

CRITICAL MINERALS ASSOCIATION AUSTRALIA

FEBRUARY 2024

- 'Is anyone going to pay' for a green premium?
- \$40 million to support critical minerals projects in Australia
- Japan adds uranium to critical minerals list

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Newsletter



FEBRUARY 2023

MONTHLY NEWSLETTER

Welcome to our Critical Minerals Association Australia monthly newsletter & updates on the critical minerals space.

CMA AUSTRALIA NEWS

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- Looking Ahead
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AUSTRALIAN NEWS

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- Nickel to be placed on critical minerals list, giving WA miners access to \$4 billion fund
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AUSTRALIAN GOVERNMENT NEWS

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INTERNATIONAL DEVELOPMENTS

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BIG PICTURE THINKING

- Critical minerals still subject to old rules of boom and bust
- DOE grants \$17M to critical minerals from coal plan
- Emerging ESG issues in mining for 2024

CALENDAR OF EVENTS 2024

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Critical Minerals Association Australia



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www.cmaaustralia.org

CMA NEWS

Cadoux Resources

We wanted to acknowledge our Foundation Advisory Board member, Cadoux Resources on their recent name change (from FYI Resources). Managing Director, Roland Hill shared the following with us about their rebrand: Cadoux's corporate journey has been under the legacy banner of FYI Resources. Under this name, the Company established an excellent platform for a critical minerals development strategy that had its genesis in a wheatfield near a small regional town in Western Australia called Cadoux. Now that the Company is on the threshold of a new phase of growth and development, we believe a decisive rebranding is appropriate to better articulate our core values and strategic direction while signaling the commencement of our exciting critical minerals future. Drawing inspiration from the rich landscape and the origin of our high purity alumina project at the locality where the successful process technology was incubated, we have chosen the name "Cadoux" to take the Company forward into our next development phase.



Click here to learn more about **Cadoux Resources**



QUT student panel

On 29 Feb, CMAA MD, Namali Mackay, joined an industry panel at a lecture for QUT Chemical and Process Engineering undergraduate students to discuss the Critical Minerals industry's role in the energy transition. The CMAA remains committed to supporting the talent pipeline into the sector!

Looking Ahead



AmCham Australia

The CMAA will participate in a panel discussion at AmCham Australia's 'Embracing the Future of Energy' on March 19th in Brisbane. The discussion will explore whether Australia is on the right track or if there are alternative routes. Is the transition going too fast or too slow and what is the cost of that journey? [Register here](#) to attend.

March 19



Australia-Japan Energy Partnership Conference

The CMAA is delighted to be chairing the critical minerals session of this important dialogue between Japan and Australia on 11-12 April in Adelaide, hosted by the Australia Japan Business Co-operation Committee.

April 11-12



Critical minerals down under: Can Australia lead the world's critical minerals charge?

Olimpia Pilch, Co-Founder and Senior Advisor of the Critical Minerals Association Australia, considers the outlook for Australian critical minerals, navigation of turbulent markets, crucial policy changes, and international significance.

In 2023, Western governments turned to penning strategies, signing agreements and banding together through the Minerals Security Partnership (MSP) – of which Australia is a member – and funding projects across MSP and allied nations. Notably, Australia and the UK signed a statement of intent to support the critical minerals sector, as well as one with Germany; they courted the US and inked the Compact aimed at enhancing bilateral co-operation; shook hands with France over a bilateral agreement on critical minerals; celebrated a milestone in the critical minerals investment partnership with India; and Australia's Prime Minister Anthony Albanese visited China's President Xi Jinping in an effort to calm down the turbulent relationship at a time when tensions over critical minerals (especially gallium, germanium, graphite, and rare earths) had been escalating as US and China continue a tit-for-tat.

For Australia, like many Western nations, China is its biggest trading partner (accounting for 34% of exports), and if prompted, could cause chaos for Australia's resources sector and, as a result, the economy (with exports of predominantly iron ore, bauxite, gold, coal, and lithium – generating a record AU\$455bn in export revenue in the 2022-23 financial year). Maintaining traditional trade relations and the search for new partners has dominated Australia's strategy on the global stage as a 'dig-and-ship' nation that has not yet capitalised on sovereign value-added processing and refining, which remains in the tight grip of China.

