



CRITICAL MINERALS ASSOCIATION

OCTOBER 2022

HIGHLIGHTS CMA/ GSBF MINERAL RIGHTS EVENT &
RSC/ CMA CIRCULAR ECONOMY EVENT

CMA & GSBF ANNUAL CRITICAL MINERALS
CONFERENCE - 28 NOV

WELCOMING MAYER BROWN TO THE ASSOCIATION



October 2022

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

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- Horizonte Raises \$80m, Ups Araguaia Capex Estimate
- Britishvolt Battery Plant: Wansbeck MP Says he Has Confidence in Plant
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Kirsty, Jeff & Olimpia

This month's newsletter has been put together by [Lily Dickson](#), PhD student at the University of Leeds & [Becca Kirk](#), PhD student at Camborne School of Mines, University of Exeter.

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Got a suggestion? Want to feature in next month's newsletter? Contact kirsty@criticalmineral.org

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[Critical Minerals Association](#)



CMA & GSBF Annual Critical Minerals Conference

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The Critical Minerals Association and The Geological Society 2nd Business Forum Annual Critical Minerals Conference will take place on 28 November 2022.

The conference at The Geological Society of London will consider topics around the delivery of the UK's critical minerals strategy, and conclude with a drinks reception.

Virtual attendees will be able to tune into a live stream from The Geological Society.

To indicate interest in attending in person, contact events@criticalmineral.org

[REGISTER HERE](#)



The Geological Society
Business Forum

**CMA & GSBF 2ND ANNUAL
CRITICAL MINERALS CONFERENCE
Delivering the UK's
Critical Minerals Ambitions**

MONDAY, 28 NOV 2022



Critical Minerals Strategy Breakfast Chat Summary

In September 2022, Critical Minerals Association (CMA) founder Jeff Townsend held a breakfast discussion with Dennis Rowland, Guy Winter and Lucy Crane. Over the course of the event, the panel comprehensively deconstructed the UK Government's inaugural critical minerals strategy. Proceedings began with a brief overview of the panel's thoughts and opinions.

The consensus was that whilst the strategy's release was welcome, details regarding its delivery were opaque. The discussion proceeded into the context of the strategy's release, an analysis of its ACE component (Accelerate, Collaborate and Enhance), culminating in a Q&A session with audience members. Overall, the event was a productive and enlightening one which the UK Government will hopefully take note of.

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CMA & GSBF Mineral Rights Event Highlights

On 6th October 2022, The Critical Minerals Association and Geological Society Business Forum held a closed-door workshop on the GB Mineral Rights System. The event aimed to highlight the challenges and complexities in the GB mineral rights system.

The event included case studies and presentations from Sarn Helen Gold, Aberdeen Minerals and Camborne School of Mines on the use of the land registry, acquiring mineral rights in GB and comparison systems outside of GB.

A successful drinks reception followed this, with presentations from Prof Frances Wall, Dr Charlie Moon, Ian Coles, Mike Armitage, James McFarlane and Roderick Smith.

An extra special thank you to our sponsors **Aberdeen Minerals, Tungsten West** and **Cornwall Resources** for making the event happen!

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Credit: Camilo Queipo

RSC Circular Economy Event Highlights

On the 21st October 2022, the Critical Minerals Association and Royal Society of Chemistry teamed up to host an open webinar and panel, followed by a closed-door workshop on the Circular Economy of Critical Minerals.

The webinar featured informative talks on all aspects of circular economy. The expert speakers and panel were: Jacqui Murray (Britishloop), Cameron Dowling (ARCH), Andy Rees (Welsh Government), Robert Lee (Met4Tech) and Eva Marquis (Met4Tech).

Following this, closed door workshops on each topic compiled expert knowledge on the circular economy, and created links between academia, government and industry. The event was a huge success, with over 70 online attendees and more than 30 workshop attendees!

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Findings from the Innovate UK Global Expert Mission on Critical Materials

In May 2022, as part of Innovate UK's Global Expert Missions Programme commissioned by the Department for Business, Energy and Industrial Strategy (BEIS) with funding from the Global Research and Innovation Programme (GRIP), a team of UK experts led by Innovate UK KTN visited Canada and the US to improve our understanding of the research and innovation landscape in the field of critical materials.

