

# CRITICAL MINERALS ASSOCIATION AUSTRALIA

## AUGUST 2023

- Australia wants EU investment in critical minerals, but first a free trade agreement
- US Department of Energy adds copper to critical minerals list
- Vanadium could be the next lithium for big battery tech

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Newsletter



AUGUST 2023

# MONTHLY NEWSLETTER

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

## CMA AUSTRALIA NEWS

- CMAA is one year old!
- 2022 - 2023 CMAA Overview
- First Foundation Advisory Board Meeting
- CMAA Members' ESG Working Group
- CMAA Upcoming Events

## AUSTRALIAN NEWS

- Growth to soar in Australia's critical minerals sector
- Australia wants EU investment in critical minerals, but first a free trade agreement
- WA powers on with vanadium
- Australia sees strong demand for critical minerals over next 40 years
- Uranium, vanadium pilot plant takes shape for Toro
- International Graphite gets plant installation approval
- Miners are voting with their wallets on lithium, as the downstream dream recedes
- Kingsland's Leliyn project emerging as major graphite discovery at the perfect time
- Dolphin tungsten mine re-opens
- EQ Resources looks farther afield
- Why did WA reverse the Aboriginal Heritage Act decision?
- Rio funds \$150 million critical minerals centre
- QUT partnership fuels renewables expansion
- Winning strategy: Collaboration leads the way in industry engagement

## INTERNATIONAL DEVELOPMENTS

- US Department of Energy adds copper to critical minerals list
- Canada, the USA and Australia unify critical minerals data
- Lithium Industry needs over \$116 billion to meet automaker and policy targets by 2030
- Japan inks critical mineral deals with five African countries to mitigate reliance on China
- Mongolia's rare earths diplomacy and its geopolitical implications
- Gallium and germanium: What China's new move in microchip war means for world
- China buys half of the lithium mines on the market

## BIG PICTURE THINKING

- New results enhance Critical Minerals scoping study
- In quest for battery metals, U.S. takes on cobalt's 'inconvenient truth'
- Vanadium could be the next lithium for big battery tech
- The mining world turns to Saudi cash for critical metal supply

## CALENDAR OF EVENTS 2023



Critical Minerals  
Association Australia



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[www.cmaaustralia.org](http://www.cmaaustralia.org)

# CMA AUSTRALIA NEWS

1  
YEAR

## CMA Australia is one year old!

Dear Members, Partners and Friends

A sincere thank you for your support and contribution over our first year of operation. We have been privileged to work closely with you over the past year and are excited to continue our efforts to promote and create a cohesive and forward-looking critical minerals industry in Australia!

Namali Mackay MD

## 2022-2023 CMA Australia OVERVIEW

### Events Attended

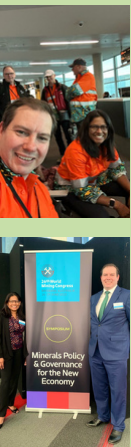
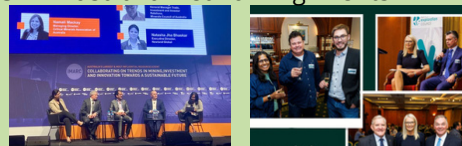
- Critical Minerals and Energy Investment Conference 2022
- IMARC 2022
- Paydirt Battery Minerals Conference 2023
- Project Blue Critical Minerals Forum 2023 Perth
- AIIA Brisbane 2023
- Mines and Money London 2022
- CMA UK Annual Conference London 2022
- World Mining Congress 2023
- Responsible Raw Materials 2023

### Submissions:

- Critical Minerals Strategy
- National Battery Consultation
- National Reconstruction Fund
- Revision of the Critical Minerals List

### Other CMAA Activities:

- CMA Australia Webinars: Bridging the Gap between Miners and OEMs and ESG
- Monthly Newsletters
- CMA Australia Networking Events







## First Foundation Advisory Board Meeting

CMA Australia held its first Foundation Advisory Board Meeting where we had an open and forward looking discussion on how the CMAA can propel the critical minerals industry forward in the coming year. See the link to see the full list of Advisory Board Members.



