THE CRITICAL ISSUE #6

DECEMBER 2023 NEWSLETTER



Critical Minerals Association USA

DECEMBER 2023 ISSUE OVERVIEW

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Events Calendar

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





ASSOCIATION UPDATES

Throughout November, the CMA USA has been focusing on collaboration both at home and overseas. The CMA USA team attended the Resourcing Tomorrow conference in London, UK to promote U.S. interests.

As the year comes to a close, we are incredibly grateful for all of the support from industry, academia and governments in helping to grow the Critical Minerals Association USA. In less than a year, the CMA USA has grown into an influential voice informing both industry and policymakers alike. We would like to wish you a peaceful and relaxing Christmas, and a very Happy New Year.

Seasons greetings,

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



Forging Stronger Transatlantic Relationships and Sharing Best Practice

Critical Minerals Association USA Cofounder and Senior Advisor, Olimpia Pilch, joined a roundtable with U.S. Department of Energy Julie Cerqueira and environmental, social and governance experts - Minviro, Circulor, Digbee, ERM, Levin Sources, Wood Mackenzie, TechMet - alongside the Critical Minerals International Alliance and Jeff Townsend.

The roundtable took place at The Geological Society of London, UK.

The discussion focused on creating responsible critical minerals supply chains, the challenges, bottlenecks, and how governments and industry can collaborate proactively to minimise administrative burden and maximise positive results.



POLITICAL & GEOPOLITICAL HIGHLIGHTS

USGS provides \$2 million to states to identify critical mineral potential in mine waste

The US Geological Survey (USGS) has invested more than \$2 million from President Biden's Bipartisan Infrastructure Law in cooperative agreements with 14 states to study the potential for critical mineral resources in mine waste and measure the potential for critical minerals that might exist in that mine waste.

Mining produces a lot of waste. In addition to topsoil, waste rock, and other materials that are removed to get to the ore, which is the rock that contains a potentially profitable concentration of a particular mineral commodity, the valuable minerals are generally a very small percentage of the ore that is mined. Concentrating the valuable minerals during initial processing leaves behind what are called tailings, which are frequently discarded and stored at the mine site while the valuable minerals are taken away for further processing.

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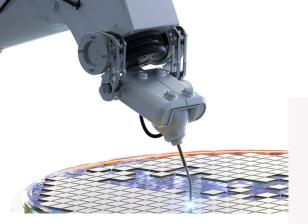
The US and EU plan \$1 billion-plus Africa rail link for key minerals

The US is racing to help develop a new rail line linking a key source of critical minerals in central Africa with a port on the continent's Atlantic coast, aiming to establish a trade route for materials used to produce electric vehicles.

The so-called Lobito Corridor project which involves laying hundreds of miles of track from Zambia's Copperbelt province to an existing line in neighboring Angola — also serves as a flagship of the Biden administration's efforts to take on China.

Metals including copper and cobalt that are crucial to EVs and the batteries that power them will be among the main cargo.





China receives US equipment to make advanced chips despite new rulesreport

Chinese companies are buying up U.S. chipmaking equipment to make advanced semiconductors, despite a raft of new export curbs aimed at thwarting advances in the country's semiconductor industry, a report said.

The 741 page annual report, released by the U.S.-China Economic and Security Review Commission, takes aim at the Biden administration's Oct. 2022 export curbs, which seek to bar Chinese chipmakers from getting U.S. chipmaking tools if they would be used to manufacture advanced chips at the 14 nanometer node or below.

With the Commerce Department using the 14 nanometer restriction limit, "importers are often able to purchase the equipment if they claim it is being used on an older production line, and with limited capacity for end-use inspections, it is difficult to verify the equipment is not being used to produce more advanced chips," the report stated.



Report to US Congress raises concerns over China's rare earth control

The US remains highly reliant on Chinese production of critical minerals, both through direct sourcing from China and indirectly due to the predominance of Chinese materials in global supply chains, according to a recent report to Congress.

According to the US-China Economic and Security Review Commission report, China could potentially disrupt the global rare earth oxide supply by cutting off 40–50%, impacting suppliers of advanced components used in US defense systems.

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Biden's restrictions on critical minerals harm America

[...] Unfortunately, the Biden administration has held up several critical mineral projects this year alone. In January, the Environmental Protection Agency blocked development of a proposed billiondollar copper- and gold-rich Pebble Mine in Bristol Bay, Alaska, ostensibly to protect the fishing rights of 68 Native Americans.

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INDUSTRY HIGHLIGHTS

U.S. Department of Defence enters agreement to expand domestic graphite supply chainent of Defence enters agreement to expand domestic graphite supply chain

The Department of Defense announced a \$3.2 million agreement with South Star Battery Metals Corporation (South Star) to support domestic production of Coated, Spheronized, Purified Graphite (CSPG) at their BamaStar Graphite Project (BGP) in Coosa County, Alabama.

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ExxonMobil drilling first lithium well in Arkansas, aims to be a leading supplier for electric vehicles by 2030

Work has begun for the company's first phase of North America lithium production in southwest Arkansas, an area known to hold significant lithium deposits. The product offer will be branded as Mobil™ Lithium, building on the rich history of deep technical partnership between Mobil and the automotive industry. U.S. Department of Energy analysis confirms California's Salton Sea Region to be a rich domestic lithium resource

Conducted by DOE's Lawrence Berkeley National Laboratory, the analysis found that with expected technology advances, the Salton Sea region's total resources could produce more than 3,400 kilotons of lithium, enough to support over 375 million batteries for electric vehicles (EV)—more than the total number of vehicles currently on U.S. roads.

