THE CRITICAL ISSUE #5

NOVEMBER 2023 NEWSLETTER



Critical Minerals Association United States of America

NOVEMBER 2023 ISSUE OVERVIEW

CMA USA Updates Green TEA Critical Minerals Barriers to the Energy Transition

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- Australia's A\$2 billion critical minerals boost
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- US, UK and partners working on 15 critical minerals projects
- US steps up efforts to access Africa's critical minerals

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- Anglo, Mitsubishi collaborate to create copper with demonstrably strong provenance credentials
- South African metals group awarded joint venture copper/cobalt slag project in Zambia
- South Korea produces first rare earth permanent magnet
- China's Zijin to develop DRC's Manono lithium project
- World Bank, Japan launch mineral supply chain scheme
- UK pledges R20m to identify bankable African critical minerals processing prospects
- Africa aims to use global demand for critical minerals as a basis for development

Events Calendar

Would you like to feature in a future edition? Submit an expression of interest to admin@criticalusa.org







SUBSCRIBE

ASSOCIATION UPDATES

It has been a busy month for CMA USA and our international colleagues. In early October, our team had the pleasure of meeting the US Under Secretary for Economic Growth, Energy and the Environment, Jose Fernandez in London, UK at an evening reception hosted by the Critical Minerals International Alliance, ahead of LME Week and the Minerals Security Partnership meeting.

We are also delighted to announce the launch of a joint initiative between CMA USA and CMIA - Green TEA - a platform for honest discussion focusing on actions.

Our very first session features Jose Fernandez who dives into critical minerals and the need for diversification.



Wilfredo A. Reyes
Founder & Chief Executive Officer
Critical Minerals Association USA



UPCOMING EVENTS

We are excited to attend Resourcing Tomorrow in London from 28th November! Our senior team, Wilfredo, Jeff and Olimpia are looking forward to seeing you there.

The **Critical Minerals International Alliance** is hosting a webinar focusing on the the Future of Deep Sea Mining on 22nd November at 11.30 ET.
Register here.

CMA USA attends CMIA's Evening Reception with Jose Fernandez, UK's Minister Nusrat Ghani and industry leaders.













Green Energy **Transition Empowering Action** Initiative



We are excited to announce our latest initiative, **Green TEA**, focusing on empowering action through meaningful and honest discussions about the energy transition, supply chains and policy.

Interested in featuring in future sessions or sponsoring? Reach out to admin@criticalmineral.org Our very first session was recorded in London, UK with the US Under Secretary for Economic Growth, Energy and the Environment, **Jose Fernandez**.

The discussion focused on Jose's role within the Minerals Security Partnership and how America can drive supply chain diversification.

EMPOWERING DISCUSSIONS THAT LEAD TO MEANINGFUL **ACTIONS**



Session 1 is now live!

POWERED BY





CRITICAL MINERALS BARRIERS TO THE ENERGY TRANSITION



PLANNING & PERMITTING

- Long lead times delay projects, increasing risk, and costs, deterring investors
 - Duplication and lack of clarity consume resources

POLICY MISALIGNMENT

- Support and positive messaging around the energy transition
- Blocking and delaying responsible domestic extraction leading to sustained reliance on adversaries



NOT IN MY BACK YARD (NIMBY) MINDSET

- Opposition to domestic projects due to concerns over impacts on environment and communities
 - Preference for offshoring and passing on responsibility to other nations

LIMITED EDUCATION



- Disconnect between where things come from and how they are made and sourced
- · Lack of geoscience education in schools

AGING WORKFORCE



- Lack of interest in geology and mining-related courses leading to a declining workforce

LIMITED VISIBILITY

· Misconceptions of mining held by the



EXPERTISE &



MARKET MONOPOLISATION



GEOPOLITICAL TENSIONS

- Increasing tensions between China and the U.S. over trade barriers, espionage, and IP exploitation
 - Strategic monopolisation of midstream processing and refining



NATIONALISATION

- and export bans on unprocessed ore in producer nations
- Uncertainty over investments and access to critical minerals sourced from other nations



COMPETITIVENESS

- Western companies in the upstream and midstream are unable to compete on price with China
- Unfair practices favouring state-backed conglomerates

There is no energy transition without mining, processing, refining, and recycling.

Outsourcing these activities to jurisdictions with poor governance and community and environmental safeguards directly contradicts the aim of the transition - to build, a better cleaner, greener future.

Critical minerals form the foundation of the modern world, yet there are many challenges facing critical minerals supply chains.

In a global race to secure critical minerals, the U.S. can take advantage of its own resources and become less reliant on distorted markets, ensuring that U.S. manufacturers have fair access to critical minerals at fair prices.



POLITICAL & GEOPOLITICAL HIGHLIGHTS

China imposes graphite export restrictions

China's latest round of export restrictions, following on from gallium and germanium earlier in the year, will require export permits for three grades of graphite (natural and synthetic) on grounds of "national security" from 1 December.

