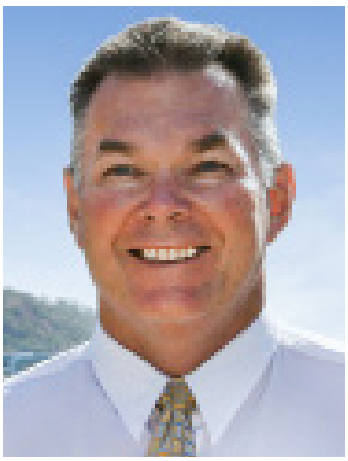
New exploration and investment can unlock a stable supply of critical metals required for energy storage, decarbonising economies and high-tech applications. Our mining industry operates within guidelines that support environmentally and socially responsible supply chains. Recent disruptions to global supply chains have demonstrated the urgent need for investment in alternative supplies for some commodities.

We believe successful international partnerships are key to accelerating investment in critical minerals exploration and production. This investment is also crucial to high-tech and defence industry supply chains. In NSW, we look forward to working with our partners to deliver the key minerals needed for 21st century technologies.

As a source of a range of critical minerals, NSW offers world-class deposits, low sovereign risk, a highly skilled workforce and a well-earned reputation for safe, responsible and innovative mining practices.

The Hon. John Barilaro MP
Deputy Premier
Minister for Regional New South Wales
Minister for Industry and Trade

Minister's Foreword



2020 was a year of many lessons, but one lesson that should not be forgotten was just how important a resilient resources sector is to a strong economy.

In Queensland, our resources sector played a key role in keeping our economy running throughout the COVID-19 lockdown and it will continue to lead the way on several fronts both at home and abroad.

As the world moves to a new era – and a new economy –powered by renewable and low emissions energy, Queensland is well placed to support that transition.

Our rich mineral endowment and proven history of reliable supply is coupled with strong capability in our resources sector and capacity across our established supply chains.

But we know the challenge, and the opportunity, is in establishing new supply chains, to link Queensland's rich supply side potential with the demands of rapidly growing markets.

The Queensland Government is working to help develop those new supply chains, to support upstream exploration and development of new resource projects.

One area that will play a big role in mining new economy minerals is the North West Minerals Province where there are great opportunities in emerging resources like cobalt, vanadium and rare earth metals which will be a key part of a low emissions energy future.

Collaboration between industry, government and academia will play a key role in realising the opportunities that lie before us. The ongoing work by the Association of Mining and Exploration Companies supports this, with this document providing a consolidated overview of the supply side of investment opportunities across Australia's critical minerals sector. It differentiates Australia from other places around the world and strengthens the investment opportunity for this sector.

Queensland is a strong resources state and strong supporter of renewable energy. We have a long future ahead, and welcome and encourage proponents to utilise our rich resource endowment to realise the opportunities that energy transition offers.

The Hon. Scott Stewart MP
Minister for Resources
Queensland

ActivEX Limited

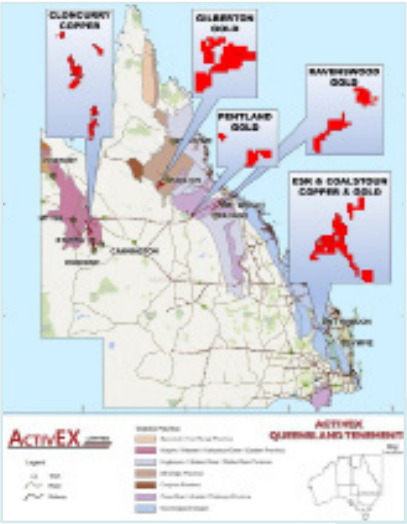
About the company: ActivEx is an ASX-listed, Sydney based company with interests in 24 granted Exploration Permits in Queensland.

ASX: AIV

Contact details: Mark Derriman, Executive Director

Phone: (+61) 0414 241 960

Link to Website: www.activex.com.au



ESK & Coalstoun Copper And Gold Project

- **Project status:** Exploration.
- **Location:** 215km north-west of Brisbane; within the New England Orogen; between Gayndah and Goomeri.
- **Government approval status:** 100% AIV granted tenements with Native Title extinguished by freehold title.
- **Historical results:**
  - Barambah production: 25Kt mined @ 2.7g/t Au and 10g/t Ag for 2.12Koz Au and 7.81Koz Ag.
  - JORC 2012 Inferred Resource: Coalstoun : 26.9Mt @ 0.38% Cu for 102.68Kt Cu Primary and 0.3% cutoff and 8.5Mt @ 0.44% Cu for 37.48Kt Cu Supergene and 0.3% cutoff.
  - Barambah : 0.36Mt @ 1.47g/t Au and 61.8g/t Ag for 17.2Koz Au and 722Koz Ag at 0.5g/t Au cutoff – Au equivalent resource of 25.39Koz Au.
- **Current or planned level of processing:** Planned expansion on the current JORC Resource base and development of a gold/copper operation.
  - Coalstoun porphyry copper system has untested gold and copper breccia and epithermal targets; additional potential for high grade, skarn related copper mineralisation.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Contact company
- Opportunity for further offtake? Contact company
- Opportunities for further processing? Contact company
- Significant potential to develop a near-surface mining operation and gold processing plant at the Gilberton Project, adjacent to the historic Mt Morgan Gold Mine.

For further information about these opportunities, please visit our website: www.activex.com.au

Aeon Metals Limited

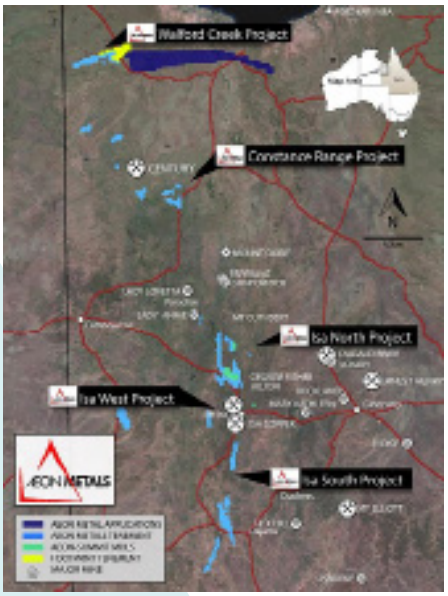
About the company: Aeon Metals is an ASX-listed Australian based mineral exploration and development company, focused on creating long-term shareholder value through the discovery, acquisition and development of natural resources.

ASX: AML

Contact details: Hamish Collins, Managing Director

Phone: +61 (02) 9232 2298

Link to Website: www.aeonmetals.com.au



Walford Creek Copper-Cobalt Project

- **Project status:** Prefeasibility Study target for completion in Q4, CY2020.
- **Location**: North-west Queensland, approximately 340km to the north north-west of Mount Isa; and around 110km to the north-west of the Century Zinc Mine near Lawn Hill. The nearest port is located in Townsville with a trucking distance of approximately 1,300km.
- **Government approval status:** Current EL tenement status; EIS permitting process targeted to take 12-18 months from point of finalising a detailed project plan through to grant of Mining Lease(s) and Environmental Authority.
- **Scheduled start of operation of mine / anticipated year of start of mining:** First production targeted for 2H 2023.
- **Current expected mine life:** Initial 11 years mine life based solely on Vardy and Marley deposits.
- **Mineral resource or reserve:** 35.8Mt @ 1.94% CuEq over 3.6km strike (including 18.4Mt @ 2.46% CuEq).
- **Current or planned level of processing:** Processing of the Vardy and Marley feed will involve a process plant (2.0Mtpa) utilizing a flotation plant and hydromet plant.
  - The feed, which comprises the majority of the process feed, will be treated by conventional flotation processing. This allows production of readily saleable copper and lead concentrates and zinc and intermediate cobalt-rich pyrite concentrates. The zinc and cobalt concentrate is then treated via commercially proven bio-leaching followed by precipitation to produce cobalt-nickel and zinc sulphide products.
  - Export of the concentrate and sulphide intermediate products is planned via trucking to the port of Townsville for shipping to global metal markets.
- **Offtake agreements in place:** All metal product streams from the Walford Creek Project are currently uncontracted. Aeon is happy to discuss potential offtake arrangements with interested parties.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The 100% owned Walford Creek Project is one of Australia's highest grade significant cobalt deposits.

For further information about these opportunities, please visit our website: www.aeonmetals.com.au

Alumtek Minerals

About the company: Alumtek is a Queensland based minerals company, focused on commercialising the extraction of rare earths and critical minerals from bauxite residue and neutralizing the remaining solid residue for beneficial re-use.

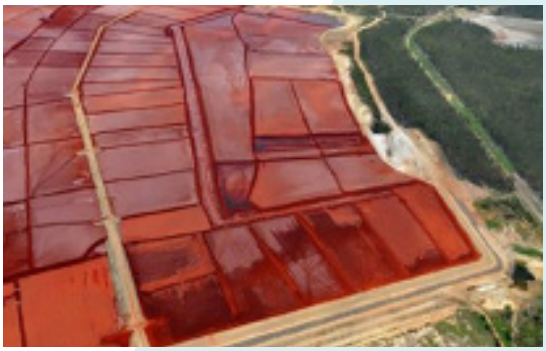
Contact details: Craig Wilson, Director

Phone: (+61) 0414 741 791

Link to Website: www.alumtekminerals.com

Project Reclaim – Rare Earths

- **Project status:** Bankable feasibility concluded in 2019; Draft supply agreement with Queensland Alumina Ltd (QAL); proof of concept work program completed 2019-20.
- **Location:** Gladstone, Queensland.
- **Government approval status:** Working as a contractor under (QAL) existing dedicated legislation and environmental permits.
- **Scheduled start of operation of mine:** Stage 1 processing plant requires a three-month build before project commencement.
  - Letter of Support in 2018, 2019 and 2020 from Rio Tinto and QAL to progress Project Reclaim in Gladstone.
  - Term Sheet with QAL finalised in February 2019.
- **Capacity:** Stage 1 – build production plant and increase annual throughput to 12,000TPA; Stage 2 – build larger plant increasing production to 100,000TPA; Stage 3 – build large scale plant increasing production to 500,000TPA.
- **Current or planned level of processing:** Red mud acid washing & S/L separation, leaching, separation of Activated Bauxite, steps to extract metals and rare earth elements including titanium, vanadium, mixed rare earth elements, scandium, hafnium, and a range of saleable by-products.
  - Recycling of materials to produce sustainable metals with a strong focus on renewable energy systems and products.



Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Focused on a range of critical minerals and rare earth elements, low regulatory hurdles, low capital intensity.

For further information about these opportunities, please visit our website: www.alumtekminerals.com

Andromeda Metals Limited

About the company: Andromeda Metals is an ASX-listed, Adelaide based emerging industrial minerals company, with a vision to become the world's leading supplier of high grade halloysite-kaolin.

ASX: ADN

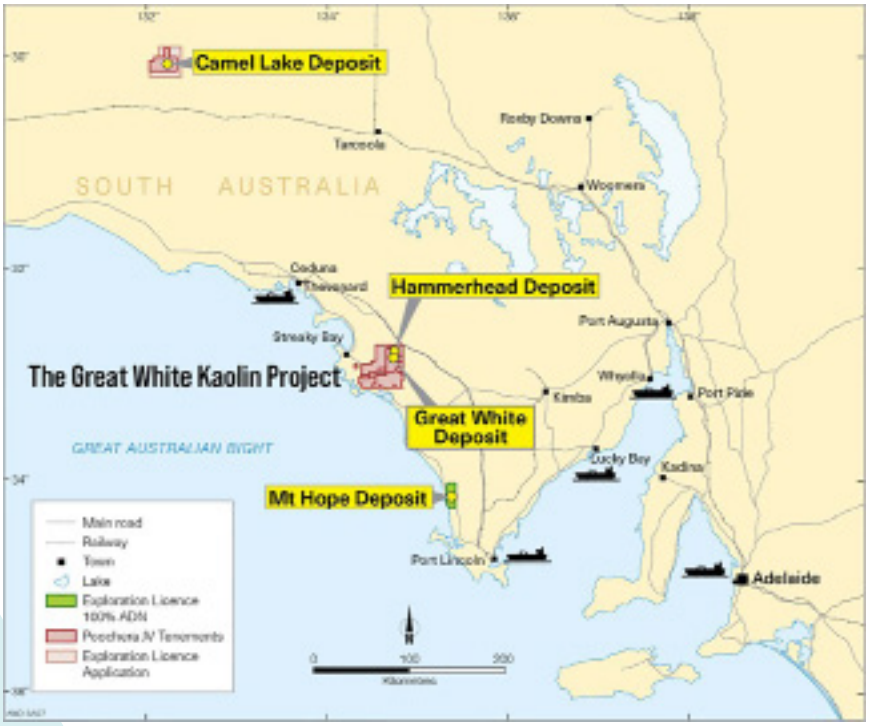
Contact details: James Marsh, Managing Director

Phone: +61 (08) 8271 0600

Link to Website: www.andromet.com.au

Halloysite-Kaolin Projects

- **Project status:** Definitive Feasibility stage.
- **Location:** Poochera, South Australia; 130km from Ceduna (port).
- **Government approval status:** Mine approval in progress.
- **Scheduled start of operation of mine:** Early 2022.
- **Current expected mine life:** 26 years.
- **Mineral resource or reserve:** Measured.
- **Current or planned level of processing:** On site wet processing.
- **Offtake agreements in place:** Letters of intent for approx. 1 million tonnes pa of mixed grades.



Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Contact company
- Opportunity for further offtake? Contact company
- Opportunities for further processing? Contact company
- The company vision extends to becoming a world-leading specialist nanotechnology company.

For further information about these opportunities, please visit our website: www.andromet.com.au

Arafura Resources Limited

About the company: Arafura is a Perth based ASX-listed mineral development company focusing on rare earth elements.

ASX: ARU

Contact details: Gavin Lockyer, Managing Director

Phone: +61 (08) 6370 2800

Link to Website: www.arultd.com

Nolans Project – Rare Earth Elements

- **Project status:** Development (in execution readiness).
- **Location:** 135km north-west of Alice Springs; 1,300km (road or rail) from Darwin Port.
- **Government approval status:** Northern Territory and Commonwealth environmental approvals secured; Native Title agreement executed; Mineral (development) Leases granted.
- **Scheduled start of operation of mine:** Subject to financing, first production in 2023.
- **Current expected mine life:** Minimum 39 years.
- **Mineral resource or reserve:** Total Mineral Resources 56 mt @ 2.6% TREO, 11% P2O5. Total Ore Reserves 29.5 mt @ 2.9% TREO, 13% P2O5.
- **Current or planned level of processing:** Production of 12,00tpa (TREO basis) of rare earth products (including 3,920tpa of NdPr oxide) and 134,000tpa of fertilizer-grade phosphoric acid for export via on site mining, crushing and milling, beneficiation, phosphate and rare earth extraction and rare earth separation.
- **Offtake agreements in place:** Non-binding offtake MOUs for:
  - NdPr (neodymium-praseodymium) oxide – 41%
  - Ce (cerium) hydroxide – 100%
  - Phosphoric acid – 100%

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Overall objective to attract debt finance via an export credit agency (ECA) syndicate linked to product offtake.
- Investigating opportunities for debt funding linked to engineering and procurement.

For further information about these opportunities, please visit our website: www.arultd.com

Ardea Resources Limited

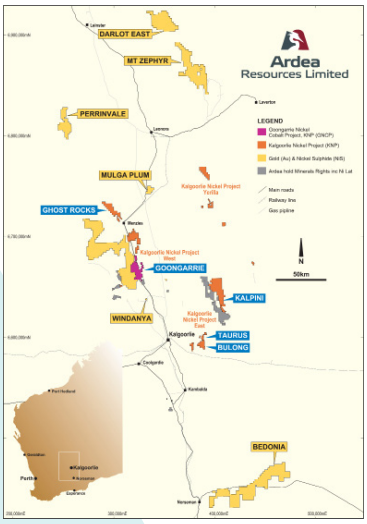
About the company: Ardea is a Western Australian ASX-listed mineral explorer and developer, with a clear strategy to develop its globally significant Goongarrie Nickel Cobalt Project and maximise value from other critical minerals and gold within its Eastern Goldfields tenure.

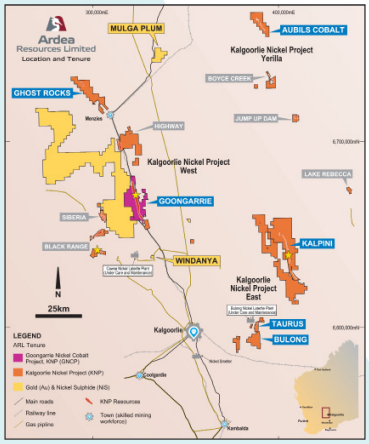
ASX: ARL

Contact details: Andrew Penkethman, Managing Director and Chief Executive Officer

Phone: +61 (08) 6244 5136

Link to Website: www.ardearesources.com.au





Goongarrie Nickel Cobalt Project (GNCP)

- **Project status:** Prefeasiblity Studies and Expansion Study completed; early-stage Definitive Feasibility Studies in progress.
- **Location:** 70km north-west of the City of Kalgoorlie Boulder, a prime resource development and operating destination in Western Australia. The Project runs parallel to the Goldfields Highway and rail line; Esperance port 420km south, and Fremantle/ Kwinana port 570km south-west of the GNCP.
- **Government approval status:** Baseline environmental studies ~80% completed; Strong support from Native Title claimant, City of Kalgoorlie Boulder and Shire of Menzies.
- **Schedule:** Subject to securing a Strategic Partner, GNCP development expected in 2-3 years.
- **Current expected mine life:** >25 years for the GNCP Expansion Case with 2.25Mtpa throughput.
  - The inclusion of the greater Kalgoorlie Nickel Project (KNP) Resources extends the mine life to an expected >100 years.
- **Mineral resource or reserve:** Global Resource including reserves of 215.6Mt @ 0.71% Ni and 0.06% Co for 1.5Mt nickel and 131kT cobalt contained metal.
  - The GNCP is part of the greater KNP resource area which contains a total of 773Mt @ 0.7% Ni and 0.05% Co for 5.4Mt contained nickel and 405kT cobalt. Resources for all KNP projects are currently being updated and will also include Scandium in the future.
- **Current or planned level of processing:** 5th generation high pressure acid leach (HPAL) autoclave processing train(s) located within the GNCP, closest to early pay-back nickel-cobalt laterite open pits.
- **Offtake agreements in place:** 100% offtake available with a production capability of 20,000 to >40,000tpa nickel metal equivalent, with cobalt as a significant by-product (2,200 to >4,400tpa cobalt metal equivalent).
  - Product can be customised to exact requirements of customer e.g. : Nickel Sulphate and Cobalt Sulphate, Mixed Sulphide Product (MSP) and/or Mixed Hydroxide Product (MHP).