Critical materials and minerals are fundamental to many of today's electronic components; from mobile phones which typically use indium-tin oxide (ITO) films for touch screen to batteries comprised of lithium, cobalt and graphite. The global energy transition towards a low-carbon future is accelerating the development of technologies and products which increasingly require critical materials such as solar panels, wind turbines and batteries for electric vehicles. This will consequently lead to supply chain disruption and vulnerabilities.

A recent study by the Faraday Institution estimates the UK will need to source an additional 70,000 tonnes of lithium by 2035, an increase of 84% from the predicted 2025 levels to keep pace with the UK's Net-Zero ambitions.

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The EU Wants to Mine Its Way Out of Reliance on China for Raw Materials

Europe wants to start mining its own backyard in an attempt to end reliance on China for raw materials crucial for green technologies like electric car batteries.

But for the Europeans who live near mineral-rich grounds, opening new mines — with their potential for local environmental damage — is out of the question.

"It's been my family's home area since time immemorial," said Carina Gustafsson, a campaigner who lives near a major reserve of rare earth minerals in southern Sweden that's a potential mining site. "I really feel like it's personal — this mining is threatening in so many ways."

The pushback from campaigners like Gustafsson around the bloc is causing a headache for EU leaders.

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DOE Launches Program to Advance Domestic Supply Chain for Critical Minerals

The U.S. Department of Energy (DOE) today issued a Notice of Intent (NOI) to fund a \$32 million Bipartisan Infrastructure Law program supporting front-end engineering design (FEED) studies to produce rare earth elements (REEs) and other critical minerals and materials (CMMs) from domestic coal-based resources. Rare earth elements and other critical minerals are key to manufacturing clean energy technologies right here in America—such as solar panels, wind turbines, electric vehicles, and hydrogen fuel cells—that will help the nation reach the Biden-Harris Administration’s goal of net-zero emissions by 2050. Converting coal production waste into components of clean energy technology can create good-paying jobs in communities that have historically produced fossil energy fuels and power.

“The President’s Bipartisan Infrastructure Law is delivering an important opportunity for American leadership to produce critical minerals and materials—the very components needed to develop clean energy technologies,” said U.S. Secretary of Energy Jennifer M. Granholm. “By producing rare earth elements and critical minerals here at home, we’ll create good-paying jobs while enhancing national security and securing the supply chains we need to reach net-zero carbon emissions by 2050.”

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Australia-Japan Strengthen Critical Minerals Cooperation

Australia and Japan have signed a new partnership on critical minerals to help build secure supply chains for critical minerals, which are crucial elements of clean energy technologies needed to help both countries meet net-zero commitments.

The new Critical Minerals Partnership was signed by Minister for Resources and Minister for Northern Australia Madeleine King and Japan's Vice Minister for International Affairs, Ministry of Economy, Trade and Industry Hirohide Hirai during the Australian visit of Japan's Prime Minister Kishida.

The partnership will establish a framework for building secure critical minerals supply chains between Australia and Japan, and promote opportunities for information sharing and collaboration, including research, investment and commercial arrangements between Japan and Australian projects.

The partnership will support the further development of Australia's critical minerals sector, to ensure Japan has the supply of critical minerals required for its advanced manufacturing sector.

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The UK's Post-Brexit Dream of Independence

Domestic supply chain resilience has been brought into sharp focus in recent years. At a time of renewed economic nationalism and pandemic-related disruption, securing timely and cost-effective raw materials and components has become one of the most serious challenges facing companies and governments alike. In many cases, local industries and jobs are beholden to external market shocks and geopolitical events.

Nowhere is this more true than in microchips and minerals, which are critical to the technologies needed in the transition away from fossil fuels. In response to China's dominance across many of these supply chains, Western governments have outlined wide-ranging policies and support to reduce their reliance and protect national strategic assets.

The UK is among those aiming to boost resilience of domestic supply chains. In July 2022, the UK government published its long-awaited critical mineral strategy and has extended support to several strategic projects. While businesses, trade groups and observers welcome these efforts, they say much more needs to be done.

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Welcoming Mayer Brown to the Association

We are delighted to introduce our latest member, Mayer Brown to the Critical Minerals Association!

Mayer Brown is a renowned law firm active in the natural resources sector with a strong focus on environmental, social and, governance.

Welcome to the association!

**FIND OUT MORE ABOUT
MAYER BROWN HERE**



MAYER | BROWN



Mines and Money Interview

Jeff for Resourcing Tomorrow

In anticipation of Europe's largest and most in-depth mining conference dedicated to sustainability, Andrew Thake from Mines and Money interviews founder of the Critical Minerals Association (CMA), Jeff Townsend. They discuss why the CMA was founded and how it hopes to make an impact.