[..] The Salton Sea Known Geothermal Resource Area (KGRA) has about 400 megawatts (MW) of geothermal electricity-generation capacity installed and is estimated to have the potential for up to 2,950 MW [..].

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Nevada Bureau of Land Management greenlights Gibellini vanadium project

The Nevada Bureau of Land Management (BLM) has approved the Gibellini vanadium project, completing the federal permitting process for what could be the first primary vanadium mine in the US.

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Electric vehicle batteries may have a new source material – used tires

The company, called T-Phite is putting used car tires through a process called pyrolysis, which entails putting the tires under extreme heat so that they break down into smaller molecules.

T-Phite CEO Bernardita Diaz says those molecules become three primary byproducts – pyrolytic oil, steel and carbon black, a substance that contains graphite material essential to providing an electric pathway within batteries for energy to surge.

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Aurubis to invest about \$700 million to build smelter in US

Europe's biggest copper smelter Aurubis will invest around \$700 million to build a smelter for complex recycling materials in North America, the company said on Wednesday.

The commissioning of the secondary smelter in Augusta, Georgia, is planned for the second half of 2024.

An expansion of the plant is already under way, which will allow the site to process 180,000 tons of complex recycling materials, such as printed circuit boards and insulated copper cable, from 2026, Aurubis said.

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US gives \$50 million boost to critical minerals investor TechMet

A US government agency has made an additional \$50 million equity investment in critical minerals firm TechMet Ltd.

The backing from the US International Development Finance Corporation brings its total investment to \$105 million, and implies a valuation for TechMet of more than \$1 billion, the Dublin-based company said Friday in a statement.

INTERNATIONAL HIGHLIGHTS

European Bank for Reconstruction and Development approves new mining sector strategy

[...] The new strategy recognises the important role the mining industry is set to play in developing greener economies that are aligned with the Paris Agreement. The responsible exploration and mining of metals and minerals, such as copper, lithium, cobalt and nickel, will be critical to achieving this goal.

The strategy has the following priorities:

- To selectively support the exploration and production of metals and minerals required for the green energy transition and digitalisation.
- To support the decarbonisation of mining activities by promoting cleaner energy sources, innovation, digitalisation, genderequal skills development and resource efficiency.
- To support mining companies' environmental, social and governance (ESG) and inclusion practices.

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Investors with \$11 trillion back plan to reform mining industry

Investors overseeing a combined \$11 trillion, including California State Teachers' Retirement System and Legal & General Investment Management, are among the first to back the Global Investor Commission on Mining 2030.

The investor group, which was convened this year with the help of the United Nations, said its goal is to "define a vision for a socially and environmentally responsible mining sector" and introduce a set of global standards for the industry covering issues from child labor to biodiversity loss.

[..] Other investors to support the initiative include the UK's Aviva Plc, Dutch pension fund APG-IM and Canada's Caisse de Depot et Placement du Quebec

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RESE



Canada's critical minerals infrastructure fund opens

Energy and Natural Resources Minister Jonathan Wilkinson opened the first call for proposals (CFP) under the Critical Minerals Infrastructure Fund (CMIF).

The CFP will be the first of several under the CMIF, with up to C\$300million in contribution funding available under two streams: the preconstruction and project development stream and the infrastructure deployment stream.

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EU agrees mineral supply targets to cut reliance on China

Negotiators for EU governments and lawmakers reached a deal on targets for domestic supply of critical minerals such as lithium and nickel to reduce its reliance on third countries, principally China.

[...] The proposal said the European Union should extract 10%, recycle 15% and process 40% of its annual needs by 2030 for 16 "strategic raw materials".

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India launches first part of critical minerals auction worth \$5.4 bln

India launched the first part of its critical minerals auction worth an estimated 450 billion rupees (\$5.40 billion), the country's mines minister said.

Mines minister Pralhad Joshi said the auctions would be held in eight states, including Bihar, Chhattisgarh, Odisha, Tamil Nadu, Jammu & Kashmir and would include minerals such as lithium, potash, vanadium, graphite, and rare earth elements.

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Vietnam's rare earth sector on the rise

[...] Vietnam increased rare earth mining tenfold with its output hitting 4,300 tons last year, compared to 400 tons in 2021 according to the U.S. Geological Survey. Vietnam said in July it plans to process 2 million tons of rare earth ores by 2030 and produce 60,000 tons of rare earth oxides annually starting in 2030.

CONFERENCE CALENDAR 2024

JANUARY



9 - 11 Jan Riyadh, Saudi Arabia

FEBRUARY



5 - 8 Feb Cape Town, South Africa





SEPTEMBER

FT LIVE

26 - 27 Sept London, UK

OCTOBER



Sydney, Australia 29 - 31 Oct

DECEMBER



3 - 5 Dec London, UK

MARCH



3 - 6 Mar Toronto, Canada

JUNE



11 - 12 Jun Washington DC, USA



23 - 26 Jun Maryland, USA



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