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The globally significant Goongarrie nickel-cobalt Resource is in an infrastructure-rich and stable jurisdiction, providing the ability to increase production from multiple processing hubs within the larger Kalgoorlie Nickel Project to meet demand from the rapidly expanding critical minerals sector.
- The Company also has an emerging Gold Camp within the GNCP, with two gold discoveries confirmed in the December Quarter of 2020.

For further information about these opportunities, please visit our website: www.ardearesources.com.au

Atlantic Vanadium Pty Ltd (AVPL)

ATLANTIC

About the company: AVPL is part of the Salim Group, one of Indonesia's largest conglomerates, focused on the 100% owned world-class Windimurra vanadium project in WA.

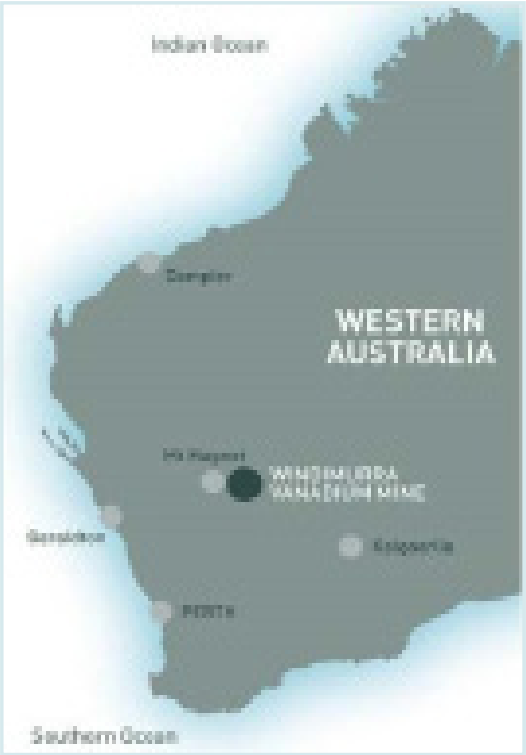
Contact details: Tony Veitch, Executive Director

Phone: +61 (08) 6141 7100

Link to Website: www.atlanticptyltd.com.au

Windimurra Vanadium Project

- **Project status:** Successful Definitive Feasibility Study completed in April 2020.
- **Location:** 670km north of Perth; 80km (road) from Mount Magnet.
- **Government approval status:** Fully approved; majority of plant already developed.
- **Scheduled start of operation of mine:** Subject to final investment decision, project is shovel ready; significant plant and infrastructure in place with historic investment of over $700 million.
- **Current expected mine life:** 31 years, with resources supporting 50+ years.
- **Mineral resource or reserve:** 88 million tonnes @ 0.49% V_2O_5 reserve; 210 million tonnes @ 0.50% V_2O_5 resources.
- **Current or planned level of processing:** Planned production of 7,600 tpa of high purity vanadium pentoxide flake (V_2O_5).
- **Offtake agreements in place:** Advanced discussions for 100% annual production offtake.



Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- With the majority of the plant already developed and significant infrastructure in place, Windimurra is the lowest capital intensity primary vanadium project development in the world.

For further information about these opportunities, please visit our website: www.atlanticptyltd.com.au

Australian Vanadium Limited (AVL)

About the company: AVL is an ASX-listed, emerging vanadium producer, developing its high-grade Australian Vanadium Project in WA.

ASX: AVL

Contact details: Vincent Algar, Managing Director

Phone: +61 (08) 9321 5594

Link to Website: www.australianvanadium.com.au

Australian Vanadium Project

- **Project status:** Bankable Feasibility.
- **Location:** 740km northeast of Perth; 42km south south-east of Meekatharra; 80km from processing plant to port.
- **Government approval status:** Granted Mining Lease, awarded Federal Government Major Project Status and WA Government Lead Agency Status, allowing for streamlined approvals.
- **Scheduled start of operation of mine:** 2022/23.
- **Current expected mine life:** 17+ years.
- **Mineral resource or reserve:** 208 Million Tonnes at 0.74% V_2O_5 with a high-grade zone of 87.9 Million Tonnes at 1.06% V_2O_5.
- **Current or planned level of processing:**
  - On site open pit mining and beneficiation to produce 900,000 tpa at life-of-mine concentrate grade of 1.37% V_2O_5 averaging 64.1% vanadium yield.
  - Production of vanadium pentoxide (V_2O_5) high purity to supply vanadium electrolyte, aerospace and specialty chemical applications in V_2O_5 flake and high purity powder.
  - Processing capability to provide products for steel, specialty chemicals and energy storage markets.
  - Co-product of vanadium extraction will produce an iron calcine available 'as is' or in pellet or fines at 54-56% Fe with further upgrades being worked on.
- **Offtake agreements in place:** Letter of intent signed with Hebei Yanshan Vanadium and Titanium Industry Technology Research Co Ltd; also progressing potential agreements with US and European counterparts.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- AVL is seeking both debt and equity, and have an online Data Room for due diligence purposes.
- In 2016 AVL launched its 100% owned subsidiary, VSUN Energy, to progress the vanadium redox flow battery market.

For further information about these opportunities, please visit our website: www.australianvanadium.com.au

Barra Resources

About the company: Barra Resources is an ASX-listed, WA focused explorer and mine developer, targeting dual high-demand commodities; cobalt-nickel and gold.

ASX: BAR

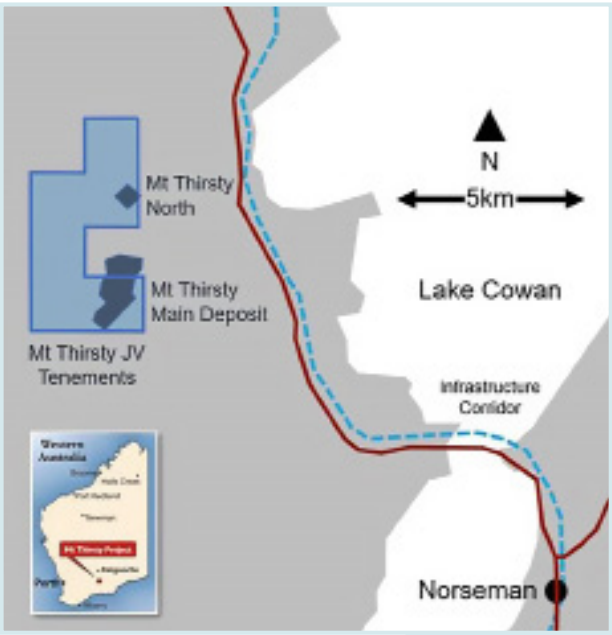
Contact details: Gary Berrell, Chairman

Phone: +61 (08) 9481 3911

Link to Website: www.barraresources.com.au

Mt Thirsty Joint Venture Cobalt-Nickel Oxide Project

- **Project status:** PFS completed in March 2020; 50/50 JV between Barra and Conico Ltd.
- **Location:** 16km north-west from mining town of Norseman WA; 4km from Highway 1 infrastructure corridor.
- **Government approval status:** Native Title negotiations at an advanced stage.
- **Scheduled start of operation of mine:** Subject to financing determining next stage of engineering development.
- **Current expected mine life:** 12 years.
- **Mineral resource or reserve:** Total Mineral Resources 26.9mt @ 0.12% cobalt including a probable Ore Reserve of 18.8mt @ 0.13% cobalt.
- **Current or planned level of processing:** Planned on site processing plant to produce an intermediary Mixed Sulphide Product for use in metal, chemical and battery markets.
  - Expected production of ore mined and processed 1.8Mtpa; Concentrate 5-10ktpa.



Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Project presents a sustainable source of cobalt for further downstream refining for metal, chemical and battery markets.
- Project available for investment from downstream partners, either as an outright sale or as a development farm-in in exchange for the 100% offtake rights.

For further information about these opportunities, please visit our website: www.barraresources.com.au

Chalice Gold Mines

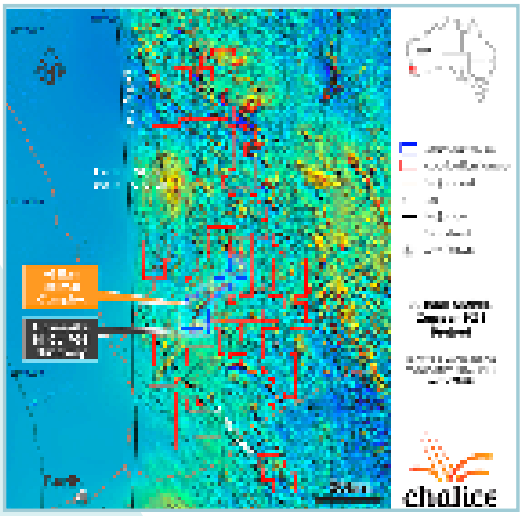
About the company: Chalice Gold is an ASX-listed, leading mineral exploration company with a track record of exceptional value creation.

ASX: CHN

Contact details: Alex Dorsch, CEO

Phone: +61 (08) 9322 3960

Link to Website: www.chalicegold.com



Julimar Project – Nickel-Copper-PGE

- **Project status:** Advanced Exploration; initial discovery in March 2020.
- **Location:** 70km north east of Perth in the Avon Region; Kwinana Port 100km south-west.
- **Government approval status:** Granted Exploration Licences; awaiting access approval to explore the extension of the discovery within adjacent Julimar State Forest.
- **Schedule:** Aiming to define a preliminary maiden Mineral Resource Estimate by mid-2021.
- **Mineral resource or reserve:** Initial RC / diamond drilling has intersected high-grade PGE-nickel-copper-cobalt mineralisation within 4 large zones.
  - The Company announced and named the Gonneville PGE-Ni-Cu-Co Discovery and has established the new West Yilgarn Ni-Cu-PGE Mineral Province.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Contact company
- Opportunity for further offtake? Contact company
- Opportunities for further processing? Contact company
- The Company is well funded, allowing it to rapidly progress a portfolio of projects with systematic, high-impact exploration activities.

For further information about these opportunities, please visit our website: www.chalicegold.com

Cobalt Blue Holdings Limited

About the company: Cobalt Blue is an ASX-listed cobalt exploration and development company, with a focus on meeting future energy storage needs.

ASX: COB

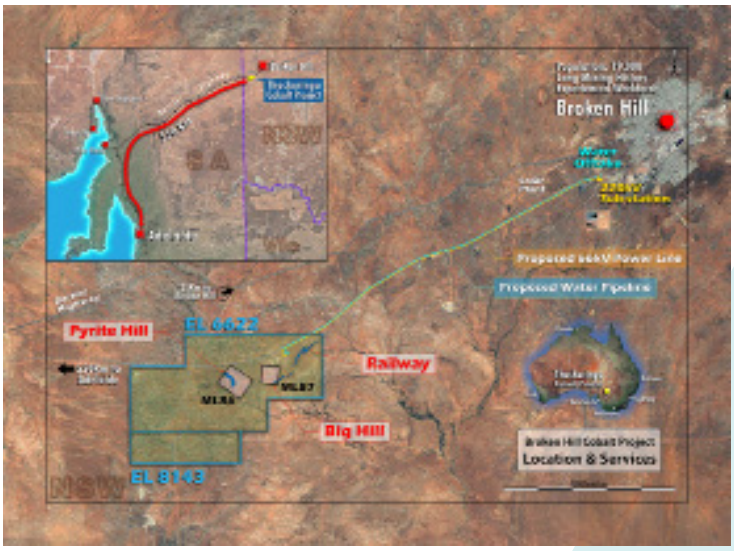
Contact details: Dr Andrew Tong, Executive Manager

Phone: +61 (02) 8287 0660

Link to Website: www.cobaltblueholdings.com

Broken Hill Cobalt Project

- **Project status:** Feasibility Study
- **Location:** 23km west of Broken Hill, established mining community; adjacent to the Barrier Highway and rail line extending to Port Adelaide.
- **Government approval status:** Application for NSW State Significant Development commenced.
- **Schedule:** Aim to complete the Feasibility Study by end 2022.
- **Current expected mine life:** 20 years.
- **Mineral resource or reserve:** Mineral Resource estimate of 123 Mt for 81,400 t Cobalt and 9 Mt Sulphur.
- **Current or planned level of processing:** Development of an open cut mining operation, down-stream ore processing and a refinery, to produce cobalt sulphate and elemental sulphur.
  - Patented minerals processing technology to recover 85-90% of cobalt from ore to product.
  - Average annual production post ramp-up of: Ore Mined and Processed ~6.5 Mtpa; Co (metal in sulphate) ~3,500 tpa; S (elemental sulphur) ~300,000 tpa.



Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Currently participating in the Future Battery Industries CRC, to help develop NMC batteries using raw materials from Australian producers. The FBICRC includes $25M support from the Australian Government, and sixty partners for a total budget of $130M over 5 years.

For further information about these opportunities, please visit our website: www.cobaltblueholdings.com

Coda Minerals Ltd

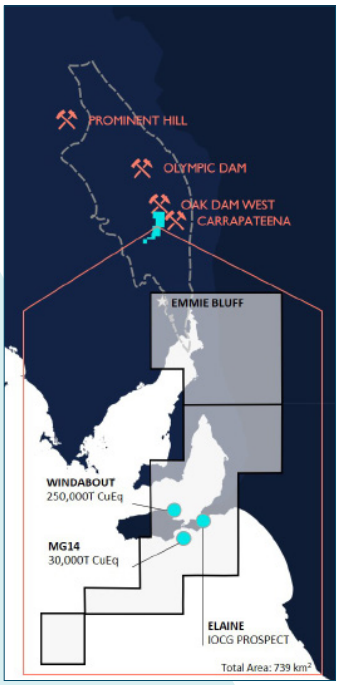
About the company: Coda Minerals is an ASX-listed advanced exploration company, focused on the exploration, discovery and development of base metals, precious metals, and battery minerals.

ASX: COD

Contact details: Chris Stevens, Chief Executive Officer

Phone: +61 (08) 6270 6331

Link to Website: www.codaminerals.com



Elizabeth Creek Copper Project

- **Project status:** Exploration and Prefeasibility.
  - Coda's extensive exploration activities have earned the Company a majority interest in the Project (51%); holding the rights to earn up to 75% interest of the Project under farm-in agreement.
- **Location:** Woomera, South Australia; 165km from Port Augusta; world class Eastern Gawler Craton; 15km from BHP's Oak Dam West Project; 50km west of OZ Minerals' Carrapateena copper-gold project.
  - The Project covers 739km^2 in Australia's most productive copper belt, the Olympic Dam Copper Province.
- **Government approval status:** Exploration Licence granted.
- **Scheduled start of operation of mine:** 2022 to 2023, subject to exploration and feasibility results.
- **Current targeted mine life:** >10 years.
- **Mineral resource or reserve:** JORC 2012 Indicated Windabout and MG14 deposits hosting a combined 159,000 tonnes of contained copper and 9,500 tonnes of contained cobalt.
  - The project also includes Coda's Emmie Bluff prospect; JORC compliant Zambian-style copper-cobalt Exploration Target, with strong IOCG potential.
- **Current or planned level of processing:** Concentrate and copper cathode, and cobalt sulphate processing planned, pending feasibility results.

EXISTING MINERAL RESOURCES (JORC 2012 Indicated) 0.5% CuEq. cut-off

	Category	Mt	Cu%	Co%	Ag g/t	CuEq%
Windabout [1,2]	Indicated	17.67	0.77	0.05	8	1.41
MG14 [1,2]	Indicated	1.83	1.24	0.03	14	1.67
Total [2]		19.5	0.8	0.05	8. 6	1.14
		Tonnes	Tonnes	MOz	Tonnes	
Contained Metal [3]		159,000	9,400	5.4	280,000	

EMMIE BLUFF EXPLORATION TARGET [2,3,4]

Tonnage Range (Mt)	Cu Range (%)	Co Range (%)	Ag Range (g/t)	Cu Eq. Range[4] (%)
43 - 72	0.34 - 1.5	0.02 - 0.10	5 - 19	0.5 - 2.3

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Coda Minerals recently listed on the ASX following a successful, heavily oversubscribed IPO to fund an intensive exploration campaign across the Elizabeth Creek Project tenure.
- The Company has a dual strategy for success at Elizabeth Creek, firstly through the definition and extension of Zambian style copper-cobalt resources across multiple prospects including Emmie Bluff, Powerline, MG14 North and Hannibal. Secondly, through the drilling of IOCG targets including Elaine, Elizabeth North, Chianti and Emmie Bluff Deeps recently redefined through extensive geophysical work.

For further information about these opportunities, please visit our website: www.codaminerals.com

Core Lithium Limited

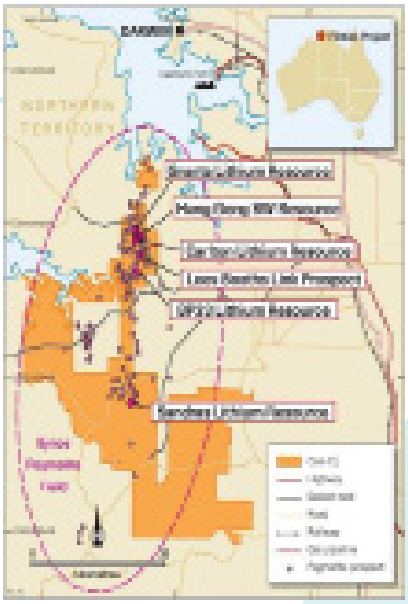
About the company: Core Lithium is an ASX-listed company well positioned to be Australia's next lithium producer.