"It is a common international practice to impose export controls on specific graphite items"

PRC Ministry of Commerce

China is the primary source and producer of natural graphite, producing an estimated 65 per cent of total world supplies in 2022, according to the US Geological Survey.

Top reads

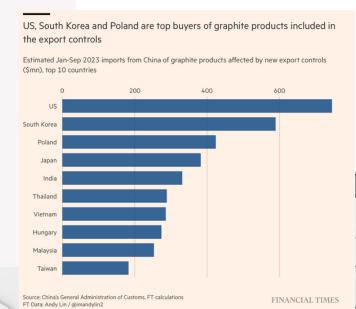
Reuters | Global EV battery supply chain puzzles over China graphite curbs

Read on here...

South China Morning Post | China ups export curbs on key EV battery component, safeguarding graphite amid US tensions

Read on here...

Financial Times | China imposes export curbs on graphite





Australia's A\$2 billion critical minerals boost

The Albanese Government has announced a \$2 billion expansion in critical minerals financing, which will solidify Australia's position as a world leading provider, help the transition to net zero, boost the economy and support more jobs and opportunities for Australians.

[...] This significant commitment will double the capacity of the Critical Minerals Facility to finance Australian critical minerals mining and processing projects.

This expansion of the Critical Minerals Facility takes the Government's value-adding investments in Australian resources to \$6 billion. Investing in critical minerals financing will bolster the sector in Australia, resulting in technology, skills, jobs and economic benefits for Australians.

Read on here...

US, Australia unveil strenghtened partnership focusing on diversifying critical minerals supply chains

Highlights

Promoting Responsible, Sustainable and Stable Supply of Critical Minerals:

On October 23, the United States and Australia held the first meeting of the U.S.-Australia Critical Minerals Taskforce and on October 24 convened the government-to-business, Critical Minerals Industry Roundtable.

Leveraging the growing economic connections between both countries, the Taskforce identified areas in which the U.S. and Australian governments can take joint action to increase investment critical minerals mining and processing projects in our respective countries and enhance market transparency in this sector. The Taskforce also agreed to support innovative research and development into efficient technologies and practices related to sustainable mining, enhanced mineral recovery from unconventional sources, and new processing methods.

Investing in High-Quality Mines and Diversifying Supply Chains: Australia and the United States are taking steps to build diversified new supply chains to help deliver the critical minerals the world needs for the clean transition.

Read on here



US, UK and partners working on 15 critical minerals projects

The Minerals Security Partnership (MSP) formed last year by 14 governments aims to ensure adequate supplies of minerals such as lithium and rare earths to meet zero-carbon goals.

"We're now looking at 15 projects on five continents, ranging from extraction to processing," Jose Fernandez, US State Department under secretary for economic growth, energy and the environment, told a briefing in London. "It's our intent is to get some deals done in the next few months."

The MSP aims to facilitate deals among private companies and help with financing, including by trade banks such as the US government's Export-Import Bank (EXIM), Fernandez said.

Fernandez said he was confident that the United States would seal an agreement to allow critical minerals mined or processed in Britain to qualify for US clean vehicle tax breaks.

Read on here...

US steps up efforts to access Africa's critical minerals

The US is stepping up efforts to boost ties with African nations rich in critical minerals to help secure supply, according to a government official.

Last month, the US government approved \$150-million of funding for a graphite-mining project in Mozambique.

The US International Development Finance Corp. financing was granted to Twigg Exploration and Mining Lda, which has a project in northeastern Mozambique, to mine and process the material that's used in electric-vehicle batteries and nuclear reactors. Twigg is a unit of Melbourne, Australia-based Syrah Resources, the biggest graphite producer outside China.

The loan is aimed at increasing production and growing the global supply chain for graphite, the Minerals SecurityPartnership said in a statement October 10. The MSP is a State Department initiative that aims to help funnel foreign investment and western expertise into the mining industries of developing nations that help supply key raw materials such as lithium, manganese and cobalt.

INDUSTRY HIGHLIGHTS

Perpetua awarded up to \$15.5m in US Department of Defense funding

Perpetua Resources announced that it had been awarded more funding from the Department of Defence (DoD) to demonstrate a fully domestic antimony trisulphide supply chain.

Perpetua Resources Idaho was awarded an ordnance technology initiative agreement (OTIA) of up to \$15.5-million under the prototype other transaction authority of the DoD.

Read on here...

Jindalee Resources will raise A\$5.5million to advance its McDermitt lithium project, in Oregon

Funds raised will go towards exploration and metallurgical test work at the McDermitt project, which is the largest lithium deposit in the US by contained lithium, with 21.5-million tonnes of lithium carbonate equivalent in mineral resource.

Read on here...

Volt signs potential supply deal with the US Department of Defense

Graphite producer Volt Resources has inked a letter of intent (LoI) with US firm M2i Global Inc to supply up to 20 000 t/y of graphite to the US Department of Defence (DoD).

Under the LoI, M2i will attempt to secure a graphite procurement contract with DoD for up to 20 000 t/y of graphite for three years. Volt would deliver graphite of between 94% and 99.5% purity from its subsidiary Zavalievsky Graphite.