CMA is dedicated to "building up the political will to tackle" the issue of critical minerals by "educating the wider political network of decision-makers" of their importance, Jeff explains. Every year the reach of their advocacy grows, from meeting politicians in Whitehall to building international partnerships with the CMA in Australia and C2M2A in Canada.

Jeff will be on a panel at Resourcing Tomorrow, speaking about the development of the UK's critical minerals sector and what outcomes we can expect in light of the government's first critical minerals strategy. This year's conference features over 120 talks and presentations on the energy transition, ESG, decarbonisation, and the circular economy.

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TOMORROW**

29 November - 1 December 2022 | London

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The Scramble for Rare Earths

The Scramble for Rare Earths is a new BBC Radio 4 Podcasts on rare earth elements. Misha Glenny explores the unnoticed global competition to control production of the rare earth metals which are crucial to all our futures, especially for the energy transition.

Episodes include:

- The Magnificent Seventeen
- The Hidden Paradox
- The Super Magnets
- The EU's Dependency of China
- The Great New Game

[LISTEN HERE](#)





Rio Invests C\$737M in Canadian Critical Minerals

Diversified miner Rio Tinto has announced plans to invest up to C\$737-million over the next eight years to decarbonise its Rio Tinto Fer et Titane (RTFT) operations in Sorel-Tracy, Québec, and to position the business as a centre of excellence for critical minerals processing.

The partnership with the government of Canada will support technological innovations that represent a first step towards reducing greenhouse gas (GHG) emissions from RTFT's titanium dioxide, steel and metal powders business by up to 70%, the miner said.

It will also progress initiatives to diversify RTFT's product portfolio, reinforcing Rio's leadership as a North American supplier of critical minerals for key growth sectors such as electric vehicles, 3D printing and aerospace.

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RioTinto



Canada's Rare Earth Processing Hub Prepares to Ramp Up

Two projects in western Canada have broken through decades of industry deadlock to develop a hub for processing rare earths for the growing electric vehicle and offshore wind sector.

A first for the region, after a lengthy hiatus, the projects are at the vanguard of a wave of new capacity. Mid-stream processing projects are advancing rapidly in the US as industry braces to develop the supply to capture the technological shift to electric vehicles and renewable energy.

The hub, located on an industrial complex in Saskatoon, Saskatchewan, contains two plants — one owned and developed by Australian rare earth miner Vital Metals and the other funded by the Saskatchewan government and owned and operated by the Saskatchewan Research Council (SRC). The two projects are very different from one another, but both share an unwavering commitment to environmental and social governance.

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IOM3: Key Role of Materials, Minerals and Mining in Driving Net Zero

The Institute of Materials, Minerals & Mining (IOM3) has partnered with CWP to produce a digital series exploring expertise and advances throughout the materials cycle to address the climate crisis, achieve net zero targets and accelerate the circular economy.

The series features comment from industry experts including Dr Colin Church FIMMM CEnv, CEO of IOM3, Neil Glover FIMMM CEng, President of IOM3, and Rosie Dodd, Manager, Product Footprinting and Circular Economy Lead at the Carbon Trust.

The panel discussion also featured Critical Minerals Association Founder, Jeff Townsend, and his insights on the importance of critical minerals, ESG compliance, and the impact of geopolitics on supply chains: "We cannot build a better tomorrow if we accept irresponsibility today."

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Dalradian Reduces Carbon Footprint by 67%

Dalradian, the west Tyrone based mine exploration and development company, has reduced its total carbon footprint by 67% from its 2019 baseline. This achievement and other proactive measures have helped the company secure Carbon Neutral Plus status for the third year running in 2021.

Between 2020 and 2021 the company reduced its carbon output by 17% due to its carbon management plan. Above and beyond that, further reductions were achieved by switching to renewable electricity. Dalradian also offsets its emissions by supporting an internationally certified project and secured 'Plus' status by planting trees in Northern Ireland.