ASX: CXO

Contact details: Stephen Biggins, Managing Director

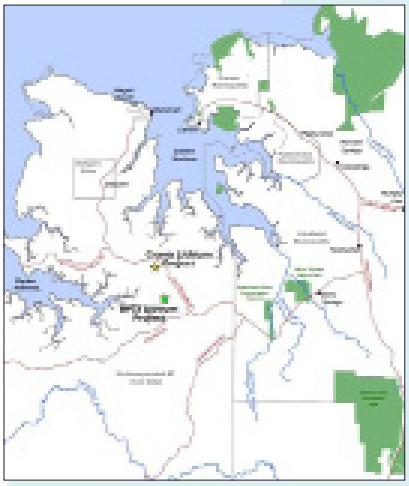
Phone: +61 (08) 8317 1700

Link to Website: www.corelithium.com.au



Finniss Lithium Project - Lithium

- **Project status:** Feasibility Study completed April 2019.
- **Location:** 20km south of Darwin; 25km from the port of Darwin.
- **Government approval status:** Regulatory approvals (including EIS and MMP) to commence construction received in April 2020.
- **Scheduled start of operation of mine:** Planned construction in 2021; commercial production in 2022.
- **Current expected mine life:** 7 to 10 year target.
- **Mineral resource or reserve:** 14.72 Mt @ 1.32% Li_2O announced June 2020, mine life and Ore Reserve classification likely to increase further.
- **Current or planned level of processing:** Combined Open pit and Underground mining of high-grade (1.4% Li_2O) ore, with on site processing producing 175,000tpa of high-quality 5.5-6% lithium concentrate.
- **Supply Chain Participation:** Diversified offtake strategy covering key markets including China and the EU. Member of the European Battery Alliance.
- **Offtake agreements in place:** Binding offtake agreement accounts for 50% of planned production with remaining 50% being progressed to binding offtake status.
  - Combination of debt and equity including offtake prepayment currently under negotiation.
  - NTG Government Finance: Local Jobs Fund (LJF) to provide $5 million low-cost business investment concessional loan.



Finniss Lithium Project
Processing Facility

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The construction ready project is proposed to be one of the most capital efficient and cost competitive lithium projects in Australia.
- Financial closure and final investment decision is expected in the next 6 months.

For further information about these opportunities, please visit our website: www.corelithium.com.au

Element 25 Limited

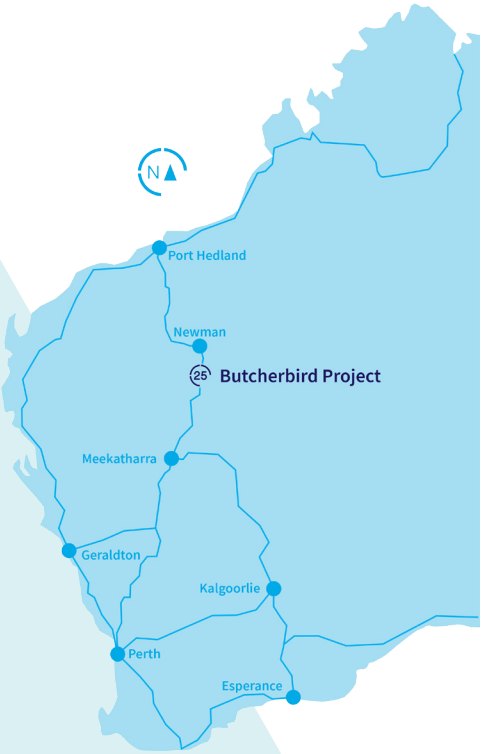
About the company: Element 25 is an ASX-listed company focused on producing high quality manganese concentrate for export markets.

ASX: E25

Contact details: Justin Brown, Managing Director

Phone: +61 (08) 6315 1400

Link to Website: www.element25.com.au



Butcherbird Project - Manganese

- **Project status:** Development.
- **Location:** 130km south of Newman; 550km from Utah Point bulk export facility.
- **Government approval status:** Mining Lease M52/1074 granted on 26 June 2020; statutory environmental approvals submitted; Native Title and pastoral leaseholder agreements in place.
- **Scheduled start of operation of mine:** Q1, 2021.
- **Current expected mine life:** 42 years.
- **Mineral resource or reserve:** Resource measured and indicated 263 Mt at 10%Mn; Proved and Probable Reserves of 50.6 Mt at 10.3% Mn.
- **Current or planned level of processing:** Production of approximately 350,000pa Mn Lump via on site crushing and beneficiation.
  - Key long lead time items ordered and deposits placed; process water source identified with detailed monitoring and borefield design in progress; detailed process plant and civil infrastructure engineering at an advanced stage.
- **Offtake agreements in place:** Currently being negotiated.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Detailed PFS confirmed Australia's largest onshore manganese resource can produce near-term cashflow from a low capital cost manganese concentration.

For further information about these opportunities, please visit our website: www.element25.com.au

Encounter Resources Limited

About the company: Encounter Resources is one of the most productive ASX-listed project generation and active mineral exploration companies.

ASX: ENR

Contact details: Will Robinson, Managing Director

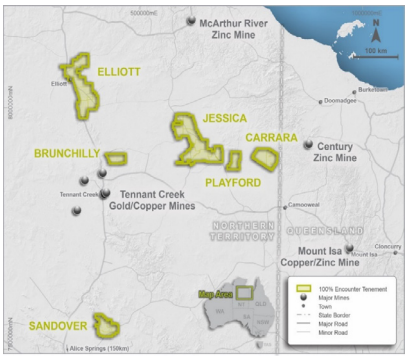
Phone: +61 (08) 9486 9455

Link to Website: www.enrl.com.au

Yeneena Copper-Cobalt Project

- **Project status:** Exploration; Earn-in and Joint Venture with IGO Limited (ASX: IGO).
- **Location:** Paterson Province of Western Australia; 400km east of Port Hedland; 60km south of the Telfer Gold Mine.
- **Government approval status:** Exploration Licences granted for over 1,600km².
- **Schedule:** Planned exploration of the Paterson Province, a proven mineral region with a consistent history of discoveries.
  - Large scale (~100km) magnetotelluric (MT) survey identified new copper drill targets.
    - Central African Copperbelt analogue.
    - Magmatic Copper-Gold (Winu analogue).
- **Mineral resource or reserve:** BM1 Coherent zone of shallow copper oxide mineralisation. Drill intersections include: 10m @ 6.8% Cu from 32m; 20m @ 2.0% Cu from 22m; 16m @ 3.2% Cu from 26m.

Elliott And Jessica Copper Projects



- **Project status:** Exploration
- **Location:** 700km south of Darwin.
  - Elliott: South Western margin of the Beetaloo Basin, NT.
  - Jessica: East of Tennant Creek, NT.
- **Government approval status:** Granted Exploration Licences and new tenement applications.
- **Schedule:** Projects were first identified by analysing new datasets generated by Geoscience Australia, as part of the Federal Government's Exploring for the Future Program.
- **Exploration zone:**
  - First – Mover Camp Scale Copper Projects in the NT.
  - Elliott: 4,500km² at a major structural intersection. Standout copper in groundwater anomaly which is supported by surface geochemical sampling.
  - Jessica: 5,500km² at a key structural corridor, prospective for sedimentary hosted copper and IOCG style deposits. Systematic investigation of rock chips generated from water bore sampling has identified near surface copper oxide (malachite) mineralisation.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- First-mover exploration opportunities in a first-world jurisdiction.

For further information about these opportunities, please visit our website: www.enrl.com.au

EQ Resources Limited

About the company: EQ Resources is an ASX-listed company transforming its world-class tungsten assets at Mt Carbine in North Queensland; leveraging advanced technology, historical stockpiles and unexploited resource. Company also holds gold exploration licences in New South Wales.

ASX: EQR

Contact details: Kevin MacNeill, Chief Executive Officer & Technical Advisor

Phone: +61 (07) 4094 3072

Link to Website: www.eqresources.com.au

Mt Carbine Project - Tungsten

- **Project status:** Phase 1 – Retreatment Project – retreatment of tailings in operation; Phase 2 – low-grade ore (LGO) stockpiles optimised using X-ray sensor based technology.
  - 50/50 Joint Venture with Cronimet Group, a leading raw materials recycling, trading and diversified commodity group.
- **Location:** 130km north-west by sealed road of the port of Cairns, QLD.
- **Government approval status:** Granted Mining Leases; preparation of extension of Environmental Approvals underway.
- **Schedule:** Reprocessing of historic tailings commenced in December 2019; first sale of tungsten concentrate shipped for export at the end of June, continuing.
- **History:** Mt Carbine Mine was a major tungsten producer, operating between 1973 – 1987, producing exceptionally high-grade concentrate.
- **Mineral resource or reserve:** Total Tailings: 2.0Mt @ 0.10%; Total LGO Stockpile: 12.0Kt @ 0.07%; Total Hard Rock 47.3Kt @ 0.13%.
- **Current or planned level of processing:** Continuation of reprocessing of tailings and sensor-based sorted LGO expected to in short-medium term.
- **Expansion Plan:** Plans to exploit remaining hard rock resource targeting high-grade envelopes for underground mining with minimal environmental impact.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The Company is currently in a collaborative project supported by a grant from METS Ignited, led by Cronimet (with participants including the University of Queensland, TOMRA Sorting and DAS Mining Solutions) investigating, amongst other things, the optimisation of scale-up application of ore sorting technology.

For further information about these opportunities, please visit our website: www.eqresources.com.au

Essential Metals Limited

About the company: Essential Metals is an ASX-listed, well-funded and active gold and lithium mineral explorer, operating a portfolio of strategically located mining projects.

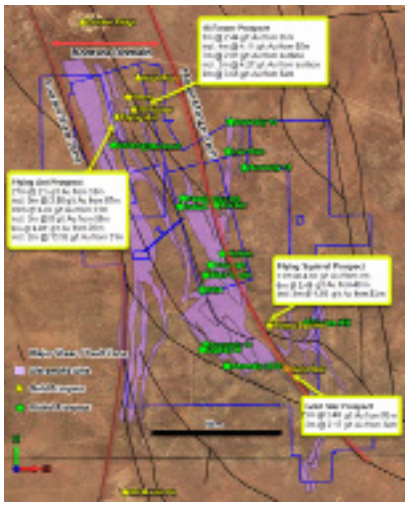
ASX: ESS

Contact details: Timothy Spencer, Managing Director

Phone: +61 (08) 9322 6974

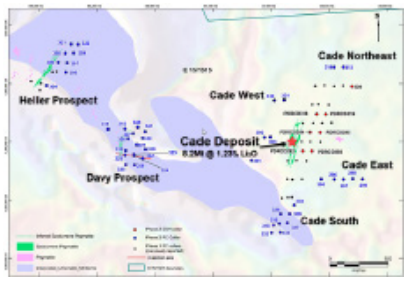
Link to Website: www.essmetals.com.au

Blair – Golden Ridge Project – Nickel, Gold, Cobalt

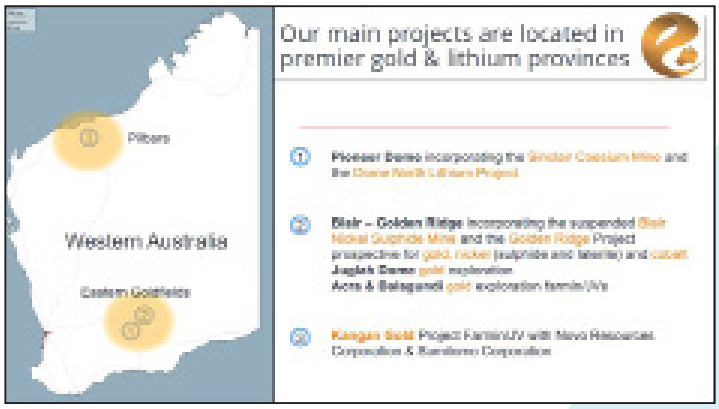


- **Project status:** Exploration.
- **Location:** 30km south-east of Kalgoorlie; Northern Kambalda District, WA.
- **Government approval status:** 100% owned granted tenement package with four Mining Leases and four Exploration tenements.
- **History:** Blair Nickel Mine ceased production in 2008 after producing 1.26mt of nickel ore at 2.62% Ni.
  - In 2018 the Company announced that drill hole GRRC38 returned 22m at 1.02% Ni and 475ppm Cu from 202m at Leo Dam, which is 2.4km NE of the Blair Mine.
- **Schedule:** Assessing targets within several kilometres of mine infrastructure that could be accessed in a short timeframe with relatively low cost.
  - Exploring drilling results showing well developed lateritic cobalt and nickel mineralisation along the eastern flank of the Blair Dome.
- **Mineral resource or reserve:** 222,710t of nickel sulphide ore at a grade of 2.92% Ni for 6,510t of Ni Metal.

Pioneer Dome Project – Lithium, Caesium



- **Project status:** Exploration.
- **Location:** 130km south of Kalgoorlie; 200km north of Esperance, WA; Goldfields Highway, Esperance Highway, established water and gas pipelines pass through the Project.
- **Government approval status:** 100% owned granted tenement package with one Mining Lease and five Exploration tenements.
- **Schedule:** Studies for Stage 2 continuation of activity at the Sinclair Caesium Mine being conducted.
- **Mineral resource or reserve:**
  - **Lithium:** Initial Inferred Mineral Resource of 8.2 Mt at 1.23% Li_2O. Plus an Initial Exploration Target of between 17 and 27 million tonnes at a grade between 1.0 and 1.4% Li_2O.
  - **Caesium:** Depleted Resource of caesium at the Sinclair Caesium Mine (mined during Stage 1).
- **Current or planned level of processing:** Drilling to test for additional mineralisation along strike from the mined deposit.
- **Offtake agreements in place:** Current caesium offtake expiring August 2021. A new agreement will be negotiated pending Stage 2 of the mine proceeding.



Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Focused on key global demand-driven opportunities, ESS is looking for its next opportunity to create shareholder wealth through exploration and project development.

For further information about these opportunities, please visit our website: www.essmetals.com.au

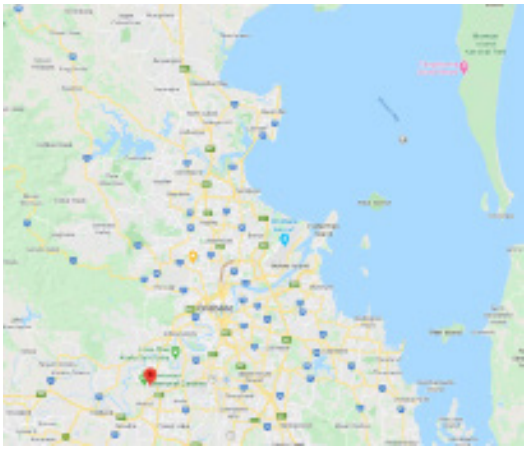
Graphene Manufacturing Group

About the company: GMG is a cleantech manufacturer focused on developing and commercialising graphene powder into ready to use and high concentrate fluid products, for sale globally.

Contact details: Craig Nicol, Managing Director

Phone: +61 (07) 3040 5716

Link to Website: www.graphenemg.com



Graphene Nanoplatelets (Powder) Production Site Project

- **Project status:** Commercialised.
- **Location:** Sumner Park, QLD; 40km from Port of Brisbane.
- **Government approval status:** Local Government Planning Approval for 60 tpa.
- **Scheduled start of operation:** Operation commenced 2016.
- **Manufacturing capacity:** Multi-tonne site; requires natural gas feedstock only.
- **Current or planned level of production:** On site unlimited production life; transferrable and scaleable to multi-sites.
  - Graphene powder battery supply.

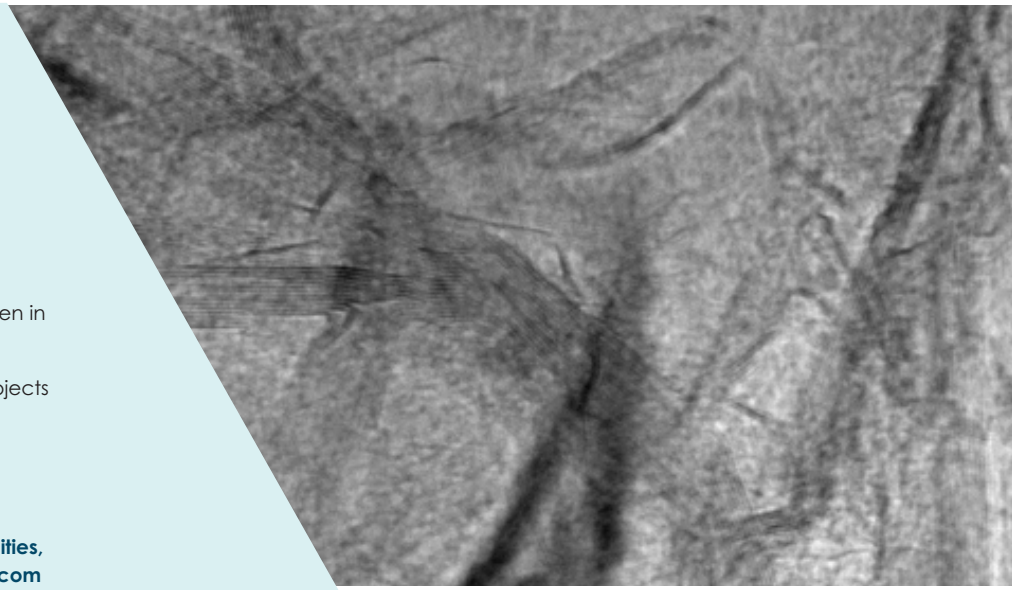
Liquid Graphene Production Site

- **Project status:** Commercialisation and sales for coolants; fluids (water); lubricants, coatings and fuels.
- **Location:** Sumner Park, QLD; 40km from Port of Brisbane.
- **Scheduled start of operation:** Operation commenced 2019.
- **Manufacturing capacity:** 1 million litre capacity for ready-to-use and concentrate products; concentrates can provide millions of litres of finished product.
- **Current or planned level of production:** On site unlimited production life; transferrable and scaleable to multi-sites.
  - Graphene enhanced liquids supply.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Various private funding rounds undertaken in Australia and North America.
- IPS share research and development projects (batteries, fuels).