## CMA Australia Members' ESG Working Group

The CMA Australia Members' ESG Working Group held its first meeting this month where we laid the foundation for how the group might make a meaningful contribution to the ESG space on critical minerals going forward, the group shared and floated some excellent ideas which will be voted on at the next meeting, so stay tuned. For any members who aren't a part of the group and would still like to join – the door is open!

## CMA Australia Upcoming Events

The CMAA has been invited to partner with and participate in a number of events for the remainder of the year.

*Please contact us for member discounts.*

### Future of Mining

**FUTUREOFMINING | PERTH**

18-19 September 2023 | Pan Pacific Perth

**SUPPORTING ORGANISATION**

Critical Minerals Association Australia (CMA)

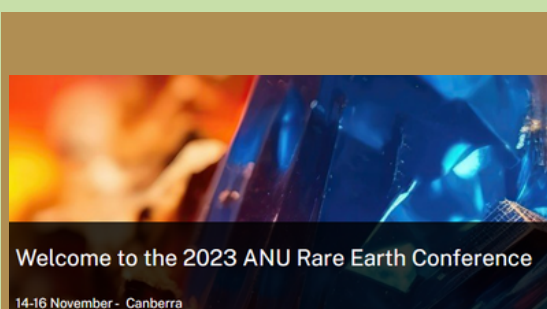
All mining companies are entitled to complimentary passes. Solution providers can access discounted rates

### IMARC

**10th INTERNATIONAL MINING AND RESOURCES CONFERENCE+EXPO**  
31 OCT - 2 NOV 2023

**CONFIRMED SPEAKER**  
**IMARC 2023**

**Namali Mackay**  
Managing Director  
Critical Minerals Association Australia



### ANU Rare Earths Conference

Critical Minerals Association - Australia is proud to be participating in AusIMM's upcoming Critical Minerals Conference 2023 in Perth, Australia on 21 - 23 November. The Technical conference program features 8 leading keynote speakers from across the critical minerals value chain.

[Learn more](#)



### AUSIMM Critical Minerals Conference



# AUSTRALIAN NEWS

## Growth to soar in Australia's critical minerals sector

Australia is set to benefit from exploding global demand for critical minerals amid concern over a decline in the nation's manufacturing.

The Intergenerational Report, to be released by Treasurer Jim Chalmers on Thursday, will show critical minerals and advanced manufacturing are opportunities that can grow Australia's economy over the next four decades...

[Read More](#)

Canberra Times | 24 Aug 2023

## Australia wants EU investment in critical minerals, but first a free trade agreement

Australia's Trade Minister Don Farrell has dangled easier access to the country's vast critical minerals sector as part of negotiations over a free trade agreement with the European Union ahead of possible further talks as soon as next week.

Negotiations between Australia and the 450-million-person bloc stalled in July, partly over the issue of greater market access for Australian farm products like beef...

[Read More](#)

Reuters | 24 Aug 2023

## WA powers on with vanadium

Western Australia is set to see a renewable energy boost with Horizon Power's purchase of a vanadium redox flow battery...

[Read More](#)

Australian Mining | 01 Aug 2023

## Australia sees strong demand for critical minerals over next 40 years

Australia's economy is well-placed to benefit from strong demand for critical minerals with the global appetite expected to rise by 350% by 2040, official forecasts showed on Wednesday, as many big economies rush to hit net zero emission targets by 2050.

Australia supplies around half of the world's lithium and has vast reserves of the nickel, zinc and bauxite required for the production of clean energy technology in electric vehicles and batteries. It has the potential for more undiscovered minerals, with around 80% of the land mass largely under-explored...