Turbulent markets

While the Australian Government embarked on a quest for new friends, the industry faced an existential problem. The optimism of analysts projecting astronomical shortfalls between demand for critical minerals and green technologies and supply was not shared by equity markets in 2023.

Key issues remained: the technologies were not being built at the rate expected, China's economy was showing signs of a slow-down, and Chinese consumers began falling out of love with electric vehicles (Tesla's sales alone dropped 17.8% in November 2023 – some attributing this to the China's phase-out of US\$28 billion worth of incentives over 2009-2022)...

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QUT's Cameron Johnston attended the Sustainable Minerals' Institute's Mine Waste Symposium, and shared his overview/summary of the excellent discussion with us.

Australian mine waste symposium

by Cameron Johnston, Research Fellow | QUT

On February 6-7, UQ and the SMI hosted a symposium on mine waste in Australia in their Global change institute. The symposium was opened by Professor Veena Sahajwalla who gave an inspirational lecture on "A smart vision for a sustainable future". One of the main takeaways from this discussion was that we need to think of mine waste as more than just the tailings. Everything that enters a mine site will become waste, from the PPE, uniforms, tires on the machinery, all are produced from raw materials and we need to see them as such. Once we get past the traditional recycling methods of like for like conversions, we are able to break down the items into their individual, elemental components.

The first theme to kickstart the symposium was "Valorisation to Sequestration". One presentation that really stood out was the work conducted by Professor Longbin Huang on "From "earth" to "earth" principle and technology to tackle global tailings challenges". The work was focused on reducing global tailings by eco-engineering soil. What was really insightful was the ability to regenerate soil from red mud using native flora.

The second theme for the day was "Mining and Reprocessing Pathways". This theme had a heavy focus on re-investigating mine tailings as new feedstocks with numerous alternative approaches. Along with new technologies in mineral sorting to reduce the gauge minerals.

On the second day the opening speaker on the theme "Barriers" was Ashleigh Morris from Coreo, who gave an amazing presentation on the circular economy, with a focus on the mining industry. One key point was that we need to stop thinking of waste from the mining industry as "waste" but rather as "undervalued resources". We need to design waste out of industries and start seeing value where others would see waste.

The first theme for the day was "Barriers to success". Russell Dann gave an interesting presentation on the History of Mt Morgan mine in QLD. Where the mine currently contains acid mine drainage as a result of mismanagement over the years. This was rather insightful to see all of the various proposed works that had been planned over the years since mining ceased at the site in the 1990's.

The second session for the day was on "Future landscapes". While all the work being presented was extremely informative and interesting, Blake Stacey's insights on "Manufacturing building blocks using mining waste" was a highlight. He showcased his research on building bricks from various mine waste sources, from aluminosilicate waste to plate glass. All of which can be used as building blocks, with their company's (Real Material Solutions) proposal of portable plants to manufacture bricks at sites using the mine waste generated at that site.

The final session of the day was from early career researchers giving a brief elevator pitch on their research. This session was an excellent chance for these early career researchers to showcase their work to a large audience. It was rather inspiring to see the passion for their work and to know that there are so many researchers in Queensland and Australia focusing on dealing with mine waste in various ways.

Overall the symposium showcased incredible work that is being conducted here in Australia and worldwide on reuse of mine waste, characterization, policy and new opportunities available due to scientific advancements, with a heavy weight on the need for collaboration. We need to reconsider what we classify as "mine waste" or "waste", particularly with the depletion of natural resources, low grade feedstocks and waste materials are becoming a more viable alternative to traditional sources. The symposium demonstrated some of the important work being conducted in Australia and worldwide on treating and reusing mine waste, with a focus on utilising the waste sources for critical mineral mining but also with unique approaches with the overall aims to achieve circularity within the industry. It was refreshing to see talks (courtesy of Dr. Corinne Unger) on policy and ISO/IEC standards being included, showing how important the relationship between fundamental research and policy is.



AUSTRALIAN NEWS

Northern Territory mining industry worth billions

The Northern Territory Government has announced its mining and resource industry is worth \$6.2 billion, and will be key to reaching its \$40 billion economic target. The industry was bolstered from an expenditure of \$74.4 million in mineral exploration for the September quarter of 2023...