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DALRADIAN
GOLD



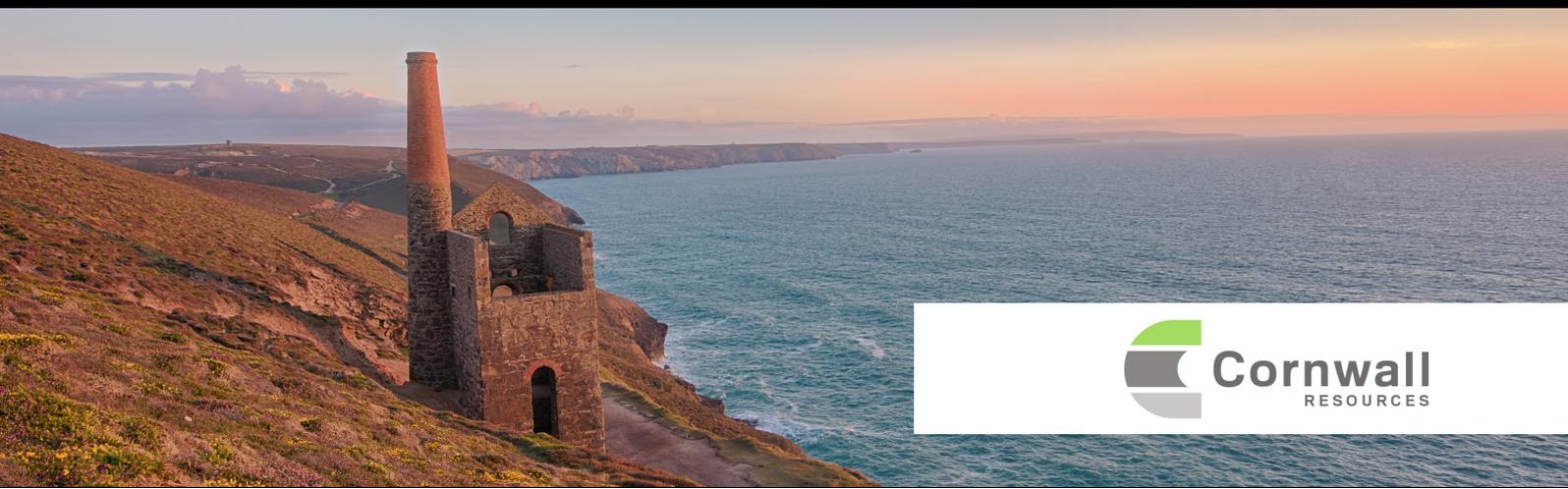
Cornish Mining Conference: Mining for the Future

The Cornish Mining Conference took place in Falmouth last week (Sep 29) at a time when demand for secure supplies of metals and minerals in an increasingly volatile world presents a huge opportunity for Cornwall and Devon's re-emergence as a global mining powerhouse, says Dennis Rowland from Cornwall Resources.

With almost every aspect of our lives ever-more dependent on technology, our society has become reliant on a relatively small number of critical minerals on which the technology relies.

From lithium for batteries; tungsten for a host of industrial uses and applications from mobile phones to jet engines; tin for electronics; and rare earth elements for electric cars and wind turbines; our world is increasingly cut, shaped, powered by and made using critical minerals. According to the Government, in 2040 the world will need four times as many critical minerals for clean energy technologies as it does today.

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Cornish Metals Archive

Cross Sections

Cornish Metals have released some beautiful long-sections and mine plans from the 1800's found in the process of cataloging for Crofty.

MORE ON CORNISH METALS HERE



Cornish Lithium Puts Float on Hold Amid Tough Conditions

The mining start-up hoping to produce lithium for electric vehicle batteries in Cornwall has delayed plans for an initial public offering, blaming tough market conditions.

Cornish Lithium had been planning a stock market flotation this year but Jeremy Wrathall, chief executive, said it was now “unlikely to happen” until next year at the earliest.

“The problem is the markets are all over the place, very difficult to read,” he said. “In times of great uncertainty, when we don’t need to IPO, we decided that we wouldn’t for the time being.”

Lithium is a critical ingredient in electric vehicle batteries and is forecast to be in increasing demand as the world moves away from petrol and diesel cars in pursuit of climate goals.

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Tungsten West Capital Expenditure Estimate Lower Than Expected

Tungsten West PLC on Tuesday said its capital expenditure estimate for its Hemerdon mine is "significantly below" the projected forecast when the project was paused in April 2022.

The owner and operator of Hemerdon tungsten and tin mine in Plymouth said it had received its final capital expenditure budget from its engineering, procurement and construction management contractor, Fairport Engineering Ltd. From these, the company estimated a remaining capital expenditure budget of GBP31.5 million.

Tungsten West will immediately start placing orders for the remaining long lead time items in time for delivery during the first half of 2023 and anticipates the commissioning of the plant upgrades in the second quarter of 2023.