[Read More](#)

Mining.com | 23 Aug 2023

Photo source: Mining.com



## Uranium, vanadium pilot plant takes shape for Toro

On the back of a strong scoping study last year, Perth-based company Toro Energy has commissioned a pilot processing plant design and added vanadium to its Wiluna uranium project in Western Australia's Goldfields region. The study into a standalone uranium-vanadium mining and processing operation at its Lake Maitland deposit, about 105km south-east of Wiluna and within the company's broader Wiluna project, holds a pre-tax net present value of \$610 million at an eight per cent discount rate and a total capital cost of \$270 million...

[Read More](#)

The West Australian | 14 Aug 2023

## Miners are voting with their wallets on lithium, as the downstream dream recedes

If recent moves in the lithium market are anything to go by, the latest generation of Australian politicians might be about to join their predecessors in waving goodbye to hopes of a major industry processing Australian-mined minerals...

[Read More](#)

The Australian (*Subscription Required*) | 27 Aug 2023

## International Graphite gets plant installation approval

Emerging processed graphite supplier International Graphite has been buoyed by WA Government approval to proceed with its planned installation of a micronising qualification plant and related infrastructure at its downstream research facility in Collie...

[Read More](#)

The West Australian | 24 Aug 2023

## Kingsland's Leliyn project emerging as major graphite discovery at the perfect time

Kingsland Minerals is confident its Leliyn project in the Northern Territory is emerging as a major graphite discovery, just as nascent electric vehicle sector demand begins to ramp up...

[Read More](#)

The Australian (*Subscription Required*) | 16 Aug 2023

## Dolphin tungsten mine re-opens

The Dolphin tungsten mine has officially re-opened, after being closed for three decades. The mine is located near Grassy, a town on the south-east coast of King Island, an island in the Bass Strait between Victoria and Tasmania...

[Read More](#)

Australian Mining | 25 Aug 2023



Photo source: Australian Mining



## EQ Resources looks farther afield

One of Australia's leading tungsten producers has acquired European tungsten producer Salora S.L.U from global investment manager Oaktree.

EQ Resources (EQR), which owns the Mt Carbine tungsten mine near Cairns, will acquire 100 per cent interest in Salora in order to strengthen its presence in the global tungsten market...

***Read More***

Australian Mining | 14 Aug 2023

## Why did WA reverse the Aboriginal Heritage Act decision?

On August 8, the Western Australian Government announced that it would be restoring the Aboriginal Heritage Act 1972. But what is behind that decision?

It all began in May 2020, when Rio Tinto, searching for iron ore, blasted rock shelters at Juukan Gorge, despite traditional owners of the land warning the major miner of the site's significance. Rio Tinto received ministerial consent for the blast in 2013...

***Read More***

Australian Mining | 09 Aug 2023

## Rio funds \$150 million critical minerals centre

Rio Tinto will commit \$150 million in order to create the Centre for Future Materials in London.

Lead by Imperial College London, the centre aims to find ways to provide the critical minerals the world needs for the energy transition...

***Read More***

Australian Mining | 02 Aug 2023



## QUT partnership fuels renewables expansion

The winners of all seven categories in the AFR Higher Education Awards 2023, which recognise and celebrate the outstanding efforts of Australian universities during the past year, have now been announced...

Winner: Queensland University of Technology  
Lava Blue partnership producing high-purity alumina at scale

As global demand for renewable energy soars, the Queensland University of Technology in partnership with Queensland company Lava Blue is revolutionising the production of minerals critical to the lithium-ion battery supply chain, particularly high-purity alumina (HPA).

***Read More***

Australian Financial Review | 23 Aug 2023

## Winning strategy: Collaboration leads the way in industry engagement

The Lava Blue and QUT partnership is a perfect example of industry and academic collaboration.

It brings together Lava Blue's in-depth knowledge of the energy sector, materials science, emerging technology and hands-on experience in tech commercialisation with the expertise of QUT in developing commercial research in sustainable mining and processing practice...