If feasible, Volt will extend long-term supply of graphite from Bunyu Tanzania Phase 2 production for M2i customers.





New resource bolsters Arizona Sonoran's Cactus copper project

Cactus has 446 million measured and indicated tonnes grading 0.58% copper for 5.2 billion lb. of the metal, according to an updated resource. That compares with 151.8 million measured and indicated tonnes at 0.53% copper in a resource issued in April last year.

Read on here...

Asteroid mining startup is ready to launch the first-ever commercial deep space mission

California-based Astroforge is running a lean operation with a high-risk, high-reward mission to mine space for precious metals.

Early next year, a SpaceX rocket will be launching a drill to the surface of the Moon as part of its Artemis program. And hitching a ride on that rocket will be a smaller spacecraft, with a much more distant destination: an asteroid that will take about nine months to reach.

Read on here...

Supplemental EIS poses fresh challenge for Ambler road project

In north-western Alaska, the Ambler road project, a vital highway aimed at unlocking access to valuable mineral deposits, faces a fresh setback. The Bureau of Land Management (BLM) has issued a draft supplemental environmental impact statement (EIS) that underscores potential environmental risks associated with the project, proposed the Alaska Industrial Development and Export Authority (AIDEA).

Meanwhile, US Senator Lisa Murkowski comments that the approval of the project should be prioritised with reasonable mitigation measures, given the strategic importance of the minerals that the road will provide access to.

"This road is guaranteed under federal law and will facilitate access to crucial supplies of copper, cobalt, gallium, germanium, and other minerals that our nation currently imports from abroad. This is particularly important as China cuts off exports of gallium and germanium, cobalt is produced through modern-day slavery in the DRC, and some of our best analysts are forecasting shortages of copper within a decade," she said.

INTERNATIONAL HIGHLIGHTS

Congo eyes 30% of germanium's global output by tapping new plant

A newly built plant in Democratic Republic of Congo aims to produce 30% of the world's germanium, according to its owner, potentially easing China's dominance of the metal used in electronics and solar cells.

Read on here...

Anglo, Mitsubishi collaborate to create copper with demonstrably strong provenance credentials

Anglo American has signed a memorandum of understanding with Mitsubishi Materials Corporation to collaborate on the creation of a copper product offering that responds to growing demand for metals with demonstrably strong provenance credentials.

The collaboration will focus on driving traceability across copper's fragmented value chain, with the aim of identifying and measuring sustainability indicators that industry stakeholders and end customers deem most relevant and valuable.

Read on here...

South African metals group awarded joint venture copper/cobalt slag project in Zambia

Jubilee Metals Group will develop the Mufulira slag project through JV collaboration with Mopani Copper Mines of Zambia.

Earmarked for processing are 13-million tonnes of historical slag, estimated to contain 0.7% copper and 0.27% cobalt, in addition to the current slag arisings.

[...] Jubilee, which has developed metal extraction solutions from waste and overlooked materials, has already secured 300-million tonnes of copper and cobalt tailings in Zambia for upgrading and refining.





permanent magnet

South Korean firm Seonglim Advanced Industrial has completed its 1,000 t/yr Hyeonpung neodymium-based rare earth permanent magnet plant, which the trade, industry and energy ministry (Motie) described as the country's first such production.

Read on here...

China's Zijin to develop DRC's Manono lithium project

Chinese multinational mining firm Zijin Mining is to explore and develop the northeast part of the Manono lithium [cesium, tantalum pegmatite deposit] project in the Democratic Republic of Congo (DRC).

Read on here...

World Bank, Japan launch mineral supply chain scheme

The partnership aims to support lowand middle-income countries in mineral processing, refining as well as component manufacturing and assembling of "clean energy products" to diversify the global supply chain, according to Japan's ministry of finance.

Read on here...

UK pledges R20m to identify bankable African critical minerals processing prospects

The UK will make R20-million in funding available to help identify the most bankable opportunities for African countries to attract investment into the processing of critical minerals.

Boston Consulting Group will be carrying out the study, which should be completed by year-end.

Read on here...

Africa aims to use global demand for critical minerals as a basis for development

African countries were determined to use the opportunity provided by the world's need for the metals and minerals essential for the clean energy systems of the future to develop their economies through local beneficiation and the creation of value-adding industries.

TOO CRITICAL TO MISS EVENTS 2023

NOVEMBER

Benchmark Week 2023 | Enabling the Most Critical Decisions of the Energy Transition | Los Angeles, USA | 14-16 Nov 2023

• Register here

Critical Minerals Conference |

AusIMMM | Perth, Australia | 21-23 Nov

• Register here

Mines & Money | Resourcing Tomorrow | London, UK | 28-30 Nov 2023

Register here

Don't miss CMIA's upcoming webinar!

Diving into the future of deep sea mining | CMIA | Virtual | 12.30 EDT / 9.30 PDT | 22 Nov

Register here





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