[Read More](#)

Australian Mining | 26 Feb 2024

Lava Blue eyes HPA production

Lava Blue is on-track to advancing its Predictive Research into Speciality Materials (PRiSM) centre into small-scale commercial production.

The high-purity materials manufacturer first started working with the Queensland University of Technology in 2018 to develop a process for the production of high-purity alumina (HPA) from sapphire-bearing kaolin clay deposits in north-west Queensland...

[Read More](#)

Australian Mining | 26 Feb 2024

'Is anyone going to pay' for a green premium?

Madeleine King says she is determined to push Europeans to value "green premium" Australian critical minerals above cheaper rivals.

Resources Minister Madeleine King will increasingly challenge her European counterparts to press the continent's behemoth carmakers into favouring Australian critical minerals over cheaper but ethically dubious sources of raw materials for EVs and green energy technology...

[Read More](#)

Australian Financial Review | 07 Feb 2024

WA welcomes International Graphite milestone

The Western Australian Government has celebrated International Graphite successfully commissioning its new graphite micronising plant in Collie. It was announced yesterday that the qualification-scale microniser will have a 200-tonne-per-annum (tpa) capacity, making it the largest qualification-scale microniser in Australia...

[Read More](#)

Australian Mining | 12 Feb 2024



Trade deal with UAE to spur critical minerals investment

A free trade deal with the United Arab Emirates will include the gulf state tapping its sovereign wealth fund to invest in the extraction and processing of Australian critical minerals, the Albanese government says...

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Australian Financial Review (Subscription Required) | 22 Feb 2024

Biden backs Australia's push on clean nickel standards

The Biden administration is backing the Albanese government's moves to recognise "clean" nickel, in efforts to help ailing Australian miners smashed by a supply glut from Chinese companies in Indonesia.

US ambassador Kevin Rudd has held talks with the White House, mining companies and US automakers about pushing global pricing agencies into distinguishing between nickel produced under high environmental and labour standards in Australia and "dirty nickel" that has flooded the market...

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Australian Financial Review (Subscription Required) | 21 Feb 2024

Nickel to be placed on critical minerals list, giving WA miners access to \$4 billion fund

Federal Resources Minister Madeline King says she will put nickel on the critical minerals list, allowing nickel miners to apply to access a \$4 billion fund.

The minister's announcement on Friday came after mining giant BHP revealed it was considering mothballing its Nickel West division, which could risk thousands of workers' jobs...

[Read More](#)

ABC News | 16 Feb 2024

Forget nickel, BHP's next big call is a test for Australia

Nickel accounted for just 2.7 per cent of BHP's revenue in the December half, but about 90 per cent of the questions chief executive Mike Henry took from journalists on Tuesday.

The interest is understandable given the crisis facing the nickel sector, where mines are being shut, jobs are being lost and the federal government is scrambling to try to come up with financial support...

[Read More](#)

Australian Financial Review (Subscription Required) | 20 Feb 2024

BHP nickel assets to incur impairment

BHP is set to declare an impairment against its nickel operations in its half-year results. Following Wyloo's decision to place the Cassini, Long and Durkin nickel mines under care and maintenance, BHP announced in late January that it would transition its Kambalda concentrator into care and maintenance in June 2024...

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Australian Mining | 16 Feb 2024





AUSTRALIAN GOVERNMENT NEWS

\$40 million to support critical minerals projects in Australia

The Australian Government is strengthening international critical minerals projects through a \$40 million grant program.

The grants will provide between \$2 million and \$20 million in co-funding for early to mid-stage critical minerals projects in Australia...

[**Read More**](#)

Australian Government - Department of Industry, Science and Resources | 14 Feb 2024

King pushes for payday for Australian critical minerals

Federal Resources Minister Madeleine King is firm European electric vehicle (EV) markets can rely on Australian critical minerals.

King told The Australian Financial Review (AFR) that she wants to see her European counterparts put their money where their mouth is and push for the continent's electric vehicle (EV) manufacturers to source their critical minerals from Australia as opposed to ethically dubious sources...

[**Read More**](#)

Australian Mining | 08 Feb 2024

O'Connor: "Great opportunities" for Australian workforce

Federal Minister for Skills and Training Brendan O'Connor has addressed the Australian Financial Review Workforce Summit with a focus on Australia's skills shortage.