The company welcomed the UK government's intention to simplify and streamline the current planning process required for onshore renewable energy installation. Tungsten West is "actively pursuing" options for wind and solar power generation at the Hemerdon site and nearby.

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Climate Change: Unpicking the Complexity

Risk professionals are the ideal people within the organisation to make sense of the complexities surrounding climate change. As our risk landscape becomes increasingly volatile and unpredictable, their role in managing the risks and opportunities that surround sustainability has never been more pressing.

Over the last three years we have lived through multiple, often interconnected shocks. These include a global pandemic, supply chain and energy crisis, multiple examples of extreme weather and natural catastrophes, a changing geopolitical world order and impending recession.

Together, they are fundamentally changing business attitudes to the risks we are facing and our commitments to protect people and planet.

The 'perfect storm of high-impact risks' is throwing many businesses into a permanent state of crisis, according to research by the Chartered Institute of Internal Auditors (IIA).

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Pensana Paves the Way for Supply Deal for 25 % of Rare Earths Refined at Saltend

Inward-investing rare earths specialist Pensana has announced an initial agreement for the sale of 25 per cent of its proposed production at Saltend.

The company has revealed a memorandum of understanding has been signed for a quarter of the anticipated critical raw materials for magnet metals, set to be refined on the Humber Bank. Who the agreement is with was not divulged in the statement, released to the City. The entity has been described as a "non-Chinese major industry player".

Pensana is investing more than £150 million in a complex chemical separation plant on the freeport site east of Hull. The minerals, to be sourced from its Angolan mine operations and third parties, are required in the burgeoning production of electric vehicles and wind turbines, with 125 direct jobs to be created.

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Giyani Metals Announces New Executive Chair; Jonathan Henry

Giyani Metals, developer of the K.Hill battery-grade manganese project in Botswana, announces that Jonathan Henry has been appointed Executive Chair.

Mr. Henry, previously Non-Executive Chair, will manage a leadership transition period as the Company moves into the next phase of development and towards production. As part of this transition Robin Birchall has resigned as Chief Executive Officer and a director of Giyani with immediate effect. With the move of the Chair of the Board to an executive position, the Board has appointed Stephanie Hart, an existing Non-Executive Director, to the position of Lead Independent Director.

Jonathan Henry, Executive Chair of the Company, commented:

“Giyani is entering a very exciting chapter in the development of K.Hill, as we start the transition from a developer to a producer. The upcoming delivery of our feasibility study and construction of the demonstration plant, to be commissioned in 2023, are key milestones in this transition.

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British Lithium Wins £2m in Government Funding

The Advanced Propulsion Centre has announced British Lithium as a winner in its Scale Up Readiness Validation (SuRV) competition.

The Cornwall-based company has won £2m in government funding as part of the Automotive Transformation Fund (ATF), a programme that supports large scale industrialisation.

British Lithium has been researching and developing the extraction of battery-grade lithium carbonate from the mica in Cornish granite over more than five years. Part-funded by Innovate UK, a pilot plant has been built near St Austell and brand-new sustainable technology is being used to successfully process the ore. Three patents are pending.

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Source: British Lithium

Horizonte Raises \$80m, Ups Araguaia Capex Estimate

Nickel developer Horizonte Minerals has scaled up its fundraising following significant institutional demand in the bookbuild from existing and new investors.

The company on Tuesday announced a placing of £61.7-million (about \$70-million), but a day later upsized that to £70.5-million (about \$80-million) and scaled back allocations.

The participation by Luxembourg-based La Mancha, which has a near 20% shareholding in Horizonte, has been reduced from about £23.8-million (\$27-million) to £22-million (about \$25-million).

A total of 77 945 627 new ordinary shares in the capital of the company have been conditionally placed with, or subscribed for by, new and existing investors at the placing price. The incremental fundraise proceeds will be used for contingencies and general working capital purposes.

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Britishvolt Battery Plant: Wansbeck MP Says he Has Confidence in Plant

Labour Wansbeck MP Ian Lavery said the area desperately needed jobs amid reports the Britishvolt £3.8bn factory planned for Cambois had stalled.

Mr Lavery said the plant, on the old Blyth Power Station site, would "transform lives".

Britishvolt said its business plan had been "refocused".

The firm said it had had to delay the opening of the plant and "sharpen" its plans in response to the "global, negative economic situation".

The firm had originally planned to start production at the factory in 2023, but that was first delayed to 2024 and The Guardian reported last week that had been pushed back to 2025.

