



# CRITICAL MINERALS ASSOCIATION

## DECEMBER 2022

CMA & GSBF 2ND ANNUAL CONFERENCE

APPG INTERNATIONAL COLLABORATION  
ROUNDTABLE

SUSTAINABLE CRITICAL MINERALS ALLIANCE COP15



# December 2022

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

Read on for:

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- Phillips66: Parliamentary Reception & Project Humber Zero
- Foreign Affairs Committee Launches Inquiry into Critical Minerals
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- UK Select Committee on Critical Minerals
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- Tungsten West receives 2 of 4 key permits to restart Hemerdon mine
- HyProMag to develop Germany's first rare earth magnet recycling plant
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- Founders Jeff and Kirsty feature on The Intelligent Miner's Top Reads of 2022
- Cornish Lithium set for a momentous 2023 following significant progress

Kirsty, Jeff, Olimpia, & Eileen

This month's newsletter has been put together by Eileen Maes and Lily Dickson, PhD student at the University of Leeds.

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*Got a suggestion? Want to feature in next month's newsletter? Contact [kirsty@criticalmineral.org](mailto:kirsty@criticalmineral.org)*

*Want to learn more? Check out our [website](#) & follow us on:*



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# CMA & GSBF Conference: Summary & Recordings

On 28 November, the Critical Minerals Association and Geological Society Business Forum hosted their second annual critical minerals conference at Burlington House, London. This year's event featured expert presentations and panels focused on 'Delivering the UK's Critical Mineral Ambitions.'

The conference was also livestreamed for a large virtual audience. The recordings of the livestream are now available to watch for free on the Critical Minerals Association website.

A written summary of the conference is also available to read on the website, and includes highlights from each panel.

This year's conference was a great success and we thank everyone who registered and attended. We look forward to welcoming you again next year.

**[ACCESS RECORDINGS HERE](#)**

**[READ EVENT SUMMARY HERE](#)**





# Phillips66: Parliamentary Reception and Project Humber Zero

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On 5 December, Critical Minerals Association co-founder Kirsty Benham attended a Parliamentary reception hosted by Phillips66.

Phillips66 is a leading global manufacturer and Europe's sole producer of specialty coke, a material precursor to the synthetic graphite used in electric vehicle (EV) battery anodes. As the energy transition approaches, demand for EV batteries is skyrocketing.

Phillips66 is also helping the UK government reach its net-zero targets with its project Humber Zero, which combines carbon capture and storage technology with hydrogen production. According to UKRI, the Humber region currently generates about 40% of the country's industrial emissions. Phillips66 anticipates that Humber Zero will remove 8 million metric tons of CO2 per year by 2028, produce enough hydrogen to power 1 million homes, and create 2,500 jobs during construction, 200 permanent jobs, and safeguard over 20,000 jobs in the region.

**[READ MORE ABOUT PHILLIPS66 HERE](#)**







# Foreign Affairs Committee Launches Inquiry into Critical Minerals

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On 20 December, the Foreign Affairs Committee launched an inquiry into critical minerals. The inquiry will consider how the UK can engage with global partners to diversify supply chains in a way that respects human rights and ensures adequate access to critical minerals.

The Committee will look at ways in which the Foreign, Commonwealth & Development Office (FCDO) can leverage diplomatic ties and build strong alliances for global regulation of the critical minerals market, ensure UK access to critical minerals markets, and promote UK values through improved ESG performance.

Chair of the Foreign Affairs Committee, Alicia Kearns MP, said: "Minerals are a particularly important ingredient in our transition towards green energy... However, with a finite supply and ever-increasing demand, critical minerals are an emerging resource battleground. As such we need to investigate whether the time for resilience diplomacy is at hand."

**[READ ON HERE](#)**



Foreign &  
Commonwealth  
Office

# APPG International Collaboration Roundtable

On 22 November, the Critical Minerals Association convened the 'International Collaboration' roundtable on behalf of the All-Party Parliamentary Group (APPG) on Critical Minerals.

The roundtable was held in Westminster to encourage open discussion between industry and governments. We were honoured to welcome representatives from five like-minded governments: Australia, Canada, Japan, the UK, and the US. Thank you to Cheryl Mackrory MP, Julian Kettle (Wood Mackenzie) for his overview of supply, demand, and emerging trends, and Olimpia Pilch for chairing the session.

To build alternative, resilient, responsible, and low-carbon supply chains, greater integration and governmental support are needed. Effective collaboration is essential to address current supply gaps and bottlenecks, particularly in the midstream processing and refining of the supply chain.