For further information about these opportunities, please visit our website: www.graphenemg.com



Hammer Metals Limited

About the company: Hammer Metals is an ASX-listed Gold and Copper exploration company, positioned in two of the world's greatest metal provinces.

ASX: HMX

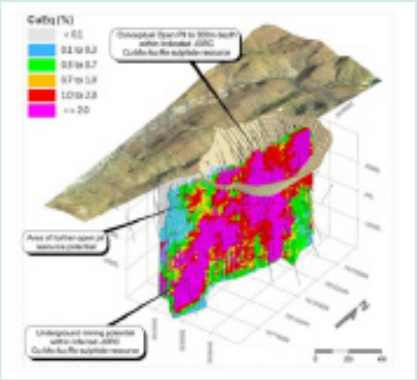
Contact details: Daniel Thomas, Managing Director

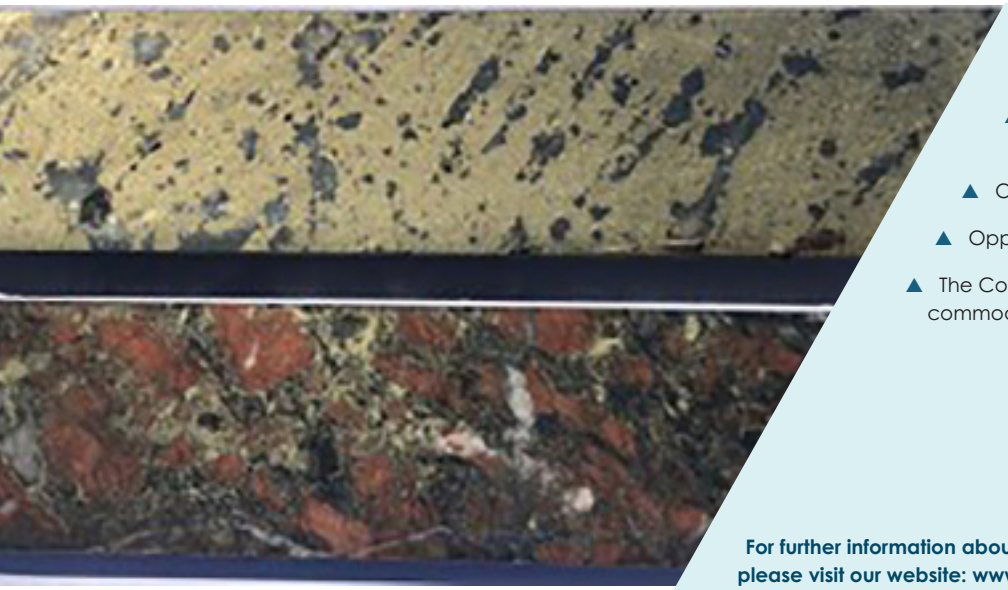
Phone: +61 (08) 6369 1195

Link to Website: www.hammermetals.com.au

Kalman Project – Copper, Molybdenum, Gold, Rhenium

- **Project status:** Exploration.
- **Location:** 60km south-east of Mt Isa mining district, QLD; 2,300km^2 tenement surrounded by existing Tier One producing mines and established infrastructure.
- **Schedule:** Recent magneto telluric (MT) survey completed highlighting high priority regional exploration targets.
- **Mineral resource or reserve:** 360kt of Copper Equivalent metal.
  - Indicated and Inferred Mineral Resource estimate of 20Mt@0.61% Cu, 0.34g/t Au, 0.14% Mo, 3.7g/t Re.
- **High-grade drill intercepts remaining open at depth including:** 7.7m @ 23.4% Cu & 0.5g/t Au from 582m (K-106C), 53m @ 2.1% Cu & 0.5g/t Au from 695 (K-106C), 31m @ 1.0% Cu & 1.1g/t Au from 221 (K-53), 7m @ 0.3% Cu, 3.4% Mo & 57.3g/t Re, within 62m @ 0.65% Mo & 11g/t Re from 206m (K-132).
- **Current or planned level of processing:** Open pit and underground potential; with the deposit remaining open at depth and along strike.
  - 2012 JORC compliant resource with high level pit optimisation. Metallurgical studies indicated Copper recovery of 95% and Molybdenum recovery of 86%.





Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The Company has multiple projects across different commodities in Queensland and WA.

For further information about these opportunities, please visit our website: www.hammermetals.com.au

Havilah Resources Limited

About the company: Havilah Resources is a South-Australian based, ASX-listed, multi-commodity minerals explorer and developer.

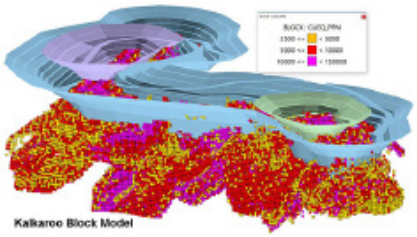
ASX: HAV

Contact details: Dr Chris Giles, Technical Director

Phone: (+61) 0428 610 557

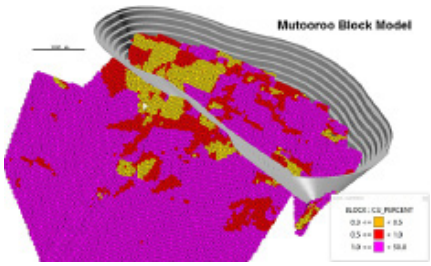
Link to Website: www.havilah-resources-projects.com.au

Kalkaroo Project – Copper, Gold, Cobalt


Kalkaroo Block Model

- **Project status:** Positive PFS supporting a large-scale open pit copper-gold-cobalt mine development.
- **Location:** 90km west north-west of regional mining centre of Broken Hill; 50km from rail line.
- **Government approval status:** Granted Mineral Leases and ownership of surrounding pastoral property.
- **Scheduled start of operation of mine:** First phase start up gold only open pit planned for development in 2021.
- **Current expected mine life:** 13+ years.
- **Mineral resource or reserve:**
  - JORC Ore Reserve: 100 million tonnes @ 0.47% copper and 0.44 g/t gold for 474,000 tonnes of copper and 1.4 million ounces of gold.
  - JORC Mineral Resources: Total of 1.1 million tonnes of copper, 3.1 million ounces of gold and 23,200 tonnes of cobalt.
  - Largest undeveloped open pit copper deposit in Australia on a CuEq Ore Reserve basis.
- **Current or planned level of processing:** Average annual production of 30,000 tonnes of copper; 72,000 ounces of gold; > 1,200 tonnes cobalt; plus possibly REE and molybdenum.

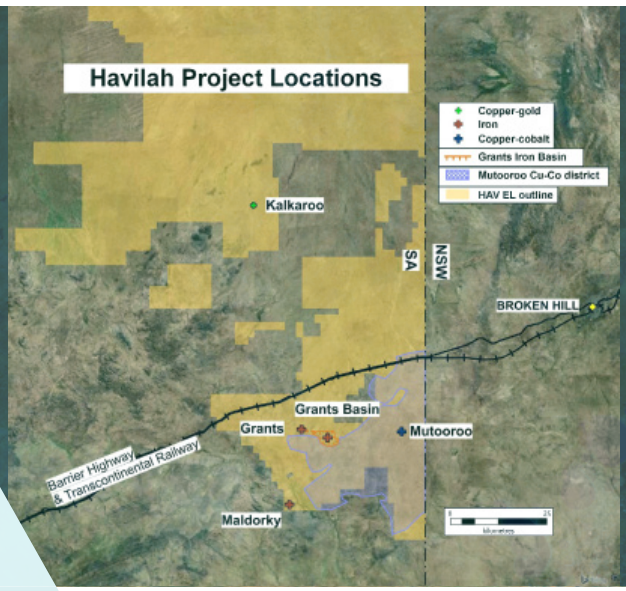
Mutooroo Project – Copper, Gold, Cobalt



- **Project status:** PFS in progress.
- **Location:** 60km south-west of Broken Hill; 16km from railway line.
- **Government approval status:** Mining licence application in progress.
- **Current expected mine life:** 5+ years open pit followed by underground operations.
- **Mineral resource or reserve:**
  - JORC Mineral Resources: Total sulphide resource of 12.5 million tonnes @1.53% copper, 0.16% cobalt and 0.20 g/t gold for 191,700 tonnes of copper, 20,000 tonnes of cobalt and 80,600 ounces of gold.
- **Current or planned level of processing:** Operation underpinned by copper production. Cobalt is contained within the iron sulphide minerals, pyrite and pyrrhotite, which can be separated and concentrated during the copper sulphide concentration process.
  - The cobalt-bearing iron sulphides are potentially an attractive grade cobalt feedstock for subsequent processing to recover cobalt, and also if feasible, significant amounts of associated gold and sulphur.
  - PFS based on 1 million tpa throughput.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The Company is also seeking investment opportunities for participation in new mining developments and exploration.
- Investment is also welcomed in the mineral processing, particularly for recovery of REE and molybdenum from Kalkaroo and cobalt and sulphur rom iron sulphide concentrates.



For further information about these opportunities, please visit our website: www.havilah-resources-projects.com.au

Hexagon Energy Materials Limited

About the company: Hexagon is an ASX-listed company seeking to develop a rare earth element refining business using state of the art technology.

ASX: HXG

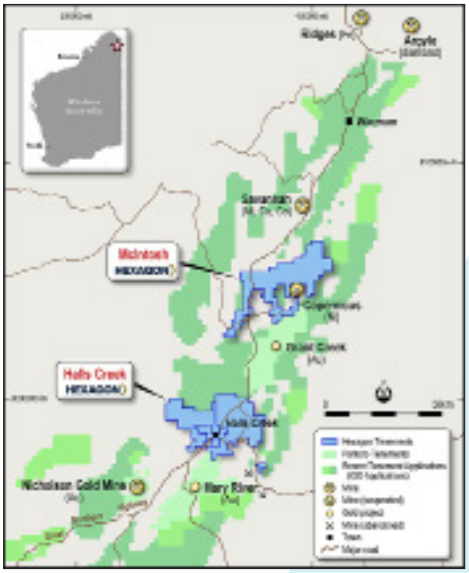
Contact details: Lianne Grove, Chief Commercial Officer

Phone: +61 (08) 6244 0349

Link to Website: www.hxgenergymaterials.com

McIntosh Project – Graphite, Nickel, Copper, PGM's

- **Project status:** Exploration, PFS completed 2018.
- **Location:** East Kimberley, WA; immediately along strike of two known nickel-copper and PGE deposits.
- **Government approval status:** Exploration Licence granted.
- **Schedule:** Recent nearby mineralisation discoveries have prompted assessments of the project for base metals and PGE on the 16 McIntosh tenements spanning ~550km^2.
  - Graphite development currently on hold.
- **Mineral resource or reserve:** Graphite JORC Mineral Resources at 23.8Mt, 4.5% TGC for 1.1 million contained tonnes.
  - Significant exploration target comprising 50 to 220Mt between 2.0 and 5.0% TGC.
- **Current or planned level of processing:** Downstream transformation of flake graphite into high purity battery and industrial applications.



Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunity for further processing? Yes
- Investors have an opportunity to create value through HXG's exposure to state of the art REE separation technology as part of its REE refining development plans, and significant gold and base metals exploration targets.
- Seeking a strategic investment partner to support the build out of a downstream REE business.

For further information about these opportunities, please visit our website: www.hxgenergymaterials.com

IGO Limited

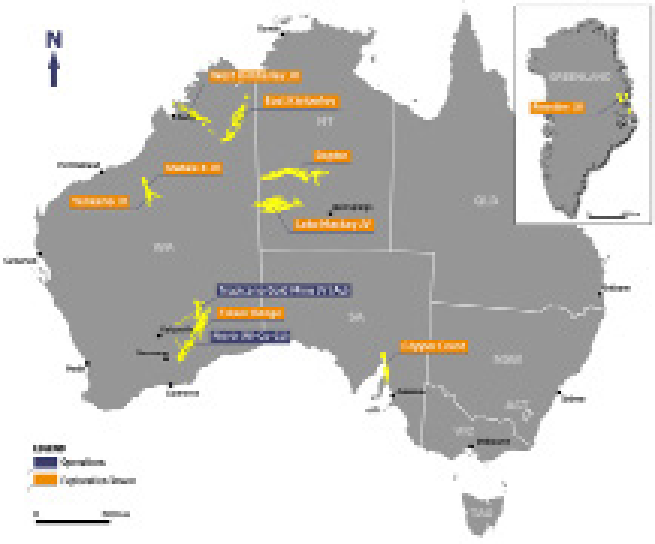
About the company: IGO is a leading ASX-listed exploration and mining company with a strategic focus on metals critical to energy storage and renewable energy.

ASX: IGO

Contact details: Richard Glass, Investor Relations Manager

Phone: +61 (08) 9238 8300

Link to Website: www.igo.com.au



Nova Operation – Nickel, Copper, Cobalt

- **Project status:** Commercial production commenced July 2018.
- **Location:** Fraser Range, WA; 360km southeast of Kalgoorlie; 380km northeast of the Port of Esperance.
- **Growth opportunity:** Significant exploration underway to unlock new magmatic nickel sulphide deposits around Nova and on the broader Fraser Range.
- **Mining:** Underground mining operation. Capital development substantially complete, providing high levels of flexibility and productivity.
- **Current expected mine life:** 7 years.
- **FY20 Production:** 30,436t Nickel; 13,772t Copper; 1,142t Cobalt.
- **Offtake agreements in place**: 100% of Nova nickel and copper concentrate products contracted under offtake agreements.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Contact company
- Opportunities for further processing? Contact company
- Opportunities for strategic partnerships, exploration JVs and farm-ins in the Fraser Range.
- Downstream opportunities to produce nickel sulphate for the battery industry.

For further information about these opportunities, please visit our website: www.igo.com.au

KGL Resources Limited

About the company: KGL Resources is an ASX-listed Australian mineral exploration and development Company, focused on the delineation and development of its high-grade Jervois Copper Project in the Northern Territory.

ASX: KGL

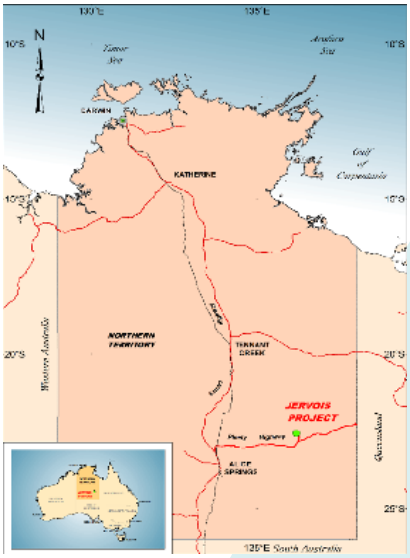
Contact details: Denis Wood, Executive Chairman

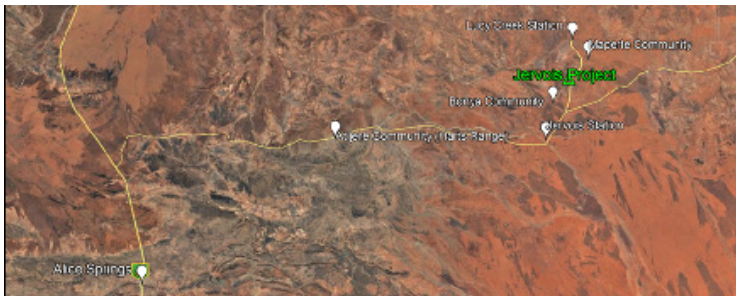
Phone: +61 (07) 3071 9003

Link to Website: www.kglresources.com.au

Jervois Copper Project – Copper, Gold, Silver

- **Project status:** Feasibility study in progress.
- **Location:** Jervois, 380km from Alice Springs, Northern Territory; direct access to Stuart and Plenty Highways.
- **Government approval status:** EIS approved August 2019; Mining Management Plan lodged April 2020.
- **Scheduled start of operation of mine:** Subject to financing and FID, construction in CY 2021; operation in 2023.
- **Current expected mine life:** 7.5 years, with opportunities to extend through further drilling; targeting minimum 10-year mine life.
- **Mineral resource or reserve:** Resource 20.97Mt @ 2.03% Cu for 426.2kT Cu, containing,
  - Reserve 9.4Mt @ 2.41% Cu for 226 kTCu.
  - Contains significant Au-Ag by-products.
- **Current or planned level of processing:** Copper concentrate to be processed on site and shipped as concentrate;
  - The PFS anticipates transport via Adelaide Port, FS will consider other routes such as the Port of Darwin.





Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Using modern, cost effective exploration methods, KGL is focused on establishing a world class, low cost copper mine in the Northern Territory, Australia.
- The December 2020 PFS revealed positive project economics (Pre-tax NPV8% A$177m, Pre-tax IRR 23.1%) at an assumed Copper price of US$3.08/lb ($US6,788/t), and the Board has approved progress to Feasibility Study.

For further information about these opportunities, please visit our website: www.kglresources.com.au

King River Resources Limited

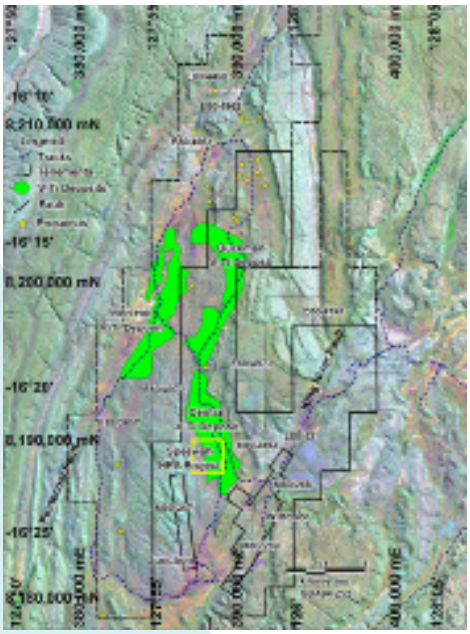
About the company: King River is an ASX-listed mineral exploration company, and emerging HPA, vanadium and titanium producer.