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Unlocking Value in Historical Mine Tailings: Mineral Resource Assessments

The total quantity of waste rock from processed mineral ore deposited in mine tailings storage facilities (TSF) around the World has been estimated at over 200 billion tonnes (Global Tailings Review and Visual Capitalist). With improvements in processing technologies, higher mineral recoveries and increased commodity prices, some of this material has the potential to be reprocessed to recover various metals, many of which have seen significant increases in demand since the material was first mined (e.g. cobalt). In addition to the economic benefits of recovering metals, reprocessing tailings material has the potential for environmental and social benefits.

For example through improvements in acid mine drainage (AMD) management (e.g. Barrick's Golden Sunlight Mine, Montana); community safety through reduction of material stored in TSF; lower greenhouse gas emissions through reduced comminution requirements and previously considered waste material being turned into saleable products (e.g. paint production from ochre in UK coal tips).

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AMTE Power Partners With UK Battery Industrialisation Centre

AMTE Power has signed a contract to manufacture its ultra high power cells at the UK Battery Industrialisation Centre (UKBIC) in Coventry to support the next phase of its commercialisation plans.

Under the agreement, the business can request UKBIC to manufacture up to 60,000 of its ultra high power cells each year over an initial term of 24 months.

Ramping up production of the cells at UKBIC is due to start from January 2023, generating initial revenues for the company and enabling the business to meet demand from within the automotive sector principally for high performance electric vehicles and fuel cell electric vehicles.

AMTE Power has existing non-binding memoranda of understanding in place with automotive partners Cosworth, Viritech and MAHLE Powertrain, in addition to development agreements with Sprint Power, Eltrium and BMW.

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Critical Minerals News

The following October news articles from Argus Media, Mining Weekly, Mining Magazine, and others, provide an overview of critical mineral mining for:

- Cobalt
- Copper
- Graphite
- Lithium
- Manganese
- Nickel
- Rare Earth Elements
- Tin
- Titanium
- Vanadium

The Critical Minerals Association United Kingdom takes no credit for any articles and makes no endorsement of any of the content.

- Europe

- Greenland: Bluejay Mining [11.10.22]

- Bluejay Mining announces completion of 2022 Disko-Nuussuaq field program.
 - <https://www.globalminingreview.com/mining/11102022/bluejay-mining-announces-completion-of-2022-disko-nuussuaq-field-program/>

- UK: London Metal Exchange [24.10.22]

- LME adds artisanal mining to green register, sets 2040 net-zero goal.
 - <https://www.miningweekly.com/article/lme-adds-artisanal-mining-to-green-register-sets-2040-net-zero-goal-2022-10-24/searchString:Cobalt>

- North America

- US: USGS & NASA [6.10.22]

- USGS and NASA to map southwestern United States for critical mineral potential.
 - <https://www.northernminer.com/news/usgs-nasa-to-map-southwestern-united-states-for-critical-mineral-potential/1003847132/>

- Canada: Sherritt [14.10.22]

- Sherritt to recoup \$362M of debt from Cuban partners through 'cobalt swap'.
 - <https://www.northernminer.com/news/sherritt-to-recoup-362m-of-debt-from-cuban-partners-through-cobalt-swap/1003847457/>

Copper

- Global

- The Copper Mark [24.10.22]

- Responsible copper mining framework extended to copper, zinc and molybdenum.
 - <https://www.mining.com/responsible-copper-mining-framework-extended-to-nickel-zinc-and-molybdenum/>

- Africa

- Zambia: Deep-South [24.10.22]

- Deep-South to start soil sampling at three Zambian copperbelt prospects.
 - https://www.miningweekly.com/article/deep-south-to-start-soil-sampling-at-three-zambian-copper-belt-prospects-2022-10-19/rep_id:3650

- DRC: Eastinco [24.10.22]

- Eastinco to rebrand, lists on LSE main market.
 - <https://www.miningweekly.com/article/eastinco-to-rebrand-lists-on-lse-main-market-2022-10-24/searchString:Copper>

- Asia

- China [24.10.22]

- China's billion-dollar cash-for-copper trade grinds to a halt.
 - <https://www.mining.com/web/chinas-billion-dollar-cash-for-copper-trade-grinds-to-a-halt/>

- China [24.10.22]

- Copper price down as China's yuan falls to lowest since 2008.
 - <https://www.mining.com/copper-price-down-as-chinas-yuan-falls-to-lowest-since-2008/>