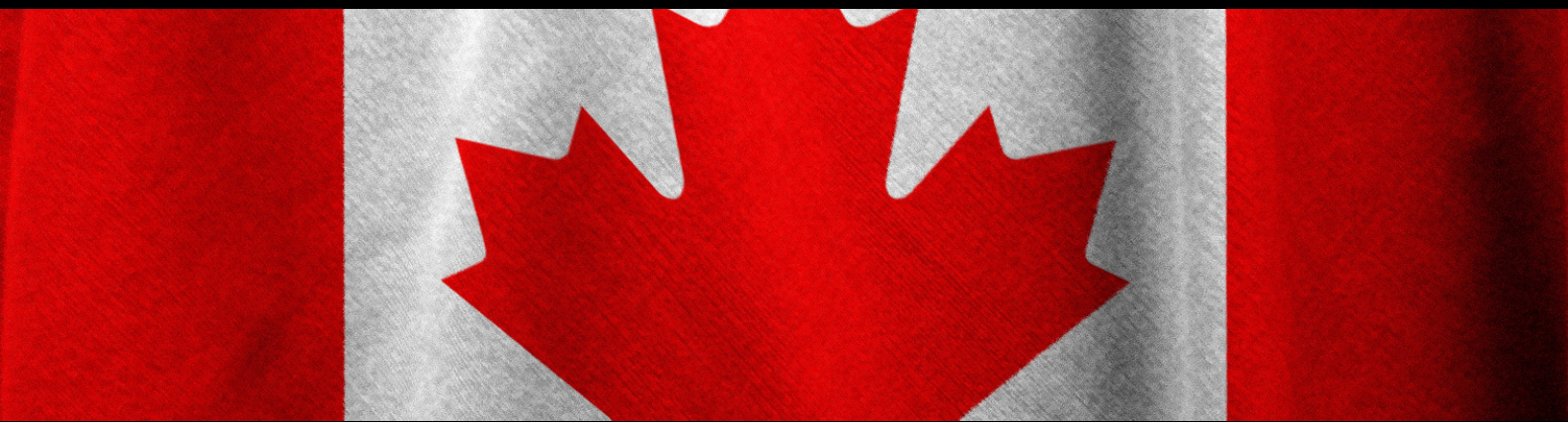
# Canada Places Big Bets on Critical Minerals

Canada is blessed with an abundance of fossil fuels — oil, natural gas and coal. But as the developed world tries to wean off of fossil fuels – largely through electrification – it is expected the demand for Canada’s fossil fuels will eventually decline, while demand for critical minerals is projected to grow sixfold by 2040.

These metals and minerals are critical in manufacturing EV batteries, solar and wind power installations, transmission lines, and other technologies that a global energy transition will require.

The Canadian government is hoping to capitalise on the opportunity this poses with a new critical minerals strategy — backed with \$4 billion in federal funding — that aims to develop a full critical minerals industry value chain, from exploration and mining, to processing, manufacturing and recycling.

**[READ THE FULL STRATEGY HERE](#)**



# Select Committee on Critical Minerals

Chairman of Pensana Paul Atherley, along with Paul Lusty, Director of the UK Critical Minerals Intelligence Centre, was called to give evidence to a House of Commons Select Committee on Critical Minerals, relating to the recently enacted National Security and Investment Act.

Questions from the cross-party panel, chaired by Darren Jones MP, were wide-ranging, covering many aspects of the UK's Critical Minerals strategy. Below is a short excerpt:

Paul Atherley: "The first thing we need to do is establish independent, sustainable, resilient supply chains for the UK because at the moment we are sitting here totally dependent on China for these critical minerals."

**[READ ON HERE](#)**



**PENSANA** Plc  
LSE : PRE



UK Critical Minerals  
Intelligence Centre





# COP15: Countries Announce Sustainable Critical Minerals Alliance

Last week the Honourable Jonathan Wilkinson, Minister of Natural Resources, announced at COP15 that Canada, along with Australia, France, Germany, Japan, the UK, and the US are launching the Sustainable Critical Minerals Alliance.

The purpose of the Alliance is "to drive the global uptake of environmentally sustainable and socially inclusive and responsible mining, processing and recycling practices and responsible critical minerals supply chains", says the Government of Canada.

The Alliance aligns with the G7 2030 Nature Compact commitment to halt and reverse biodiversity loss by 2030 through a globally wide system change to reduce greenhouse gas emissions (GHGs) with a focus on sustainable and inclusive development.