ASX: KRR

Contact details: Anthony Barton, Chairman

Phone: +61 (08) 9221 8055

Link to Website: www.kingriverresources.com.au



Speewah Project – Hpa, Vanadium

- **Project status:** Prefeasibility.
- **Location:** East Kimberley, WA; 100km south of Port of Wyndham
- **Government approval status:** Granted Exploration Licences on pastoral station land.
  - Mining Agreement to be negotiated with land holders and traditional owners.
- **Scheduled start of operation of mine:** 2023.
- **Current expected mine life:** Potential for long mine life; PFS modelled on 25 years.
- **Mineral resource or reserve:** JORC 2012 Mineral Resources: Central deposit comprises a Measured, Indicated and Inferred Mineral Resource of 1,240 million tonnes at 0.31 V_2O_5, 3.3% TiO_2, 14.6% Fe, 12.5% Al_2O_3 and 4.7% MgO (reported at a 0.23% V_2O_5 cut-off grade).
  - PFS initially scaled to HPA production, with Vanadium Pentoxide, Titanium Dioxide and Iron Oxide as co-products.
  - Additional large Mineral Resources at Buckman and Red Hill.
- **Current or planned level of processing:** Value adding processing to be located at Speewah.
  - Undertaking a study into the production of high purity Vanadium Pentoxide powders, standard grade Vanadium Pentoxide flake, Titanium Dioxide products, and iron oxide Hematite.
  - Mining expected to produce 4N HPA (99.99% Al_2O_3).
  - The Company has developed a new sulphuric acid process to produce HPA, and currently refining a solvent extraction process to precipitate high purity vanadium pentoxide and titanium dioxide products.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Proposed developments are based on the very large Speewah deposits with the potential for a long mine life and processing opportunities.

For further information about these opportunities, please visit our website: www.kingriverresources.com.au

Legend Mining Limited

About the company: Legend Mining is an ASX-listed Australian exploration company, focussed on its nickel-copper Rockford Project in Western Australia's highly prospective Fraser Range.

ASX: LEG

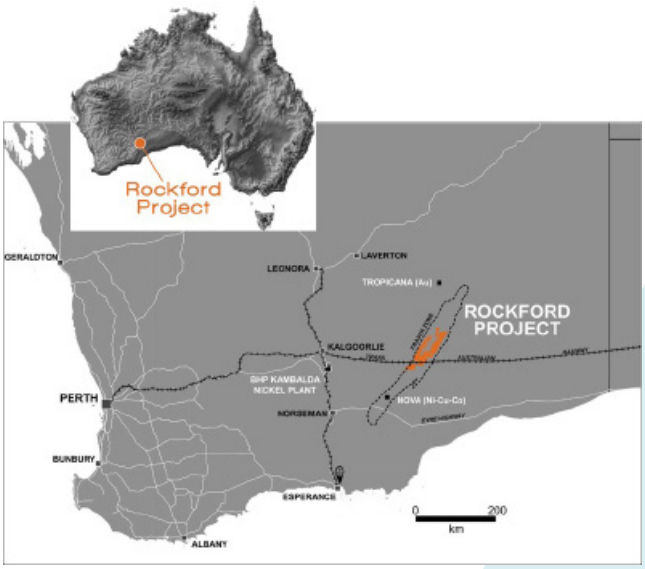
Contact details: Mark Wilson, Managing Director

Phone: +61 (08) 9212 0600

Link to Website: http://legendmining.com.au

Rockford Project – Nickel, Copper, Zinc, Silver

- **Project status:** Exploration.
- **Joint Venture partners and major shareholders:** Creasy Group and IGO Limited.
- **Location:** Fraser Range, WA; 300km east of Kalgoorlie; existing road and rail access to the town of Kalgoorlie, and Esperance and Fremantle ports.
- **Government approval status:** 14 contiguous granted Exploration Licences.
- **Schedule:** Exploration primarily focused on magmatic nickel-copper sulphide mineralisation, and volcanogenic massive sulphide (VMS/VHMS) style zinc-copper-silver.
  - Also exploring for Tropicana-style structurally controlled gold mineralisation.



Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Contact company
- Opportunity for further offtake? Contact company
- Opportunities for further processing? Contact company
- Legend Mining has a mission to make value-adding mineral discoveries and utilise all available asset bases to maximise shareholder benefit.
- The Company is well funded with 3000km^2 of premium tenure in the prospective Fraser Range, Western Australia.

For further information about these opportunities, please visit our website: http://legendmining.com.au

Lincoln Minerals Limited

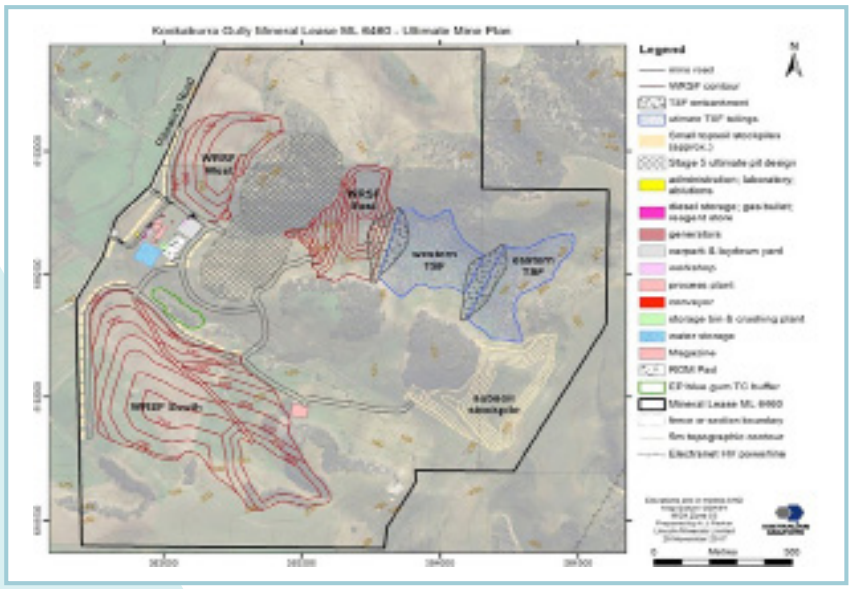
About the company: Lincoln Minerals is an ASX-listed Australian minerals explorer and developer, primarily focused on project development on the Eyre Peninsula of South Australia.

ASX: LML

Contact details: Dwayne Povey, Chief Geologist

Phone: +61 (08) 8682 3269

Link to Website: www.lincolnminerals.com.au



Kookaburra Gully Project - Graphite

- **Project status:** Feasibility Study and a maiden Ore Reserve statement completed.
- **Location:** Eyre Peninsula, SA; 35km north of Port Lincoln.
- **Government approval status:** Mineral Lease granted; Environmental Approvals process commenced.
- **Scheduled start of operation of mine:** Project currently on hold.
- **Current expected mine life:** 10 years.
- **Mineral resource or reserve:** Feasibility study based on a processing rate of 250,000tpa to produce 35,000tpa graphite flake concentrates.
  - Mineral Resource Total 2.03Mt at 15.2%; Ore Reserves probable 1.3Mt at 14.60%.
- **Current or planned level of processing:** Onsite concentrate production of flake graphite products with further downstream and offsite value adding production.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Contact company
- Opportunity for further offtake? Contact company
- Opportunities for further processing? Contact company
- One of the highest-grade graphite projects globally, with very low start up capital costs and a production profile suited to work graphite supply and demand volumes.

For further information about these opportunities, please visit our website: www.lincolnminerals.com.au

Liontown Resources Limited

About the company: Liontown is an ASX-listed battery metals exploration and development company, with a Tier One discovery at its flagship Kathleen Valley Lithium-Tantalum Project in Western Australia.

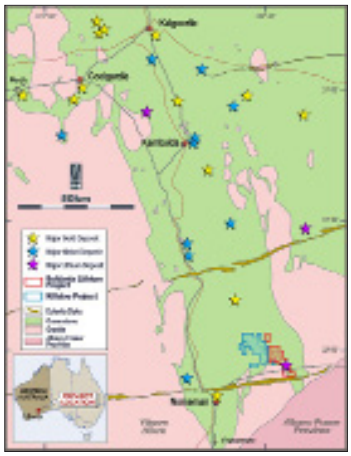
ASX: LTR

Contact details: David Richards, Managing Director

Phone: +61 (08) 9322 7431

Link to Website: www.ltresources.com.au

Kathleen Valley Lithium - Tantalum Project



- **Project status:** Prefeasibility.
- **Location:** 680km north east of Perth, WA; adjacent to sealed Goldfields Highway; 600km from Geraldton Port; 750km from Esperance Port; established mining region infrastructure including power line, natural gas pipeline, sealed airstrips and mining camps.
- **Government approval status:** Granted Mining Leases.
- **Scheduled start of operation of mine:** 2024.
  - Updated PFS scheduled delivery in Q4 2020, following major increases in contained resource.
- **Current expected mine life:** 25+ years.
- **Mineral resource or reserve:** 156Mt @ 1.4% Li2O & 130ppm Ta_2O_5.
- **Current or planned level of processing:** Onsite processing plant to produce spodumene (lithium) and tantalum concentrates for overseas export, or local processing in WA.
  - The Company is investigating the viability of building its own downstream processing facilities.
- **Offtake agreements in place:** Kathleen Valley is the only uncommitted, globally significant hard rock, lithium resource in Australia.

Buldania Lithium Project

- **Project status:** Exploration / Scoping Study.
- **Location:** Southern part of Eastern Goldfields, WA; 600km east of Perth; 30km northeast of Norseman; 200km north of mineral export Port Esperance.
- **Government approval status:** Granted Exploration Licences.
- **Mineral resource or reserve:** 14.9Mt @ 0.97% Li_2O and 44ppm Ta_2O_5.
  - Part of a larger, +150km^2 strategic land holding in a lithium-rich mineral province.
- **Current or planned level of processing:** Maiden Mineral Resource announced in late 2019 confirmed Buldania as a significant new greenfields lithium-tantalum discovery with substantial growth potential.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- One of the highest-grade graphite projects globally, with very low start up capital costs and a production profile suited to work graphite supply and demand volumes.

For further information about these opportunities, please visit our website: www.ltresources.com.au

Metallica Minerals Limited

About the company: Metallica Minerals is an ASX-listed Australian resource development company, with interests in silica sands, bauxite, gold-copper and graphite.

ASX: MLM

Contact details: Theo Psaros, Executive Chairman

Phone: +61 (07) 3249 3000

Link to Website: www.metallicaminerals.com.au

Cape Flattery Silica Sands Project

- **Project status:** Exploration.
- **Location:** 200km north of Cairns, North Queensland; adjacent to world class Cape Flattery Silica Sands mining operation and Cape Flattery port and wharf facilities.
- **Government approval status:** Exploration Permit granted; discussions progressing with Native Title claimants.
- **Schedule:** Further exploration programs planned in 2020 to establish a maiden silica sand resource and further progress concept work currently underway on an infrastructure solution to load ocean-going vessels.
- **Mineral resource or reserve:** Eight auger holes returned intervals of >99% silica oxide SiO^2 with an insitu quality that averaged between 96.1% and 99.1% SiO.
  - Exploration target of 20-100Mt.
  - Sampling program completed in Q4 2019 confirmed the presence of high-purity silica sands, similar quality to the already identified Cape Flattery and Cape Bedford resources.

Urquhart Bauxite Project

- **Project status:** PFS completed in 2018.
  - 50% owned by Metallica Minerals; 50% by Joint Venture partner Ozore Resources Pty Ltd.
- **Location:** 5km southwest of Weipa; west coast of Queensland's Cape York Peninsular.
- **Government approval status:** Mining Lease granted; Native Title Agreements and Environmental Agreements in place for mining; plans for infrastructure are in progress.
- **Mineral resource or reserve:** JORC Resource estimate 9.5Mt with 6.9Mt in the Measured and Indicated categories.
- **Current or planned level of processing:** Investigating alternative options for shipping bauxite from the tenement.

Esmeralda Gold And Base Metals Project - Graphite

- **Project status:** Exploration.
- **Location:** 80km south of the Croydon goldfields; north-west Queensland.
- **Government approval status:** Exploration Permit granted.
- **Schedule:** Two drill ready targets identified for testing of priority magnetic and gravity geophysical targets
- **Mineral resource or reserve:** Intrusive related mineralisation targeted.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The Company is also interested in financial investment via share placement with or without an offtake agreement.

For further information about these opportunities, please visit our website: www.metallicaminerals.com.au

Metalsearch Limited

About the company: Metalsearch is an ASX-listed, aspiring Australian industrial kaolin and mineral processing technology Company.

ASX: MSE

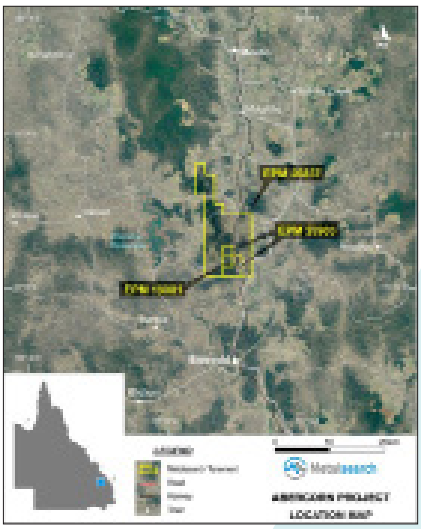
Contact details: Peter Zardo, Chief Operating Officer

Phone: (+61) 0498 525 551

Link to Website: www.metalsearch.com.au

Abercorn Project - Kaolin

- **Project status:** Definition of maiden JORC.
- **Location:** Central Queensland; 135km south of Gladstone deep-water port; 125km west of Bundaberg deep-water port; Burnett Highway bisects the tenements.
- **Government approval status:** Working towards Mining Licence Application.
- **Schedule:** Less than 10% of Project area drilled, potential for substantial future upgrade.
- **Mineral resource or reserve:** Total Maiden Resource is 39.06Mt yielding 36.8% -20µm grading 28.6% Al_2O_3.
  - 86 RC holes drilled with kaolinite intersected in every hole; Resource remains open in all directions.
  - High-grade Al_2O_3 assay results include 33.71% Al_2O_3 (20 µm).
- **Current or planned level of processing:** Kaolin mineralisation has the potential for the extraction of marketable volumes of high-grade kaolin for industrial mineral export and feed.
  - The Company has partnered with the University of Queensland to develop and commercialise novel and proprietary zeolite mineral processing technology that consumes kaolin or suitable mine tailings/residues to produce high value zeolites.
  - The zeolite technology has the potential to drive mining industry partnerships by offering a commercial remediation solution, by consuming suitable mine tailings waste as feed for zeolite production and fast track development of the Abercorn Project, at a potentially low capital cost, by utilizing the company's Abercorn kaolin as feedstock.



Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The Zeolite (IP) mineral processing technology project also has opportunities for technical collaboration, co-investment and partnerships with mining companies (commercial remediation solution for suitable mine tailings), specialist industry groups or Investment Funds.

For further information about these opportunities, please visit our website: www.metalsearch.com.au

Mineral Commodities Limited

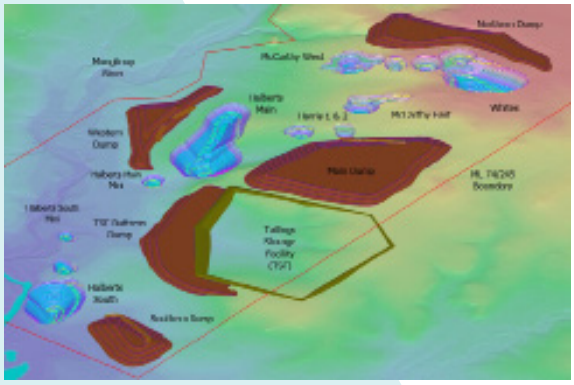
About the company: Mineral Commodities is an ASX-listed global mining and development company, with a primary focus on the development of high-grade mineral deposits within the mineral sands and battery minerals sectors.

ASX: MRC

Contact details: Peter Fox, Direct Manager – IR and Corporate Development

Phone: +61 (08) 6253 1100

Link to Website: www.mineralcommodities.com

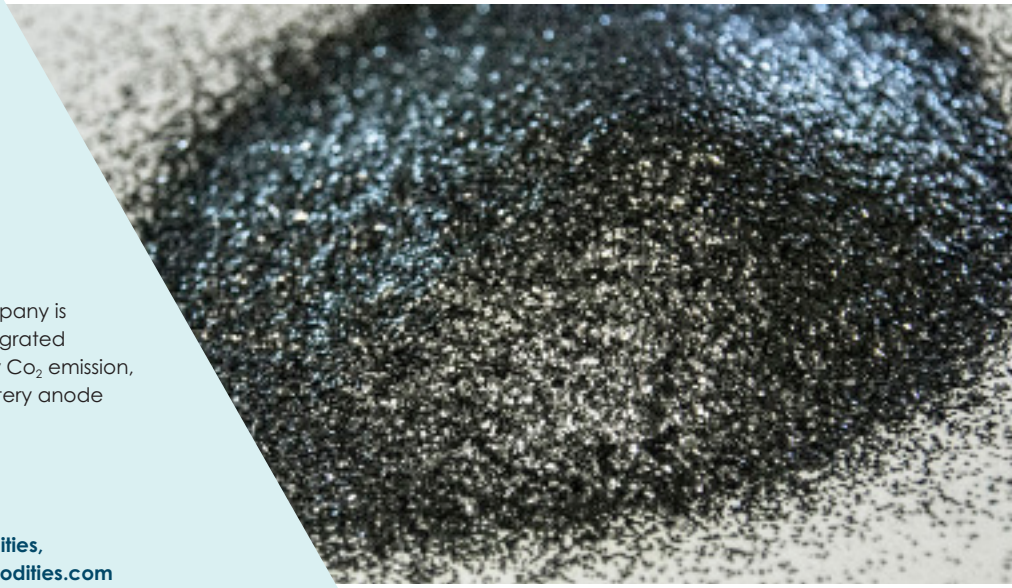


Munglinup Graphite Project

- **Project status:** DFS completed January 2020; final Environmental approvals expected in Q3 2020.
- **Location:** 640km southeast of Perth; 4km north of Munglinup town; 105km west from the port of Esperance.
- **Government approval status:** EPA and EPBC assessments submitted; final Environmental approvals expected in Q1 2021.
- **Scheduled start of operation of mine:** Subject to FID, production in 2023; construction and earthworks in 2022.
- **Current expected mine life:** 14 years.
- **Mineral resource or reserve:** 7.99Mt @ 12.2% TGC using a 5% cut-off; Ore Reserve of 4.24Mt @ 12.8% TGC (Probable).
  - Expected production of ~52ktpa of >95% purity graphite concentrate.
- **Current or planned level of processing:** Onsite Process Plant designed to initially treat 400ktpa of ore; ROM ore will be primary crushed, scrubbed, screened and processed via a floatation circuit before drying, screened into multiple size fractions and bagged.
  - Developing further downstream products including environmentally friendly purified, coated spherical graphite, pre-cursor / active anode material.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- As part of its graphite strategy, the Company is investing in a downstream vertically integrated strategy targeting the production of low Co_2 emission, environmentally sustainable natural battery anode material in Norway.