Copper

- Europe

- Russia [12.10.22]

- Russian copper builds up in LME warehouses.
 - <https://www.reuters.com/markets/commodities/russian-copper-builds-up-lme-warehouses-sources-2022-10-12/>

- Germany: Aurubis [21.10.22]

- Aurubis tests ammonia for low-carbon copper product output.
 - <https://www.mining.com/web/aurubis-tests-ammonia-for-low-carbon-copper-product-output/>

- North America

- USA: Jetti Resources [24.10.22]

- Copper techfirm Jetti raises funds at value of \$2.5 billion.
 - <https://www.mining.com/web/jetti-raises-funds-at-2-5-billion-value/>

Graphite

- North America

- Canada: Cullian Metals [20.10.22]

- Cullian Metals options a graphite property in Quebec.
 - <https://www.juniorminingnetwork.com/junior-miner-news/press-releases/3110-cse/cmt/129771-cullinan-metals-options-a-graphite-property-in-quebec.html>

- Canada: Northern Graphite [21.10.22]

- Northern Graphite bolsters senior management team.
 - <https://www.miningweekly.com/article/northern-graphite-bolsters-senior-management-team-2022-10-21/searchString:Graphite>

- Canada: Nouveau Monde [21.10.22]

- Nouveau Monde partners with Panasonic; unveils \$50m private placement.
 - https://www.miningweekly.com/article/nouveau-monde-partners-with-panasonic-unveils-50m-private-placement-2022-10-21/rep_id:3650

- Oceania

- Australia: Syrah Resources [20.10.22]

- Syrah secures more US funding, flags ongoing issues in Moz.
 - <https://www.miningweekly.com/article/syrah-secures-more-us-funding-flags-ongoing-issues-in-moz-2022-10-20/searchString:Graphite>

Lithium

- Europe

- UK: Tees Valley Lithium [12.10.22]

- Tees Valley Lithium and BP to trial green hydrogen.
 - <https://www.londonstockexchange.com/news-article/ALK/tvl-and-bp-trial-green-hydrogen/15668626>

- UK [21.10.22]

- Record funding uplift for UK battery research and development.
 - <https://www.gov.uk/government/news/record-funding-uplift-for-uk-battery-research-and-development>

- France: Imerys [24.10.22]

- French lithium mine project could be leading supplier in electric car strategy.
 - <https://www.miningweekly.com/article/french-lithium-mine-project-could-be-leading-supplier-in-electric-car-strategy-2022-10-24/searchString:Lithium>

Lithium

North America

- Canada: First Lithium Minerals [20.10.22]
 - First Lithium Minerals commences geophysical surveys at OCA Lithium Project.
 - <https://www.juniorminingnetwork.com/junior-miner-news/press-releases/3182-cse/flm/129782-first-lithium-minerals-commences-geophysical-surveys.html>

- Canada: Green Technology Metals & Ardiden [24.10.22]
 - Ardiden sells remaining stake in Canadium lithium JV.
 - <https://www.miningweekly.com/article/ardiden-sells-remaining-stake-in-canadian-lithium-jv-2022-10-24/searchString:Lithium>

- USA [24.10.22]
 - Biden's EV minerals cash fruitless without permitting reform.
 - <https://www.miningweekly.com/article/bidens-ev-minerals-cash-fruitless-without-permitting-reform-2022-10-24/searchString:Copper>

- USA: Cypress Developments [24.10.22]
 - Cypress tests world's first battery-grade lithium from hydrochloride process at Nevada plant.
 - <https://www.northernminer.com/news/cypress-tests-worlds-first-battery-grade-lithium-from-hydrochloride-process-at-nevada-plant/1003847782/>

Manganese

- North America

- USA [3.10.22]

- EV demand sparks revival of US manganese mining after decades.
 - <https://www.bloomberg.com/news/articles/2022-10-03/ev-demand-sparks-revival-of-us-manganese-mining-after-decades>

- USA: South32 [5.10.22]

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- Canada: Manganese X Energy [25.10.22]

- Manganese X Energy kicks off pilot plant for EV battery project.
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Nickel

- Global

- International Nickel Study Group [19.10.22]
 - Nickel to enter surplus by end of the year says INSG.
 - <https://www.miningweekly.com/login.php?url=/article/nickel-to-enter-surplus-by-year-end-insg-2022-10-19/searchString:Nickel>