**[READ ON HERE](#)**





# UK and South Africa Seek Deeper Cooperation on Critical Minerals

London and Pretoria have announced a partnership to promote the responsible exploration, development, production, and processing of critical minerals in South Africa.

The collaboration will start with the launching of regular ministerial and technical dialogues between South Africa's Department for Mineral Resources and Energy and the UK's Department for Business, Energy and Industrial Strategy.

A media release reads: "Cooperation will help to support investment into exploration, production and beneficiation activities, securing and expanding access to minerals that are key for clean industrial and economic development and the global clean energy transition."

South Africa is responsible for 60% of the global manganese supply, 75% of the platinum supply and 40% of the palladium supply. It also produces or has the potential to produce, vanadium, nickel, cobalt and rare earth elements.

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# Pensana Begins On-site Construction in Saltend and Longonjo

Pensana Plc is a rare earth metal mining company looking to establish a supply chain for rare metals used in EVs, wind turbines, and other high-technology applications.

Its Saltend facility, a rare earth processing hub in the Humber Freeport, is set to become one of three such facilities operating outside of China. The facility is 'progressing well' and will likely to commence in the new year.

Pensana's Chairman Paul Atherley says: "Our Saltend hub will be the world's first independent and sustainable rare earth separation plant, with plans to produce 5% of the global magnet metals in 2024. This will play a vital role in transforming the UK's EV and offshore wind industries, as well as creating high value local jobs in the Humber region."

Raw materials will be sourced from a sustainable mine in Longonjo, Angola. The Longonjo mining project has mobilised to site and undertaken ground clearing.

## **READ ON [HERE](#)**



**PENSANA** Plc  
LSE : PRE





# Tungsten West Granted 2 of 4 Key Permits to Restart Hemerdon Mine

Tungsten West PLC says it has received two key permits out of the four required to restart production in the Hemerdon tungsten and tin mine in Devon. The Environment Agency granted it a mining waste facility permit and an open pit water abstraction license, two significant milestones for the project.

Tungsten West expects to receive the two outstanding permits - the mineral processing facility permit and the remaining abstraction license - in the first quarter of 2023.

"We believe that our commitment to upholding and adhering to international best practice in mining operations, environmental conservation and safe working practices will allow the company to successfully receive the remaining required permits in good time to restart operations in the second half of next year," said executive vice chairman Mark Thompson.

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**TUNGSTEN WEST**





# HyProMag to Develop Germany's First Rare Earth magnet recycling plant

Mkango Resources Ltd stated that HyProMag GmbH has been awarded grants totalling €3.7 mil for a new project to develop Germany's first rare earth magnet recycling plant using hydrogen processing of magnet scrap (HPMS).

The total cost of the project, called 'Innovation Centre for Science & Economy Northern Black Forest IZWW', is expected to be €6.1 mil, of which approximately 60% will be funded by the grants.

The first phase of the project includes the development of a production facility in Baden-Württemberg State with a minimum output capacity of 100 tonnes per annum. The plant will produce permanent magnets, alloy pellets and powders composed of recycled neodymium, iron and boron.

First production from the project is targeted for 2024, said AIM-traded Mkango.

**[READ ON HERE](#)**





# Billionaire-backed KoBold Metals to develop copper-cobalt mine in Zambia

KoBold Metals, a start-up backed up a coalition of billionaires including Bill Gates and Jeff Bezos, has committed US\$150 million to the development of Mingomba mine in Zambia.

KoBold Metals uses artificial intelligence to process drilling data and optimise mineral exploration.

The Mingomba mine is the highest-grade undeveloped deposit of copper-cobalt in the world, allegedly containing 247 million tonnes of ore. Copper is in high demand due to its use in renewable technologies, but big, new deposits are rare to come by.

Mingomba plays into Zambia's ambitious copper production target of 3 million tonnes per annum by 2032, up from its current 850,000 tonnes. Zambian President Hakainde Hichilema said at the US-Africa Leaders Summit: "The investment is not about Kobold, it's not about Zambia ... it's about the rest of the world, as we grapple with climate change."

## READ ON [HERE](#)





# Founders Jeff and Kirsty feature on The Intelligent Miner's Top Reads of 2022

The Intelligent Miner recently published a list of its ten most-viewed articles of the year. Featuring eighth on the list is 'Mining for Change at the Highest Level', an article written by Carly Leonida about the Critical Minerals Association.

The article features conversations with co-founders Jeff Townsend and Kirsty Benham, and covers the importance of the Association, public perceptions of mining, ESG, transparency, and more.