The AFR Workforce Summit gathers business leaders, policymakers and industry insiders to discuss the shifts facing workforces and strategies to prepare for the future...

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Australian Mining | 13 Feb 2024

Queensland makes mineral processing leap

The Queensland Government has unveiled concept designs for its new pilot processing plant in Mackay. Dubbed FlexiLab, the plant will provide space for testing, innovation, research and development, and training for the resources sector. It will be supported by \$5.7 million in funding from the Queensland Government...

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Australian Mining | 01 Feb 2024

Federal Government focuses on minerals investments

The Federal Government has updated the Northern Australia Infrastructure Facility's (NAIF) investment mandate to help deliver more national critical minerals priorities...

[**Read More**](#)

Australian Mining | 09 Feb 2024

INTERNATIONAL DEVELOPMENTS

Critical minerals help Canada overtake China in battery supply chain

China has surprisingly been overtaken by Canada in BloombergNEF's (BNEF)'s 2024 ranking for prominence in the lithium-ion battery supply chain. The annual assessment, now in its fourth edition, evaluated...

[Read More](#)

Mining Magazine (Subscription Required) | 08 Feb 2024

Australia seeks clarity on when Chinese ties will bar miners from US cash

The Albanese government has asked the United States to clarify its plan to exclude companies with high levels of ownership or processing by China, North Korea, Iran or Russia from accessing critical minerals subsidies.

It fears Australian companies may find it "difficult" and "burdensome" to identify Chinese or Russian involvement in their supply chains...

[Read More](#)

Australian Financial Review (Subscription Required) | 18 Feb 2024

Japan adds uranium to critical minerals list

Japan's government has added uranium to its list of critical minerals, citing the threat to supply raised by Russia's dominance of the mineral.

The addition of uranium came alongside the designation of "advanced electronic components" to the list of "Specified Important Supplies" that aim to ensure a stable supply based on the Economic Security Promotion Act, reported Nikkei...

[Read More](#)

Mining Magazine | 01 Feb 2024

Canada to fast-track critical minerals projects

At the 2024 IEA Ministerial Meeting held in Paris, February 13-14, Canada's Energy Minister, Jonathan Wilkinson, told Reuters the country will expedite the permitting process for new critical metals mines by as much as a decade.

"(We're) looking at how do we optimise the regulatory and permanent processes so you can take what is a 12 to 15-year process and bring it down to maybe five," he said...

[Read More](#)

Mining Magazine | 14 Feb 2024

Chile mining needs 34K workers, faces 'female cannibalisation' and skill gaps

A surge in demand for skilled workers that reflect global trends, threatens to strain the Chilean mining industry, according to a recent study by the CCM-Eleva Alliance...

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Mining Magazine (Subscription Required) | 12 Feb 2024

Anglo American invests in Finnish battery chain

Anglo American and Finnish Minerals Group have signed a memorandum of understanding (MoU) to explore battery value chain opportunities in Finland.

Finnish Minerals Group is a holding and development company that manages the Finnish Government's mining industry shareholdings and supports the development of the Finnish battery value chain.

Read More

Australian Mining | 13 Feb 2024

The value chain curse in Zambia: why a copper powerhouse struggles to prosper

A recent policy report by the London School of Economics' International Growth Centre (IGC) has done an in-depth dive into Zambia's copper industry, identifying crucial pain points and opportunities.

Zambia is a significant player in copper mining in Africa, second only to the DRC. The country relies heavily on copper exports, which constitute more than US\$6 billion of its annual revenue.

With the demand for copper growing as the world seeks green tech, Zambia's copper industry represents a massive opportunity for its growth - especially as new copper reserves continue to be discovered...

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Mining Magazine (Subscription Required) | 22 Feb 2024

Albemarle, BMW team up on EVs

Albemarle has agreed to supply battery-grade lithium to BMW Group to help the automaker manufacture electric vehicles (EVs).

In addition to supplying the BMW Group with lithium hydroxide, the two companies will partner on technology for safer and more energy dense lithium-ion batteries...

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Australian Mining | 22 Feb 2024

BIG PICTURE THINKING . . .

Critical minerals still subject to old rules of boom and bust

The global energy and green transition means three formerly distinct industries – oil and gas, mining and renewables – now have their fates and much of their fortunes linked.