For further information about these opportunities, please visit our website: www.mineralcommodities.com

Multicom Resources Limited

About the company: Multicom is an unlisted, emerging Vanadium producer, focused on developing its Saint Elmo Vanadium Project in Queensland.

Contact details: Shaun McCarthy, CEO

Phone: (+61) 0428 506 180

Link to Website: www.mcres.com.au

Saint Elmo Vanadium Project

- **Project status:** DFS planned to be released in late 2020.
- **Location:** 260km east of Mount Isa; 700km from Port of Townsville via Flinders Highway or Mount Isa Rail Line; globally renowned North West Minerals Province.
- **Government approval status:** Mining Lease and Environmental Authority expected in late 2020; EIS approved.
  - Awarded Major Project Status by the Australian Federal Government, Prescribed Project and Project of Regional Significance by the Queensland State Government.
- **Scheduled start of operation of mine:** 2022, subject to funding and approvals.
- **Current expected mine life:** 30+ years.
- **Mineral resource or reserve:** Total JORC Mineral Resource of 465Mt at 0.3% V_2O_5, including 275Mt of Indicated Resource at 0.31%.
  - Infill drill program results pending, expected to upgrade the resource classification, with Maiden Reserve Statement expected in H2 2020.
- **Current or planned level of processing:** Shallow, low strip ratio, open pit mining and beneficiation operation producing a concentrate of approximately 1.4% for downstream processing.
  - The vanadium pentoxide (V_2O_5) refinery, will be established at the Project site, 25km from Julia Creek, with an initial production rate of approximately 8.8Mlb V_2O_5 per annum over an initial mine life of 30 years.
  - The mineral process facility is designed to treat 2.5Mtpa of 0.3% V_2O_5 grade ore to generate 4,000 dry metric tonnes of V_2O_5 fused flake (>98% w/w) per annum.
- **Offtake agreements in place:** Letter of Intent in place with European end-user targeting the clean energy industry with new battery technology.
  - Additional Letters of Intent with 2 global trading groups for unspecified volume of V_2O_5 fused flake product; and a LOI with StorEn Technologies for up to 1,500 tpa of V_2O_5 fused flake product

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Multicom Resources is looking for project partners to provide project financing to bring the project into production.

For further information about these opportunities, please visit our website: www.mcres.com.au

Neometals Limited

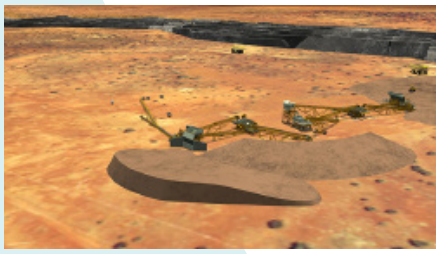
About the company: Neometals is an ASX-listed company who innovatively develops opportunities in minerals and advanced materials essential for a sustainable future.

ASX: NMT

Contact details: Jeremy Mcmanus, General Manager

Phone: +61 (08) 9322 1182

Link to Website: www.neometals.com.au



Mt Edwards Project – Nickel And Lithium

- **Project status:** Exploration / Prefeasibility.
- **Location:** Widgiemooltha, WA; 90km south of Kalgoorlie; 300km from Esperance port; 50km from Kambalda Nickel Concentrator.
- **Government approval status:** Mining Leases, Exploration and Prospecting Licences Granted.
- **Mineral resource or reserve:** 11 Nickel Sulphide Mineral Resources totalling 8,382Kt @ 1.7% Ni for 141,000 tonnes of contained nickel metal using a 1% Ni cut-off.
- **History:** 240km of tenements within the historic Widgie Dome nickel sulphide camp.
- **Current or planned level of processing:** Mining Studies to exploit underground nickel underway.
  - Review of historic Ore Tolling and Concentrate Purchase Agreement with BHP Kambalda Nickel Concentrator.

Barrambie Project – Titanium, Vanadium, Iron

- **Project status:** Feasibility; DFS completed May 2019.
- **Location:** Between Sandstone and Meekatharra, WA; 555km from Geraldton port.
- **Government approval status:** Granted Mining Lease; Granted Miscellaneous and Exploration Licences; EPA Ministerial approval for mining and processing onsite.
- **Current expected mine life:** 20+ years.
- **Mineral resource or reserve:** Mineral Resources of 280.1Mt @ 9.18% TiO_2 and 0.44% V_2O_5 using cut-off of ≥ 10% TiO_2 or ≥ 0.2% V_2O_5. Ore Reserve of 39.9Mt @ 15.1% TiO_2 and 0.78% V_2O_5 based on 0.6% V_2O_5 cut-off.
- **Current or planned level of processing:** Comprehensive development work including piloting and advanced economic evaluation on a range of metallurgical processing routes.
  - Probable development option is open cut and beneficiation plant onsite with a mixed concentrate sent for further processing at another location.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The Company's strategy focuses on de-risking and developing long-life projects with strong partners and integrating down the value chain to increase margins and return value to shareholders.

For further information about these opportunities, please visit our website: www.neometals.com.au

Novonix Limited

About the company: Novonix is an ASX-listed, international battery materials and technology company, well positioned to benefit from increasing demand for long life, light weight, high capacity batteries for the electric vehicle market.

ASX: NVX

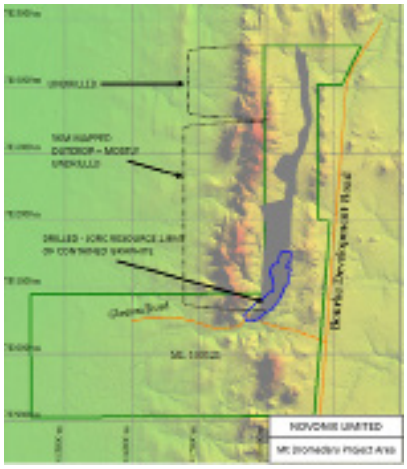
Contact details: Philip St Baker, Managing Director

Phone: (+61) 0438 173 330

Link to Website: www.novonixgroup.com

Flake Graphite Project

- **Project status:** Prefeasibility.
- **Location:** 130km north of Cloncurry, Queensland; adjacent to the Burke Development Road.
- **Government approval status:** Mining Lease application in progress; Native Title agreements in place; Landholder agreements progressing.
- **Scheduled start of operation of mine:** 2023.
- **Current expected mine life:** 20 years with upside potential.
- **Mineral resource or reserve:** JORC Resource of 1.908Mt contained graphite, including 8.5Mt at an average grade of 18.4% Total Graphitic Carbon (Measured, Indicated and Inferred).
- **Current or planned level of processing:** Anticipated production rate of 50,000 tpa; test work has confirmed the ore will produce a high-grade concentrate (~96%) with good graphite recovery.
  - Concentrate produced onsite, dried, bagged and transported for export via existing ports at Townsville and/or Brisbane.
  - The Company is considering larger scale development options (with and without Spheronising).



Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Novonix welcomes third-party proposals to invest in or acquire the project, via direct share purchase or farm-in agreement.

For further information about these opportunities, please visit our website: www.novonixgroup.com

Pilbara Minerals

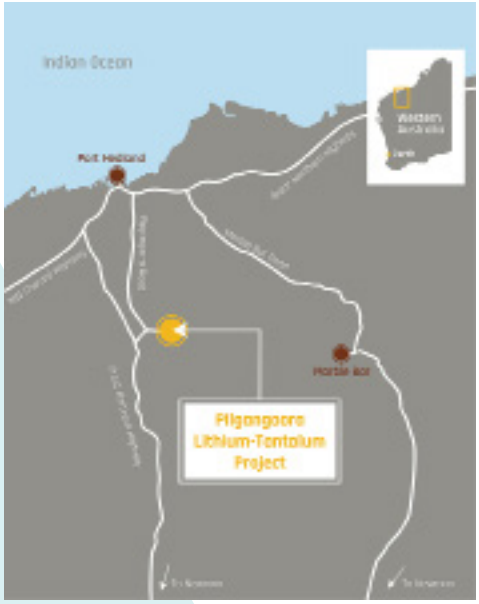
About the company: Pilbara Minerals is an Australian, ASX-listed lithium-tantalum producer, focused on the development of its 100% owned Pilgangoora Lithium-Tantalum Project to become one of the world's biggest lithium raw materials producers.

ASX: PLS

Contact details: Linda Reddi, Manager Corporate Affairs

Phone: +61 (08) 6266 6266

Link to Website: www.pilbaraminerals.com.au



Pilgangoora Lithium-Tantalum Project

- **Project status:** Production commenced 2018 (Stage 1).
- **Location:** Pilbara, WA; 120km south of Port Hedland port.
- **Government approval status:** All major approvals in place.
- **Current expected mine life:** 40 years (Stage 1).
- **Growth opportunity:** Pursuing a growth and diversification pathway to expand processing capacity from 2Mtpa to 5Mtpa and therefore production from ~330,000tpa to ~850,000tpa of 6% spodumene concentrate, and 321,000lbspa to ~ 800,000lbspa +5% tantalite concentrate and a participate in downstream lithium chemical conversion through a proposed JV with POSCO.
- **Mineral resource or reserve:** Total Mineral Resource 223.2Mt grading 1.27% Li_2O (spodumene), 116ppm Ta_2O_5 and 0.60% Fe_2O_3, containing 2.82Mt of Li_2O and 56.9Mlbs of Ta_2O_5; Ore Reserve: 106.0Mt at 1.25% Li_2O (spodumene), 120ppm Ta_2O_5 and 1.18% Fe_2O_3.
- **Current or planned level of processing:** Dense media and flotation recovery through the processing plant to produce 6% spodumene concentrate.
  - Tantalum recovery to +5% tantalite concentrate via gravity separation.
- **Offtake agreements in place:** 100% of Stage 1 offtake; 100% of Stage 2 offtake.
  - Long-term offtake agreements with key industry customers throughout the global lithium battery supply chain.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The Company provides an ethical and sustainable supply of lithium raw materials to power the growth in the clean energy and transportation sector across the world.

For further information about these opportunities, please visit our website: www.pilbaraminerals.com.au

Pure Minerals Limited

About the company: Pure Minerals is an ASX-listed company who, through its wholly owned subsidiary Queensland Pacific Metals Pty Ltd, is focused on developing a modern battery metals refinery in Queensland.

ASX: PM1

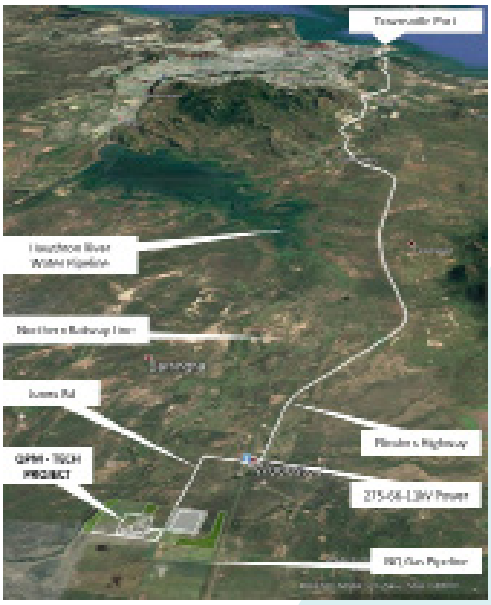
Contact details: Dr Stephen Grocott, CEO

Phone: (+61) 0409 417 326

Link to Website: www.pureminerals.com.au

Townsville Energy Chemical Hub (Tech) Project

- **Project status:** Feasibility.
- **Location:** Landsdown Industrial Precinct; 40km south of Townsville, QLD.
- **Government approval status:** Rezoned – Heavy Industry.
- **Schedule:** Aim to complete all feasibility studies and approvals by Q4 2021.
  - The Company has also secured exploration ground in the Marlborough region for prospective future sources of nickel and cobalt.
- **Current expected mine life:** 30+ years.
- **Mineral resource or reserve:** Indicative grade or 1.6% Ni / 0.17% Co.
- **Current or planned level of processing:** The TECH Project will process 600,000wmt of ore per annum, producing 26,000tpa nickel sulphate; 3,000tpa cobalt sulphate; 4,000tpa high purity alumina (4N); 325,000tpa high-grade iron ore.
  - TECH will employ the processing technology developed and patented by Direct Nickel Projects Pty Ltd, the Dni Process.
  - Pure Minerals has secured a binding ore supply agreement through QPM to purchase 600,000tpa of nickel-cobalt ore for an initial five-year period from New Caledonian mining companies.
  - Pure Minerals will utilise a nitric acid leach under atmospheric conditions. This has a number of advantages over high pressure acid leach including lower capital intensity, environmentally friendly - no tailings dam required and <0.5 t residue per dry t ore (c.f. 1.2 – 1.5t/t for HPAL), and ability to recover all valuable metals from ore, increasing and diversifying revenue.



Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- QPM is currently seeking offtakers and invites interested parties to view its pilot plant activities in Perth in Q3 2020.

For further information about these opportunities, please visit our website: www.pureminerals.com.au or contact Dr Stephen Grocott (sgrocott@qpmetals.com.au)

QEM Limited

About the company: QEM Ltd is an ASX-listed company, focused on the development of its 100% owned flagship Julia Creek Vanadium and Oil shale Project in Queensland.

ASX: QEM

Contact details: Gavin Loyden, Managing Director

Phone: +61 (07) 5646 9553 or +61 403 256 580

Link to Website: www.qldem.com.au

Julia Creek Project – Vanadium, Oil Shale

- **Project status:** Advanced Exploration.
- **Location:** North-west Minerals Province, Queensland, 230km east of Mt Isa; 12km from Julia Creek township; project intersected by the Flinders Highway and heavy gauge rail; 600km from Port of Townsville.
- **Government approval status:** 4 granted Exploration Permits, covering 250km^2.
- **Schedule:** PFS anticipated to begin early 2021.
- **Mineral resource or reserve:** JORC (2012)Resource of 2760Mt, consisting of 220Mt Indicated and 2540Mt Inferred Category @ 0.30% V_2O_5.
  - 783MMBBLs of Oil in the 3C category, contained within same ore body.
- **Current or planned level of processing:** Shallow resource amenable to open pit design with low stripping ratio.
  - On-site production of both high-quality vanadium pentoxide and fuel oils (diesel).
  - Vanadium to be processed from spent shale via leaching.
  - Residual material may also be suitable for Portland cement as a by-product.
  - Based on current processing test work and flowsheet; oil to be recovered via thermal solution in an above ground processing facility and hydrotreated to upgrade raw oil, using hydrogen donor solvent derived from the product stream, the process has the potential to convert the kerogen to product oil with higher yield and quality than conventional (retort) technologies.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The Julia Creek Project is one of the largest single oil shale and vanadium resources in the world; providing an opportunity for investors to reap the benefits from the dual commodities of fuel oil and V_2O_5 to enhance margins and drive long-term shareholder value.
- Dual commodity exposure mitigates the risk of price volatility in markets.

For further information about these opportunities, please visit our website: www.qldem.com.au

Quantum Graphite Limited

About the company: Quantum Graphite is the ASX-listed owner of the century old Uley graphite mine and the broader Mikkira Deposit located in South Australia's Eyre Peninsula, one of the world's largest natural coarse flake graphite deposits.

ASX: QGL

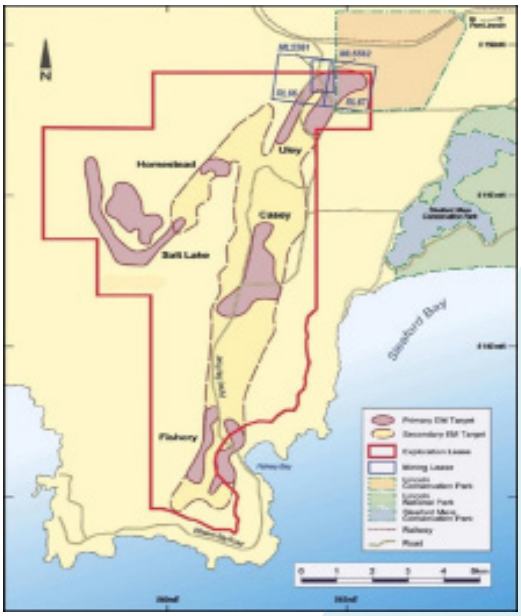
Contact details: Sal Catalano, Director

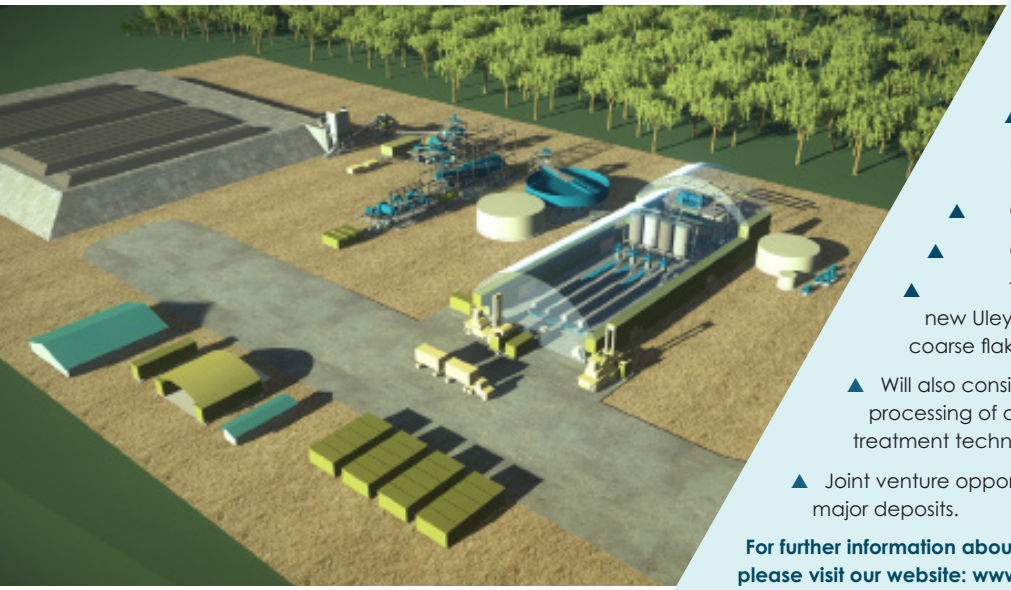
Phone: +61 (03) 8614 8414 or +61 419 642 600

Link to Website: www.quantumgraphite.com

The Uley 2 Project - Graphite

- **Project status:** DFS completed for Uley 2.
- **Location:** Eyre Peninsula, SA; 20km west south-west of Port Lincoln.
- **Government approval status:** All approvals obtained pursuant to Program for Environment Protection and Rehabilitation.
- **Scheduled start of operation of mine:** Q1 2022.
- **Current expected mine life:** 12 years.
- **Mineral resource or reserve:** Total Mineral Resources 6.3Mt @ 11.10% TGC; Total Ore Reserves 4.0Mt @ 11.89% TGC.
- **Current or planned level of processing:** Uley 2 processing plant will produce a minimum of 55,000 tonnes of high purity coarse flake.
  - The plant will accept run-of-mine ore and liberate graphite particles through crushing and grinding, followed by flotation and polishing sections which will be critical for enhanced flake graphite recoveries and upgrading graphite flake to maximise purity and coarse flake size.
- Offtake agreements in place: The Sunlands Company Pty Ltd (thermal storage applications) approx. 20% of annual production.





Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The Company is seeking funding for the new Uley 2 process plant and offtake of Uley 2 coarse flake production;
- Will also consider opportunities to further or advance processing of coarse flake production including thermal treatment technologies; and
- Joint venture opportunities in respect of the Company's other major deposits.

For further information about these opportunities, please visit our website: www.quantumgraphite.com

RareX Limited

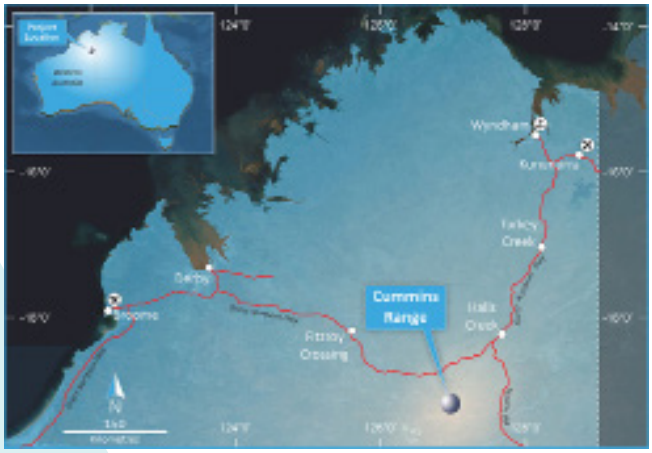
About the company: RareX is an ASX-listed rare earths development company, with the strategy to produce a Rare Earth Rich monazite concentrate for export in downstream processing facilities.

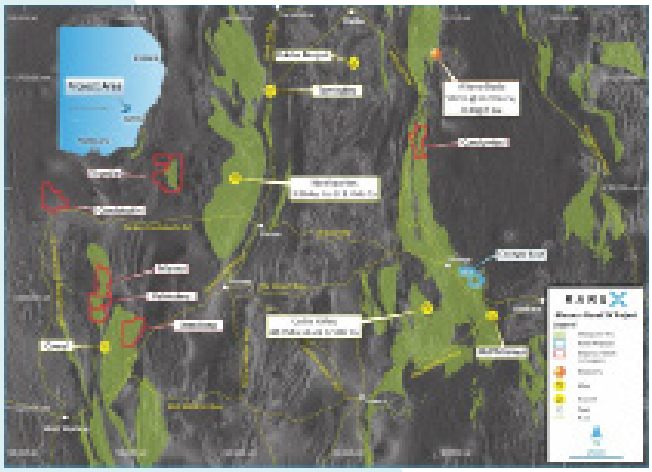
ASX: REE

Contact details: Jeremy Robinson, Executive Director

Phone: +61 (08) 6143 6720

Link to Website: www.rarex.com.au





Cummins Range Project – Rare Earths

- **Project status:** Prefeasibility.
- **Location:** 125km south south-west of Halls Creek; Kimberley, WA; Halls Creek 350km from port of Wyndham.
- **Government approval status:** Environmental approvals in progress; Mining Lease application planned in late 2020.
- **Scheduled start of operation of mine:** 2022/2023.
- **Current expected mine life:** 10+ years.
- **Mineral resource or reserve:** Mineral Resource of 13.0Mt at 1.13% TREO with NdPr content of 22.1%; Targeted Reserve of 2.5Mt at 2.5% TREO.
- **Current or planned level of processing:** Onsite production of concentrate via froth flotation; targeting a 250kpa plant producing roughly 10ktpa of rare earth concentrate.
- **Offtake agreements in place:** Working with Talaxis Group to develop.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Looking for downstream monazite (rare earths) processors to partner with and refine into rare earth oxide.
- Also looking for a project partner to help develop the Cummins Range Project.

For further information about these opportunities, please visit our website: www.rarex.com.au

Renascor Resources

About the company: Renascor is an ASX-listed mineral exploration and development company focused on developing a vertically integrated graphite mine and battery anode material operation in South Australia.

ASX: RNU

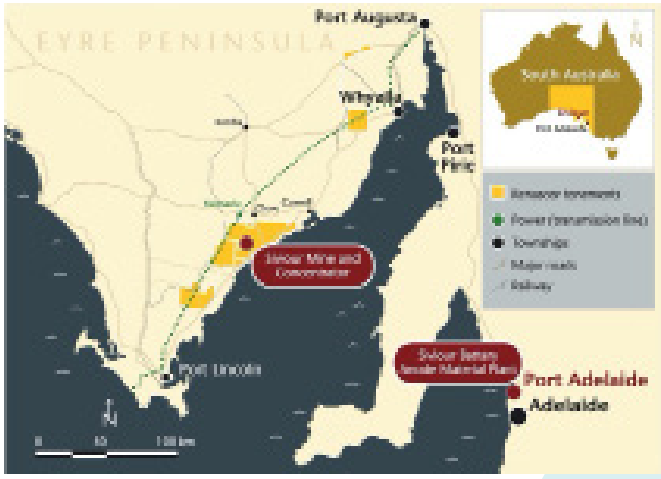
Contact details: David Christensen, Managing Director

Phone: +61 (08) 8363 6989

Link to Website: www.renascor.com.au

Siviour Project - Purified Spherical Graphite / Battery Anode Material

- **Project status:** Development.
- **Location:** Eyre Peninsula, SA; 8km from major highway leading to established port; 120km from deep-water port.
- **Government approval status:** Mineral Licence Granted.
- **Scheduled start of operation of mine:** 2022/2023.
- **Current expected mine life:** 40+ years.
- **Mineral resource or reserve:** Total Mineral Resources 87.4Mt @ 7.5% TGC 6.6Mt Contained Graphite; Total Ore Reserve Estimate 51.5Mt @7.4% TGC 3.8Mt Contained Graphite.
- **Current or planned level of processing:** 28,000Tpa of battery anode material (purified spherical graphite).
  - 2-staged processing: Stage 1 – crushing, grinding, flotation circuit to create ~94-96% carbon Graphite Concentrate product; Stage 2 – two-step process of milling then purification through a low temperature caustic roast process.
  - With the Battery Anode Material operation, Renascor aims to create, in Australia, the first vertically integrated, in-county Purified Spherical Graphite operation outside of China.



Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Low cost and low sovereign risk project with down streaming and value add potential.

For further information about these opportunities, please visit our website: www.renascor.com.au

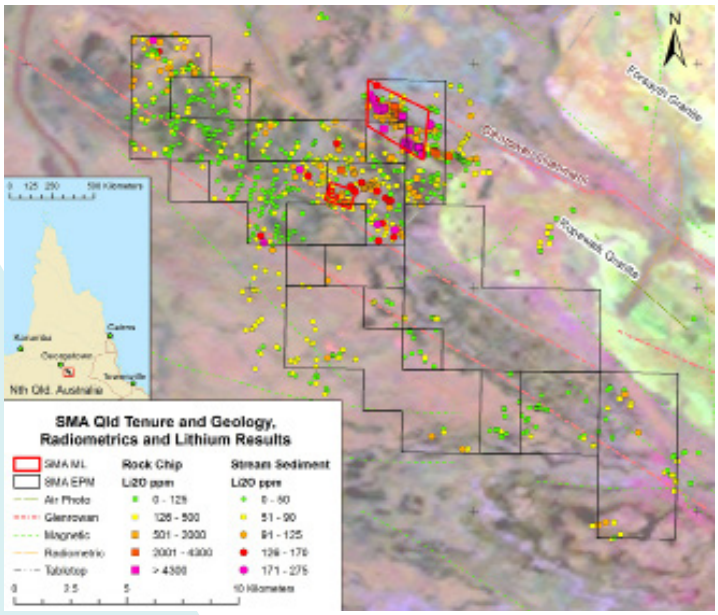
Strategic Metals Australia Pty Ltd

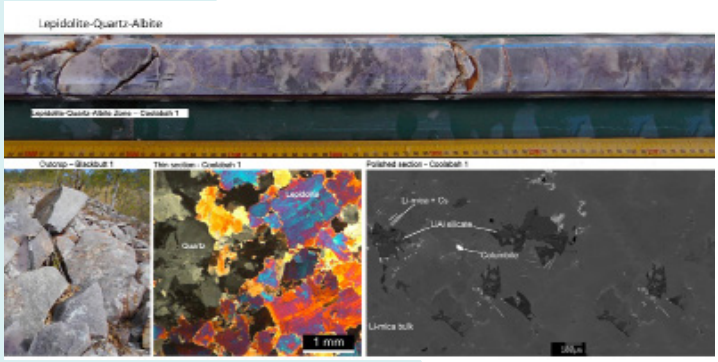
About the company: Strategic Metals Australia is a private company specialising in early exploration and discovery of strategic metals deposits, and the subsequent development of these deposits.

Contact details: Graham Willett, CEO

Phone: +61 (07) 3841 5500

Link to Website: www.strategicmetalsaustralia.com





Georgetown Project – Lithium, Cesium, Tantalum

- **Project status:** Advanced Exploration.
- **Location:** 30km south-west of Georgetown; 18km north-west of Forsayth; main access via Flat Creek Station Road, QLD.
- **Government approval status:** Approved EPM 13694.
- **Schedule:** Drilling completed. Drilling demonstrated the presence of an intensive mineralising event covering an area of 2.5 x 0.5 km^2, likely much larger.
  - Subject to financing, plan to conduct a feasibility study of the newly identified lithium province containing the largest underdeveloped Lithium-Cesium-Tantalum Pegmatite Field on Australia's east coast.
- **Mineral resource or reserve:** Assays to 1.1% Li_2O were recorded in drill core samples.
  - Targeting medium-grade large tonnage lithium / alkali metals and high-grade small-medium tonnage LCT Pegmatites.
- **Opportunity:** Lithium mica deposits have low production costs offset with by-products.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Seeking a project partner to confirm the economic potential of the recently discovered "new style" lithium and alkali metals mineralisation.

For further information about these opportunities, please visit our website: www.strategicmetalsaustralia.com

Technology Metals Australia Limited

About the company: Technology Metals is an ASX-listed company focused on developing its 100% owned Gabanintha Vanadium Project.

ASX: TMT

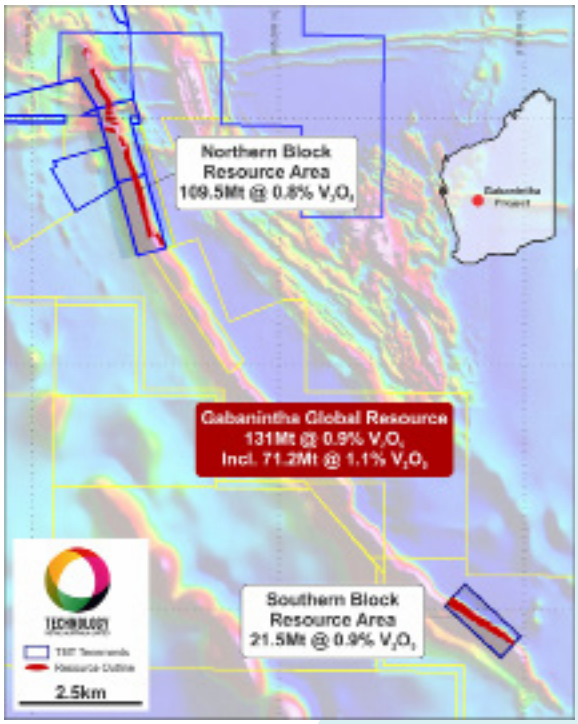
Contact details: Ian Prentice, Managing Director

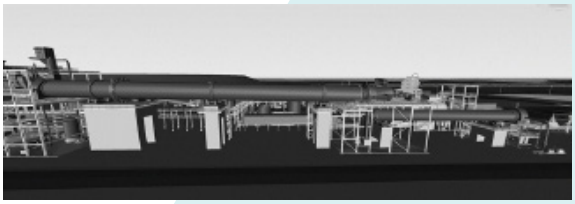
Phone: +61 (08) 6489 1600

Link to Website: www.tmtlimited.com.au

Gabanintha Vanadium Project

- **Project status:** DFS completed 2019.
- **Location:** 40km south of Meekatharra, WA; 580km east of the port of Geraldton.
- **Government approval status:** Mining Leases Granted; Native Title discussions progressing; Environmental approval application expected to be lodged late 2020.
  - Achieved WA Government Lead Agency support to assist with approvals.
- **Scheduled start of operation of mine:** Subject to financing, first production in 2023.
- **Current expected mine life:** 16 years, expected to increase beyond 20 years.
- **Mineral resource or reserve:** Global Resource is 131 Mt @ 0.9 % V_2O_5 which includes the high-grade massive magnetite zone of 71 Mt @ 1.1 % V_2O_5.
  - A mining reserve for the northern group of tenements has been defined at 29.6Mt @ 0.88% V_2O_5.
- **Current or planned level of processing:** TMT plans to build a salt-roast water-leach processing facility on site, to produce high purity >99% vanadium pentoxide suitable for battery and steel markets.
- **Offtake agreements in place:** Binding offtake agreement with CNMNC for 16% of annual production.
  - Additional 30-60% committed under MOUs with Big Pawer and Shaanxi Fengyuan, in the process of being converted to binding offtakes.





Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The high-grade and scale of TMT's project has attracted key players in the vanadium market and TMT is committed to making Gabanintha the world's next vanadium mine.

For further information about these opportunities, please visit our website: www.tmtlimited.com.au

Tempest Minerals Ltd

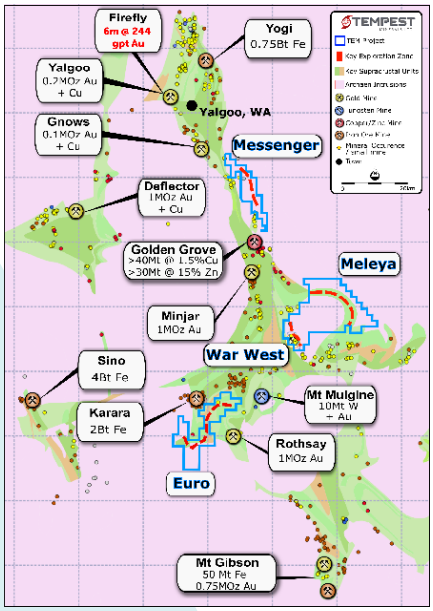
About the company: Tempest Minerals Ltd is an ASX-listed mineral exploration company with a diversified portfolio of WA-based projects, prospective for precious, base and energy metals.

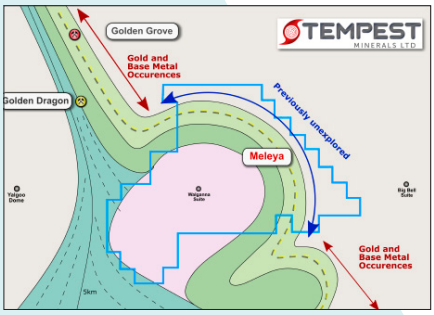
ASX: TEM

Contact details: Don Smith, Managing Director

Phone: don@tempestminerals.com

Link to Website: www.tempestminerals.com





Yalgoo Project – Copper, Zinc, Gold

- **Project status:** Exploration.
- **Location:** Yalgoo, Western Australia; 400km north of Perth, 200km from Geraldton port.
  - Extension of the host rocks of the world class Copper-Zinc-Lead-Gold-Silver VMS Golden Grove mine.
  - Located between 3 current major mining operations.
- **Government approval status:** Granted Exploration, Prospecting and Mining Licences.
- **Exploration Schedule:** Gold target zone drilling planned for 2021.
- **Geology:** Multi-kilometre geochemical and geophysical anomalies identified.
- **History:** The Company's experienced board and management team possess technical and commercial acumen, with an impressive history of achieving exploration, operational and corporate success.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Tempest Minerals is a diversified exploration company with exposure to multiple commodities and mineralisation types, including projects currently exploring for gold.
- As industry leaders with excellence in sustainable business, Tempest maximises shareholder value and benefit through focussed, data-driven, risk-weighted exploration and development of its assets.

For further information about these opportunities, please visit our website: www.tempestminerals.com

Transition Resources Pty Ltd

About the company: Transition Resources is an unlisted private explorer, focused on discovery of new economy metals associated with gold in the Cloncurry Belt of the Mt Isa Block.