Jeff and Kirsty gaged Carly's interest at this year's Responsible Raw Materials conference, which focused on 'unlocking a just transition through mining'. Jeff and Kirsty jointly delivered a presentation on practical ways mining companies can better engage with governments to influence sustainable development.

## READ THE ARTICLE [HERE](#)

Mining:  
Unlocking  
a 'Just  
Transition'

RESPONSIBLE  
RAW MATERIALS







# Cornish Lithium set for a momentous 2023 following significant progress

Cornish Lithium, a pioneering mineral exploration and development company in the UK, is set for a momentous year after significant progress in 2022.

Its hard rock lithium plant, the Treleavour Project, received a £1.8 million grant from Innovate UK through the Automotive Transformative Fund (ATF). LiOH is vital for the production of cathodes needed in lithium-ion electric vehicle (EV) batteries, and will contribute to the UK's energy transition. Treleavour underwent a scoping study in June and produced a forecasted production of 7,800 tonnes of lithium hydroxide (LiOH) per annum.

Cornish Lithium has also achieved significant milestones in other areas. It has implemented ESG initiatives, strengthened its Board of Directors, and its projects to extract lithium and heat from geothermal water beneath the surface of Cornwall have been approved and commissioned.

## LEARN MORE ABOUT CORNISH LITHIUM HERE







# Critical Minerals News

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

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

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

- Africa

- Zambia: Jubilee [5.11.22]

- Jubilee completed water infrastructure upgrade at its Roan Project, advances in production of cobalt and copper from waste at its Sable Refinery in Zambia.
    - <https://www.miningreview.com/base-metals/jubilees-cobalt-revenue-to-fund-roan-northern-refinery-strategy/>

- North America

- Canada: Silver Cobalt Works [23.11.22]

- Canada Silver Cobalt Works Inc expands Greenfield lithium project in Ontario
    - <https://www.proactiveinvestors.com/companies/news/999214/canada-silver-cobalt-works-expands-greenfield-lithium-project-in-ontario-via-new-staking-999214.html>

## Oceania

- Australia: Cobalt Blue [8.12.22]

- Cobalt Blue Holdings Ltd delivers impressively high-grade concentration results at Broken Hill cobalt mine in NWS
    - <https://www.proactiveinvestors.com/companies/news/1000734/cobalt-blue-delivers-high-grade-concentration-results-at-the-broken-hill-cobalt-project-1000734.html>

# Copper

- Oceania

- Australia: PMR [15.12.22]

- Power Metal Resources's Wilan Project to merge with other Australia exploration companies in the Mount Isa copper belt
    - <https://www.proactiveinvestors.co.uk/companies/news/1001410/power-metal-resources-unveils-merger-of-its-wilan-project-with-a-number-of-other-australian-exploration-interests-1001410.html>

- South America

- Panama: Quantum Minerals [17.12.22]

- Government of Panama cuts off talks with Canadian company Quantum Minerals Ltd to open huge copper mine.
    - <https://www.mining-journal.com/copper-news/news/1443708/capstone-copper-presses-case-for-chile-potential>

- Africa

- Tanzania: MET [19.12.22]

- Magnus Energy Technologies appoints HCF International Advisors Ltd for Nachu Graphite Project
    - <https://www.proactiveinvestors.co.uk/companies/news/1001583/magnis-energy-technologies-appoints-advisers-for-nachu-graphite-project-in-tanzania-1001583.html>

- Asia

- Kazakhstan: Sarytogan Graphite [6.12.22]

- Sarytogan Graphite and laboratory partner Pro-Graphite thrilled with metallurgical breakthrough, producing graphite of 99.87% purity
    - <https://smallcaps.com.au/sarytogan-graphite-metallurgical-breakthrough-namesake-kazakhstan-project/>

- North America

- Canada: Nouveau Monde Graphite [13.12.22]

- NMG Inc. to develop the Matawinie Graphite mine in Quebec, producing battery anode material
    - <https://seekingalpha.com/article/4564262-nouveau-monde-graphites-debt-holds-it-back>

- Greenland: GreenRoc Mining [9.12.22]

- GreenRoc raises £315k to develop Amitsoq graphite project
    - [https://www.morningstar.co.uk/uk/news/AN\\_1670586605701271000/greenroc-placing-raises-gbp315000-to-develop-amitsoq-graphite-project.aspx](https://www.morningstar.co.uk/uk/news/AN_1670586605701271000/greenroc-placing-raises-gbp315000-to-develop-amitsoq-graphite-project.aspx)