That makes for plenty of unprecedented, even perverse, results for companies as well as countries. These dramatic shifts – at fast pace – are particularly significant in a heavily resource-dependent economy like Australia's.

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That makes for plenty of unprecedented, even perverse, results for companies as well as countries. These dramatic shifts – at fast pace – are particularly significant in a heavily resource-dependent economy like Australia's...

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Australian Financial Review (Subscription Required) | 15 Feb 2024

DOE grants \$17M to critical minerals from coal plan

The US Department of Energy (DOE) has allocated US\$17 million in funding for three projects geared towards fortifying the nation's supply chain for critical minerals. These minerals play an important...

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Mining Magazine | 19 Feb 2024

Emerging ESG issues in mining for 2024

Requirements for disclosing climate and nature-related financial threats, opportunities and responsibilities for protecting human rights (including Indigenous people) are key emerging environmental, social and governance (ESG) trends for mining companies in 2024 and beyond...

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Australian Mining | 09 Feb 2024



Photo source: - Dmitriy Kandinskiy | Mining Magazine

Calendar of events 2024

Do you know of an upcoming event that's not listed?
Email: admin@cmaustralia.org

JANUARY 2024

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FEBRUARY 2024

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MARCH 2024

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APRIL 2024

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MAY 2024

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JUNE 2024

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JULY 2024

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AUGUST 2024

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SEPTEMBER 2024

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OCTOBER 2024

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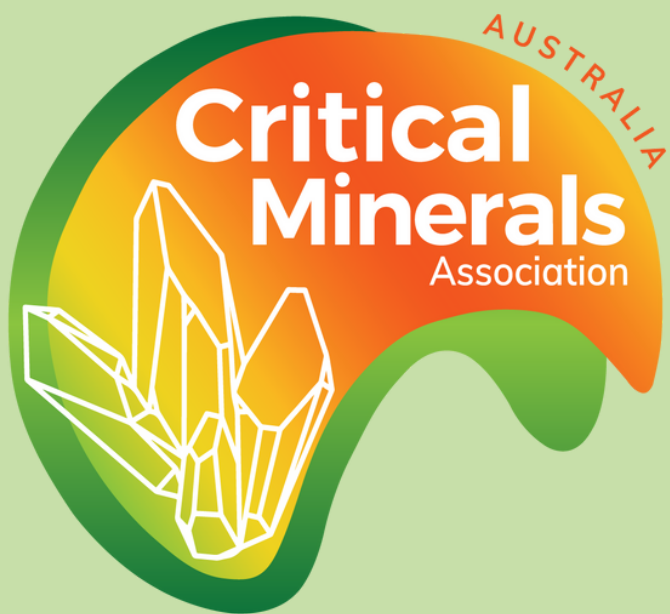
NOVEMBER 2024

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DECEMBER 2024

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	DATE(S)	EVENT	HOSTS/PARTNERS	LOCATION
FEB	5 FEB - 8 FEB	Mining Indaba	Investing in African Mining Indaba	Cape Town, SA
	6 FEB - 7 FEB	Mine Waste Symposium	UQ, SMI	Brisbane, AU
MAR	3 MAR - 6 MAR	PDAC	Prospectors & Developers Association of Canada	Toronto, CA
	26 MAR - 28 MAR	Future Facing Commodities Conference 2024	Resource Connect	SC
APR	11 APR - 12 APR	Australia-Japan Energy Partnership Conference	AJBCC	Adelaide, AU
	16 APR - 17 APR	2024 Paydirt Battery Minerals Conference	Paydirt	Perth, AU
JUN	17 JUN - 18 JUN	Future of Mining, Perth	Future of Mining	Perth, AU
AUG	5 AUG - 7 AUG	Diggers and Dealers	Diggers and Dealers Mining Forum	Kalgoorlie, AU
	26 AUG - 28 AUG	Aust CM Conference 2024	AusIMM	Brisbane, AU
OCT	7 OCT - 8 OCT	Battery & Supply Chains 2024	IQ Hub	Perth, AU
	29 OCT - 31 OCT	IMARC	International Mining and Resources Conference	Sydney, AU
DEC	3 DEC - 5 DEC	Resourcing Tomorrow 2024	Mines and Money	London, UK



This Newsletter has been compiled by QUT researchers:

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