***Read More***

Australian Financial Review | 23 Aug 2023



# INTERNATIONAL DEVELOPMENTS

## US Department of Energy adds copper to critical minerals list

The US Department of Energy (DOE) this week officially added copper to its critical materials list, marking the first time a US government agency has included copper on one of its official "critical" lists, following the examples of the European Union, Japan, India, Canada and China.

2023 Critical Materials Assessment, which evaluated materials for their criticality to global clean energy technology supply chains, focuses on key materials with high risk of supply disruption that are integral to clean energy technologies...

***Read More***

Mining.com | 03 Aug 2023

## Canada, the USA and Australia unify critical minerals data

The US Geological Survey (USGS) has released a compilation of national-scale geological, geophysical and mineral resource datasets from Australia, Canada and the US through a collaboration between the three countries' federal geological surveys...

***Read More***

Mining Journal (Subscription Required) | 22 Aug 2023

## Lithium Industry needs over \$116 billion to meet automaker and policy targets by 2030

The lithium industry needs to invest \$116 billion by 2030 if the world is to meet the ambitions targets set by governments and the largest automakers, according to a Benchmark analysis...

***Read More***

Benchmark Source | 04 Aug 2023

## Japan inks critical mineral deals with five African countries to mitigate reliance on China

Japan has secured deals with five African countries in a move aimed at mitigating Tokyo's reliance on China for critical minerals, which comes as strategic competition between Western allies and China for access to key raw materials used in high-tech industry heats up....

***Read More***

North Africa Post | 24 Aug 2023

Photo source: North Africa Post





## Mongolia's rare earths diplomacy and its geopolitical implications

Mongolia, rich in minerals especially copper and rare earths, but sandwiched between China and Russia, is making a pivotal shift toward a "third neighbor" – the United States. During a recent visit to Washington, Prime Minister Oyun-Erdene Luvsannamsrai aimed to fortify U.S. ties concerning critical minerals and particularly to enhance cooperation in rare earth mining. Additionally, Mongolia and the U.S. brokered an "Open Skies" aviation agreement, intended to bolster direct trade...

### ***Read More***

The Diplomat | 12 Aug 2023

## Gallium and germanium: What China's new move in microchip war means for world

China has started restricting exports of two materials key to the semiconductor industry, as the chip war with the US heats up.

Under the new controls, special licences are needed to export gallium and germanium from the world's second largest economy.

The materials are used to produce chips and have military applications...

### ***Read More***

BBC | 02 Aug 2023

## China buys half of the lithium mines on the market

Half of the world's biggest lithium mines put on the market since 2018 were bought by Chinese companies, underscoring the tightening grip of the world's second-largest economy over the global battery metal supply chain.

But a closer look suggests national interest arguments are posing a hurdle to future deals where the United States and its allies are concerned, pushing China deeper into emerging markets for new sources of the coveted raw material...

### ***Read More***

Australian Financial Review  
(Subscription Required) | 27 Aug 2023

Photo source: BBC



# BIG PICTURE THINKING . . .

## New results enhance Critical Minerals scoping study

Encouraging metallurgy results for vanadium pentoxide and high-purity alumina (HPA) concentrates – from mineralised seams not included in Critical Minerals' current mineral resource estimate – will turbo-boost outcomes for the company's upcoming scoping study into its flagship Lindfield project in north-west Queensland.

Management says its vanadium metallurgical results bode well for potential further improvement on optimisation of grade and recovery, with upper-seam material returning a beneficiated product of 1.5 percent vanadium pentoxide on the fourth test. It also achieved an 85 percent vanadium extraction on the first leach test...

***Read More***

The West Australian | 22 Aug 2023

Photo source: The West Australian



## In quest for battery metals, U.S. takes on cobalt's 'inconvenient truth'

The U.S. is turning to a much-criticized source as it races to secure supplies of battery metals to meet the growing demand for electric vehicles...

***Read More***

The Wall Street Journal (Subscription Required) | 24 Aug 2023

## Vanadium could be the next lithium for big battery tech

Big batteries across Australia could one day be powered by a little-known element called vanadium and manufactured onshore, an industry leader says.