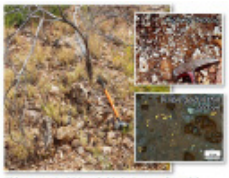
Contact details: David Wilson, Managing Director

Phone: (+61) 0419 899 589

Link to Website: www.transitionresources.com.au

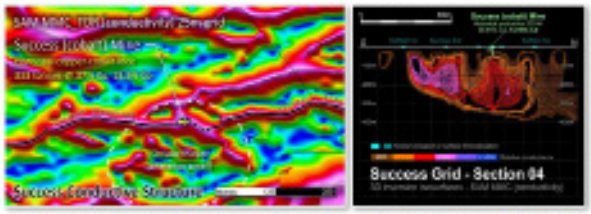
Highway Prospect Project – Gold, Tungsten, Rare Earths, Cobalt, Scandium

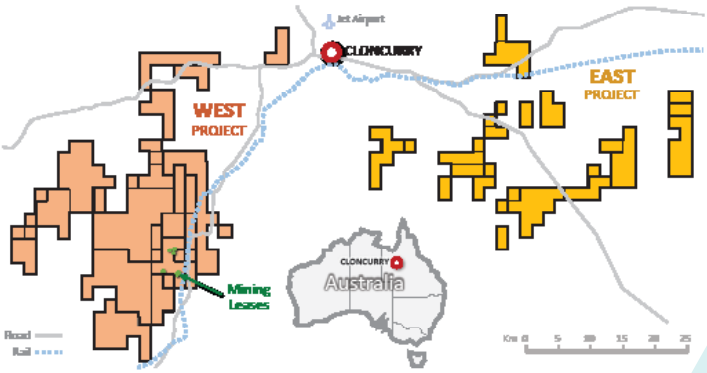
- **Project status:** Exploration.
- **Location:** 28km south-west of Cloncurry, QLD; 800km from Port of Townsville; National rail and Highways traverse the tenements.
  - 21km prospective corridor 100% controlled by Transition, anticipated to host repeats of the Highway discovery.
- **Government approval status:** Exploration Permit for Minerals.
- **Schedule:** Drilling from August 2020 to define the size and extent of the Highway discovery; an outcropping gold-rich new economy metals mineral system.
- **History:** The Highway location shows no evidence of prior mining or modern exploration but is proximal to one of the most densely mineralised areas of the Cloncurry District.
- **Current or planned level of processing:** The tenements are within short trucking distance of many operating mines, planned operating mines, and mines on care and maintenance, offering third-party processing options.
  - Early metallurgical test work indicates stand-alone simple beneficiation operation may be attractive.



Success Mine Project – Cobalt

- **Project status:** Exploration.
- **Location:** 28km south-west of Cloncurry, QLD; 800km from Port of Townsville; National rail and Highways traverse the tenements.
- **Government approval status:** Exploration Permit for Minerals.
- **Schedule:** Exploration to target a possible larger primary cobalt ore zone associated with the previously mined high-grade supergene cobalt lode.
- **History:** Produced an estimated ~333 tonnes of total ore mined at an estimated 13.5% Co and 37% Cu from 1927 to 1931.
  - Historical mines adjacent and along strike produced similar tonnages and grade of copper ore but weren't assayed for cobalt.
- **Current or planned level of processing:** The tenements are within short trucking distance of many operating mines, planned operating mines, and mines on care and maintenance, offering third-party processing options.





Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The Company is seeking up to $2M to fund drilling through FY2020.
- Transition has developed a new mineral system model for the region that is transforming previously overlooked tenements into fertile new discovery opportunities including possible Tier One scale systems.

For further information about these opportunities, please visit our website: www.transitionresources.com.au

Tungsten Mining NL

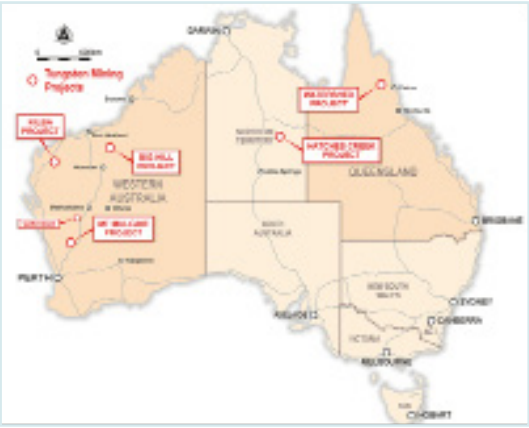
About the company: Tungsten is an ASX-listed company focused on the discovery and development of tungsten deposits in Australia.

ASX: TGN

Contact details: Craig Ferrier, CEO

Phone: +61 (08) 9486 8492

Link to Website: www.tungstenmining.com



Mt Mulgine Project – Tungsten Polymetallic

- **Project status:** PFS for large scale operations scheduled for completion in H2 2020.
- **Location:** Murchison Region, WA; 350km north northeast of Perth.
- **Government approval status:** Granted Mining Leases; DMIRS approval for mining Mulgine Hill deposit; targeting submission for large-scale project to environmental regulator in 2022.
- **Scheduled start of operation of mine:** Small-scale commencing in 2021/22; construction of large-scale project in 2024; large-scale operation 2025.
- **Current expected mine life:** 30+ years.
- **Mineral resource or reserve:** Combined Mineral Resources of 259Mt @ 0.11% WO_3, 270ppm Mo, 0.12g/t Au, 5g/t Ag and 0.03% Cu at a 0.05% WO_3 cut-off grade.
- **Current or planned level of processing:** Large scale PFS based on mining 6mtpa and processing via X-ray ore sorting with gravity and flotation circuits for recovery of tungsten concentrate and separate by-products of molybdenum and copper concentrates, to be bagged and shipped in containers via Fremantle Port.
  - Potential for production of magnetite concentrate.

Watershed Project – Tungsten

- **Project status:** DFS completed 2014.
- **Location:** 130km north of Cairns, QLD.
- **Government approval status:** Granted Mining Leases and Environmental Authority for open pit development.
- **Opportunity:** Positioned for development with the aim of producing tungsten concentrate for the APT market.
- **Current expected mine life:** 10 years.
- **Mineral resource or reserve:** Proven and Probable Ore Reserve of 21.3Mt @ 0.15% WO_3 from Measured, Indicated and Inferred Mineral Resources of 49.3Mt @ 0.14% WO_3 at a 0.05% WO_3 Cut-off grade.
- **Current or planned level of processing:** Project to be developed as an open pit mine with drill and blast mining, then excavator and truck.
  - 2.5Mtpa of ore to be processed on-site through a circuit containing crushing, X-ray transmission ore sorting, rod milling, gravity separation with spirals, ball milling and flotation.
  - Concentrate produced to contain >65% WO_3 with very low level of contaminants.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes

For further information about these opportunities, please visit our website: www.tungstenmining.com

Vecco Group

About the company: Vecco Group is a private company that has developed an integrated vanadium mining, electrolyte production and downstream energy business model.

Contact details: Tom Northcott, CEO

Phone: +61 (07) 3186 1014

Link to Website: www.veccogroup.com.au

Debella Vanadium Project

- **Project status:** PFS due to be completed in November 2020.
- **Location:** Julia Creek, North West Minerals Province, QLD.
- **Government approval status:** Expedited mining lease and environmental authority approval process.
- **Scheduled start of operation of mine:** 2022.
- **Current expected mine life:** 40+ years.
- **Mineral resource or reserve:** Low LOM strip ratio and high-grade tonnage of 0.56% V_2O_5 supports for 10+ years of mining; JORC 147Mt vanadium resource averaging 0.47% V_2O_5.
- **Current or planned level of processing:** On-site ore beneficiation and leaching; low-cost modular flotation and atmospheric sulphuric acid leaching with no requirement for roasting.
  - Final purification and processing into electrolyte at Vecco's Townsville facility; Australia's first commercial scale vanadium electrolyte facility to immediately supply vanadium flow battery technology companies.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- Vecco is seeking a partner to assist with funding to progress the deposit to production.
- The Company's low-cost production ensures profitability through the vanadium price cycles, with low capital intensity, low mining costs, and local production of vanadium electrolyte.

For further information about these opportunities, please visit our website: www.veccogroup.com.au

Venturex Resources Limited

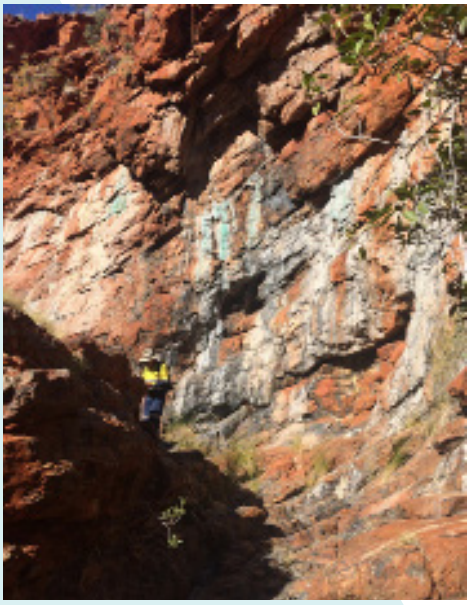
About the company: Venturex is an ASX-listed base metal mining company, focused on the development of its flagship Sulphur Springs Copper-Zinc Project in WA, and continued exploration across the Pilbara.

ASX: VXR

Contact details: Anthony Reilly, Executive Director

Phone: +61 (08) 6389 7400

Link to Website: www.venturexresources.com

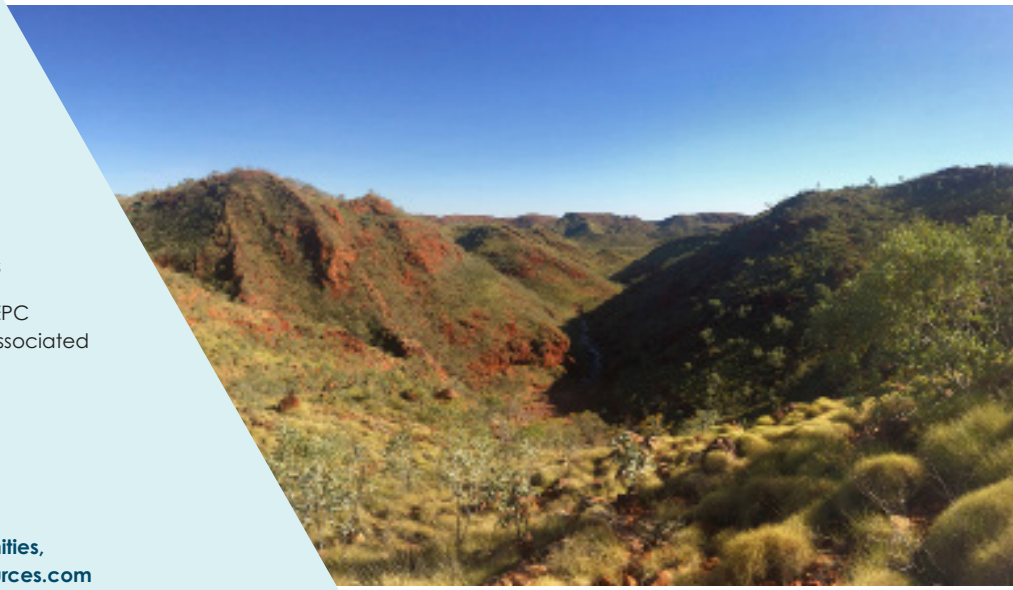


Sulphur Springs Copper-Zinc Project

- **Project status:** DFS completed 2018.
- **Location:** 140km south of Port Hedland, WA; Pilbara; access to Port Hedland port facilities via existing haul road and sealed highways.
- **Government approval status:** EPA approval May 2020; final Mining Licence Proposal currently underway.
- **Scheduled start of operation of mine:** 2022.
- **Current expected mine life:** 10+ years with potential for significant growth.
- **Mineral resource or reserve:** Minerals Resource 13.8Mt @ 1.5% Cu, 3.8% Zn, 0.2% Pb & 17g/t Ag; Mineral Reserves 8.5Mt @ 1.4% Cu, 3.1% Zn, 14.3g/t Ag for 120Kt Cu, 261Kt Zn & 2,640koz Ag.
- **Current or planned level of processing:** 1.25Mtpa throughput, via open pit and underground operations, producing 15ktpa payable copper and 35ktpa payable zinc.
- **Offtake agreements in place:** Toho Zinc 50% Zinc metal, Copper unencumbered.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The Company intends to tender for an EPC contract for the processing plant and associated infrastructure.



For further information about these opportunities, please visit our website: www.venturexresources.com

VRX Silica Limited

About the company: VRX is an ASX-listed company focused on supplying the global demand for silica sand.

ASX: VRX

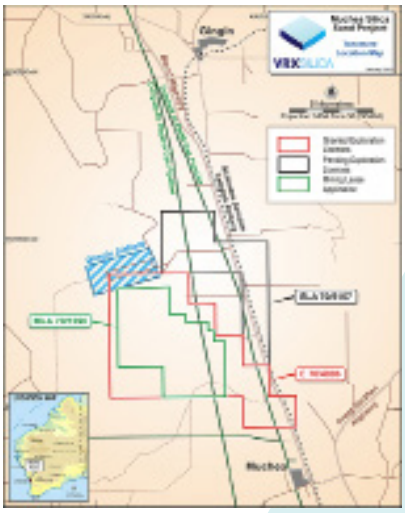
Contact details: Bruce Maluish, Managing Director

Phone: +61 (08) 9226 3780

Link to Website: www.vrxsilica.com.au

Arrowsmith North Project – Silica Sand

- **Project status:** Bankable Feasibility Study completed August – October 2019.
- **Location:** 270km north of Perth; 100km from Geraldton Port, WA; access to established infrastructure with rail lines running adjacent to project tenements; adjacent to Brand Highway.
- **Government approval status:** Environmental approvals expected Q3 CY2020; Native Title Agreement terms approved.
- **Scheduled start of operation of mine:** Subject to financing, 2021; construction planned to commence late 2020.
- **Current expected mine life:** 25 years, potential for 100+ years.
- **Mineral resource or reserve:** Total Mineral Resources 771Mt @ 98% SiO_2; Total Ore Reserves 223Mt @ 99.6% SiO_2 confirming the Mineral Resource is a world class deposit.
  - No more drilling is required before the Company commences mining operations.
- **Current or planned level of processing:** Simple processing with no chemicals and no dust; 2mtpa processing capacity on site.
  - Capex $28M.
- **Offtake agreements in place:** Binding offtake discussions ongoing for each project, and can be developed and operated separately.



Muchea Project – Silica Sand

- **Project status:** Bankable Feasibility Studies completed August – October 2019.
- **Location:** 50km north of Perth; 100km from Kwinana Bulk Terminal; access to established infrastructure with rail lines running adjacent to project tenements; adjacent to Brand Highway.
- **Government approval status:** Environmental approvals expected Q3 CY2020.
- **Scheduled start of operation of mine:** Subject to financing, December 2021; construction planned to commence mid 2021.
- **Current expected mine life:** 25 years, potential for 100+ years.
- **Mineral resource or reserve:** Total Mineral Resources 208Mt, 99.6% SiO_2; Total Ore Reserves 18.7Mt @ 99.9% SiO_2.
- **Current or planned level of processing:** Simple processing with no chemicals and no dust; 2mtpa processing capacity on site.
  - Capex $33M.
- **Offtake agreements in place:** Binding offtake discussions ongoing.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- VRX has a rapid pathway to production and is well placed to capitalise on robust market outlook and demand.

For further information about these opportunities, please visit our website: www.vrxsilica.com.au

Woomera Mining Limited

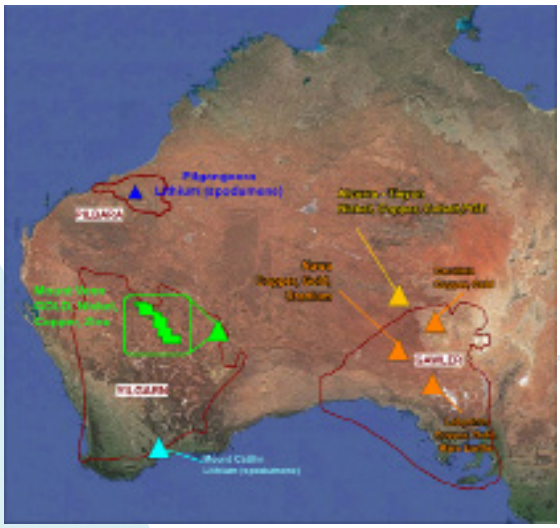
About the company: Woomera Mining is an ASX-listed exploration company based in Adelaide, with an extensive minerals tenement portfolio.

ASX: WML

Contact details: Donald Triggs, Exploration Director

Phone: +61 (08) 8232 6201

Link to Website: www.woomeramining.com.au



Lithium Projects

- **Project status:** Exploration.
- **Location:** Pilbara and south east Yilgarn Craton, WA; proximal to operating Lithium mines.
- **Government approval status:** 6 granted tenements.
- **Mineral resource or reserve:** Lake Cowan Indicated and Inferred Mineral Resource estimate of 12.8Mt at 1.18% Li_2O and 158ppm Ta_2O_5.
  - Also prospective for gold and potash.

Alcurra-Tieyon Project – Nickel, Copper, PGE

- **Project status:** Exploration.
- **Location:** Eastern Musgrave Province; intersects the Adelaide-Darwin Railway and Stuart Highway.
- **Government approval status:** 4 granted tenements; Native Title Agreement.
- **Mineral resource or reserve:** Recent proximal discoveries of 203Mt @ 0.41% Ni 0.42% Cu; 187Mt @ 1% Ni.
  - Numerous anomalies identified from geophysics and Government drilling.
  - Ground EM completed, and RC drilling returned anomalous Ni-Cu-Co.

Investment Opportunities

- Interested in financial investment by a third party, such as a joint venture? Yes
- Opportunity for further offtake? Yes
- Opportunities for further processing? Yes
- The Company has an extensive minerals tenement portfolio. In addition to critical minerals, their portfolio is prospective for Gold, Uranium, and Iron Ore.

For further information about these opportunities, please visit our website: www.woomeramining.com.au

Association of Mining
and Exploration Companies Inc

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