- Europe

- Russia: Norilsk Nickel [24.10.22]
 - Rusal accuses Potanin of breaching Nornickel shareholder pact.
 - https://www.miningweekly.com/article/rusal-accuses-potanin-of-breaching-nornickel-shareholder-pact-2022-10-24/rep_id:3650
- UK: London Metal Exchange [26.10.22]
 - LME chief executive makes statement after March 'nickel trading chaos'.
 - <https://www.ft.com/content/60280b52-d8c7-4a01-a9d1-15b7152ec310>

- South America

- Brazil: Vale [21.10.22]
 - Vale CEO says iron ore miner will spin-off copper, nickel unit.
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Rare Earth Elements

- Europe

- Finland: Capella Minerals [6.10.22]

- Capella Minerals expands battery metal focus with acquisition of lithium and REE project portfolio in Finland.
 - <https://www.juniorminingnetwork.com/junior-miner-news/press-releases/1302-tsx-venture/cmil/129103-capella-expands-battery-metal-focus-with-acquisition-of-lithium-and-ree-project-portfolio-in-finland.html>

- UK: University of Cambridge [25.10.22]

- New approach to 'cosmic magnet' manufacturing could reduce reliance on rare earths in low-carbon technologies.
 - <https://www.cam.ac.uk/research/news/new-approach-to-cosmic-magnet-manufacturing-could-reduce-reliance-on-rare-earth-in-low-carbon>

- North America

- Canada [7.10.22]

- Canada's rare earth processing hub prepares to ramp up.
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- Canada: Vital Metals [11.10.22]

- Vital Metals bails on Quebec rare earth project.
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- Africa

- Congo: Alphamin [6.10.22]

- Alphamin's quarterly production rates exceed guidance.
 - <https://www.internationaltin.org/timah-communities/>

- Namibia: AfriTin [11.10.22]

- AfriTin reports multiple pegmatite intersections in Uis.
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- Oceania

- Indonesia [19.10.22]

- Indonesia tells tin industry to be prepared for an export ban.
 - <https://www.miningweekly.com/login.php?url=/article/indonesia-tells-tin-industry-to-be-prepared-for-an-export-ban-2022-10-19/searchString:Nickel>

- Spain: Strategic Minerals [23.9.22]

- Strategic Minerals maintains solid tin and tantalum concentrate levels.
 - <https://www.juniorminingnetwork.com/junior-miner-news/press-releases/2910-neo/snta/128414-strategic-minerals-maintains-solid-tin-and-tantalum-concentrate-production-levels.html>

Titanium

- North America
 - Canada: Rio Tinto [12.10.22]
 - Rio Tinto and Canadian government to invest in mine in Quebec.
 - <https://www.mining-technology.com/news/rio-tinto-critical-minerals/>
 - USA: Chemours [17.10.22]
 - US Chemours starts up titanium dioxide mineral-sands mine.
 - <https://www.icis.com/explore/resources/news/2022/10/17/10815713/us-chemours-starts-up-tio2-mineral-sands-mine/>

Tungsten

- North America
 - USA: International Tungsten Industry Association [19.10.22]
 - The Oil and Gas, and Aerospace industry are driving US tungsten demand.
 - <https://www.argusmedia.com/en/news/2382104-oil-and-gas-aerospace-driving-us-tungsten-demand-itia>

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- Global

- Ecora Royalties[20.10.22]

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- Africa

- Limpopo: Steelpoortdrift [20.10.22]

- Study shows Steelpoortdrift project will be one of the world's lowest-cost vanadium producers.
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- Oceania

- Australia: Mt Peake [20.10.22]

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CMA at Mines & Money: Resourcing Tomorrow

Resourcing Tomorrow, by Mines and Money is an event focused on the energy transition, ESG, sustainability and the circular economy. It is to be held at the Business Design Centre, London. The agenda has been selected by Mines and Money to incorporate themes and topics that are highly relevant to investors and industry.

With mining driving 38% of the world's GDP, it will play a critical role in the energy transition and hence the window of opportunity to transform and recreate the mining industry for this is here, and understanding and addressing to investors, industry and policymakers in essential.

The event will showcase more than 120 talks, including **Jeff Townsend, Founder, Critical Mineral Association** providing expertise in the critical minerals field and addressing this to government and policymakers.

[MORE INFO HERE](#)

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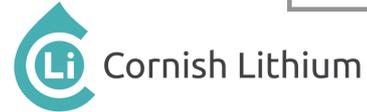
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