The silvery-grey metal is the latest "pit to grid" sensation for electricity system operators, although most people have never heard of it. "Seven years ago lithium was in the same spot," Australian Vanadium CEO Graham Arvidson told AAP ahead of a briefing on the element at the Diggers and Dealers Mining Forum in Kalgoorlie, Western Australia, on Wednesday...

***Read More***

Renew Economy | 09 Aug 2023

## The mining world turns to Saudi cash for critical metal supply

A \$2.6 billion deal announced last week has set the stage for a potentially landmark shift in the metal and mining investment landscape: the arrival of Saudi Arabia as a pivotal player.

The agreement with Vale SA gives the kingdom a 10% slice in one of the world's crucial suppliers of nickel and copper — essential metals needed to decarbonize. It's also held other talks, including with Barrick Gold Corp. about investing in a big Pakistan copper mine, according to people familiar with the matter. Speaking privately, executives at top miners said the value of Thursday's deal made clear that the Saudis are ready to splash cash around...

***Read More***

Mining.com | 30 Jul 2023



# Calendar of events 2023

Do you know of an upcoming event that's not listed?  
Email: [namali@criticalmineral.org](mailto:namali@criticalmineral.org)

## JULY

S	M	T	W	T	F	S
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30	31					

## AUGUST

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## SEPTEMBER

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## OCTOBER

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## NOVEMBER

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## DECEMBER

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## JANUARY 2024

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## FEBRUARY 2024

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	DATE(S)	EVENT	HOSTS/PARTNERS	LOCATION
JUL	25 JUL	<a href="#">Critical Minerals as Tools of Economic Statecraft</a>	Australian Institute of International Affairs Queensland	Brisbane, AU
AUG	10 AUG	<a href="#">Critical Materials Forum Perth 2023</a>	Project Blue and Critical Minerals Association Australia	Perth, AU
	16 AUG	<a href="#">Critical Materials Forum Sydney 2023</a>	Project Blue and Critical Minerals Association Australia	Sydney, AU
SEP	07 SEP - 9 SEP	<a href="#">Meeting of the Mines</a>	Cloncurry Shire Council	Conclurry, AU
	18 SEP - 19 SEP	<a href="#">Future of Mining   Perth</a>	Aspermont Media	Perth, AU
	20 SEP - 21 SEP	<a href="#">Critical Minerals &amp; Energy Investment Conference and Exhibition</a>	Spire Events	Perth, AU
	28 SEP	<a href="#">IEA Critical Minerals and Clean Energy Summit</a>	International Energy Agency	Paris, FR
OCT	02 OCT - 05 OCT	<a href="#">ACG Mine Closure 2023</a>	CSIRO/University of Western Australia	Nevada, USA
	18 OCT - 20 OCT	<a href="#">19th International Rare Earths Conference</a>		San Antonio, USA
	31 OCT - 02 NOV	<a href="#">International Mining and Resources Conference (IMARC)</a>	AusIMM, Victoria State Gov, AustMine, Mines and Money	Sydney, AU
NOV	01 NOV - 02 NOV	<a href="#">Rare Earth Conference</a>	Australian National University (ANU)	Canberra, AU
	13 NOV - 17 NOV	<a href="#">EU Raw Materials Week</a>	European Commission	Brussels, UK
	14 NOV - 16 NOV	<a href="#">Benchmark Week 2023</a>		Los Angeles, USA
	21 NOV - 23 NOV	<a href="#">Critical Minerals Conference 2023</a>	AusIMM	Perth, AU
	27 NOV	CMA UK Critical Minerals Conference	CMA UK	London, UK
	28 NOV - 30 NOV	<a href="#">Mines and Money London</a>		London, UK



This Newsletter has been compiled by QUT researchers:

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**Elaiza Luker** | Research Associate  
**David Hunter** | Research Fellow  
**Nicholas Spadotto** | Research Associate



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