- Africa

- Jordan: Arab Mining Company [19.12.22]

- AMC and Jordan sign MoU to excavate lithium in Wadi Araba and gold in the Aqaba region
    - <https://www.zawya.com/en/projects/mining/lithium-gold-extraction-mous-signed-in-jordan-dwb7bpzi>

- North America

- USA [16.12.22]

- Enverus uncovers direct lithium extraction potential in Permian basin
    - <https://www.globalminingreview.com/mining/16122022/enverus-uncovers-direct-lithium-extraction-potential-in-the-permian-basin/>

- Mexico [25.11.22]

- Mexico nationalizes lithium resources and plans to start producing lithium batteries in late 2023
    - <https://www.mining.com/mexico-to-start-producing-lithium-batteries-in-late-2023/>

- Canada: Sayona Mining [12.11.22]

- Sayona Mining and partner Piedmont Lithium granted final permit to restart the North American Lithium mine in Quebec
    - <https://smallcaps.com.au/sayona-mining-piedmont-lithium-final-permit-restart-nal-operation/>

# Nickel

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- North America
  - Canada: Canada Nickel [19.12.22]
    - Canada Nickel Company Inc acquires Texmont mine
    - <https://www.prnewswire.com/news-releases/canada-nickel-acquires-past-producing-texmont-mine-highlights-high-grade-potential-of-regional-land-package-301705951.html>
- Asia
  - Indonesia
    - WTO backs EU in nickel dispute; Indonesia plans appeal
    - <https://www.mining.com/web/wto-backs-eu-in-dispute-with-indonesia-over-nickel-ore-ban/>
- Africa
  - Tanzania: Lifezone Metals [13.12.22]
    - Lifezone plans to mine nickel with a low carbon footprint, listed in New York
    - <https://www.mining.com/web/tanzania-nickel-producer-lifezone-metals-to-list-in-new-york/>

## Rare Earth Elements

- North America
  - Us: Eagle Mountain Mining[16.12.22]
    - EMM flags rare earth potential at Arizona copper project
    - <https://stockhead.com.au/resources/eagle-mountain-mining-flags-rare-earth-potential-at-arizona-copper-project/>

# Tin

22

- Europe
  - UK: Cornish Metals [10.11.22]
    - Cornish Metals provides update on South Crofty project.
    - <https://www.geplus.co.uk/news/drilling-and-dewatering-progress-at-former-cornish-underground-tin-mine-10-11-2022/>

# Tungsten

- Europe
  - UK: Tungsten West [19.11.22]
    - Tungsten West boosts ore and mineral reserves at Hemerdon mine near Plymouth.
    - <https://www.business-live.co.uk/economic-development/mining-firm-tungsten-west-boosts-25785106>
- Asia
  - Korea: Almonty Industries [7.12.22]
    - Almonty set to mine for tungsten in Sangdong to challenge China's dominance
    - [https://www.koreatimes.co.kr/www/tech/2022/12/419\\_340916.html](https://www.koreatimes.co.kr/www/tech/2022/12/419_340916.html)

# Vanadium

- North America

- Canada: Phenom [23.12.22]

- **Phenom Resources Corp. completes** shallow vanadium drilling on its flagship Carlin Gold-Vanadium Project
    - <https://www.juniorminingnetwork.com/junior-miner-news/press-releases/1314-tsx-venture/phnm/131724-phenom-resources-expands-the-vanadium-deposit-on-its-flagship-nevada-project.html>

- Canada: VanadiumCorp [13.12.22]

- VanadiumCorp Resource Inc. announce plans for vanadium electrolyte manufacturing facility in Quebec
    - <https://www.juniorminingnetwork.com/junior-miner-news/press-releases/2701-tsx-venture/vrb/132818-vanadiumcorp-to-establish-a-vanadium-electrolyte-manufacturing-test-facility.html>

- Oceania

- Australia [1.12.22]

- Skills shortage hampers mining developments in North Queensland
    - <https://www.theguardian.com/australia-news/2022/dec/01/skills-shortage-could-hamper-new-mining-developments-in-north-queensland-industry-says>

- Australia: Currie Rose Resources [16.12.22]

- TNG terminates offtake agreement with Gunvor Singapore for 40% of vanadium pentoxide to be produced from Mount Peake
    - [https://www.miningweekly.com/article/tng-cancels-vanadium-offtake-2022-12-16/rep\\_id:3650](https://www.miningweekly.com/article/tng-cancels-vanadium-offtake-2022-12-16/rep_id:3650)





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