

# Geological Society Business Forum & Critical Minerals Association (UK) 3rd Annual Conference: The UK Opportunity

Date: 27 November 2023

Location: Royal Society of Chemistry, Burlington House, Piccadilly, London W1J 0BA

- 08:30 10:00 APPG Breakfast Reception (Invite-only)
- 10:30 17:45 Conference
- 17:45 21:00 Drinks Reception

# <u>Sessions</u>

- 1. Opening Remarks
  - a. Welcome from Kirsty Benham, Critical Minerals Association (UK)
  - b. Welcome from Simon Thompson, The Geological Society and Tanya Sheridan, Royal Society of Chemistry
  - b. Address from Minister Nusrat Ghani MP, Department of Business & Trade
- 2. Critical Minerals in a New World
  - a. Presentation: Global Overview: Geopolitics, Demand & Supply
  - b. Panel: International Partnerships & Approaches to Critical Minerals
  - c. Address: Canada Your Trusted Critical Minerals Producer
  - d. Addresses and Fireside Chats: The Provinces & Regions Australia & Canada
  - a. Address: Saudi Arabia An Emerging Minerals & Metals Hub
  - c. Presentation: The EU's Critical Raw Materials Act (CRMA) Approach
  - e. Panel: A Just Transition in Africa
- 3. Lunch
- 4. The UK Opportunity
  - a. *Presentation:* The UK's Geological Potential
  - b. *Panel:* Fertile Ground: Mineral Rights, Planning & Permitting, and Developing Local Infrastructure & Utilities
  - c. *Panel:* UK Innovation, Scientific Collaboration, and Skills Gaps
- 5. Break, with teas and coffees
- 6. Integration & Collaboration
  - a. *Panel:* Waste Collection & Recycling
  - b. Panel: Essential Materials: Uniting Industries
  - d. Panel: Responsible Financing
  - e. *Panel:* Chemicals & Downstream: Joining up Supply Chains
- 7. Closing Remarks
  - a. Address from Mike Armitage, Geological Society Business Forum

## <u>Schedule</u>

#### 8:30 - 10:00 - Breakfast Reception, Houses of Parliament

• Welcome from Cherilyn Mackrory MP, Chair of the APPG for Critical Minerals and Jeff Townsend, CEO & Co-founder of the Critical Minerals International Alliance

The Critical Minerals Association (UK) provides the Secretariat for the All-Party Parliamentary Group (APPG) for Critical Minerals, which was launched in March 2020. The APPG's events have been attended by Minister Zawahi, Lee Rowley MP, and Secretary of State for International Trade, Anne-Marie Trevelyan MP.

This Breakfast Reception is an invite-only event. Attendees will enjoy breakfast at the beautiful Terrace Pavilion overlooking the River Thames in the House of Commons, and welcome speeches from Cherilyn Mackrory MP, Chair of the APPG for Critical Minerals and Jeff Townsend, CEO & Cofounder of the Critical Minerals International Alliance.

## 10:00 - 10:30 - Teas & Coffees, Royal Society of Chemistry

#### 10:30 - 10:45 - Opening Remarks

• 10:30 - Welcome from *Kirsty Benham, CEO & Co-founder of the Critical Minerals Association* (*UK*)

The CMA (UK) was founded in 2020 by Jeff Townsend and Kirsty Benham, both of whom saw that the UK's Industrial Strategy and Green Energy ambitions do not consider the vulnerability of today's critical mineral supply chains. The Association unites the entire UK critical minerals value chain in its membership— from industry to academia, finance to R&D, law and more— and amplifies their voices to be at the forefront of influencing policy. In the past year their project has expanded across the globe with the formation of sister associations: CMA Australia, CMA USA, and the Critical Minerals International Alliance (CMIA).

- 10:35 Welcome from Simon Thompson, The Geological Society, and Tanya Sheridan, Royal Society of Chemistry
- 10:40 Address from *Minister Ghani, Department for Business and Trade*

Nusrat Ghani MP was appointed Minister of State at the Department for Business and Trade, and as the Minister of State responsible for the Investment Security Unit at the Cabinet Office, on 7 February 2023. Over the past few months, China has asserted its dominance over certain critical minerals supply chains by implementing export restrictions on germanium, gallium, and graphite. Minister Ghani will be speaking about her wide portfolio and how critical minerals fit into the wider issue of supply chain resilience; what the UK Government's delivery plan is in the coming months; and the strengths & opportunities the UK has to be a global player in the development of alternative critical mineral supply chains.

#### 10:45 - 13:30 - Session 1 - Critical Minerals in a New World

• 10:45 – 10:55 – Global Overview: Geopolitics, Demand & Supply Trends

## • Suzanne Shaw, Wood Mackenzie

As the race to Net Zero gathers pace, the International Energy Institute projects that the demand for critical minerals will increase four-fold by 2050. Given this trajectory, the development of diverse, resilient, and responsible supply chains is an "essential task".

Suzanne Shaw, Head of Energy Transition & Battery Raw Materials at Wood Mackenzie, will be providing a global overview of the current geopolitical context for critical minerals, trends of investment, demand and supply forecasts, as well as which jurisdictions are attracting business and what incentives they are offering.

## • 10:55 – 11:30 – The Minerals Security Partnership (MSP): International Partnerships & Approaches to Critical Minerals

- Chair Matthew Hatfield (Department for Business & Trade)
- Panel Rachael Parrish (US Department of State), Marcin Zydowicz (Canadian High Commission), Ana Nishnianidze (Austalian Trade & Investment Commission)

The Minerals Security Partnership (MSP) is a collaboration of 13 countries and the European Union (UN) to catalyse public and private investment into responsible critical minerals supply chains. This panel discussion will bring together representatives from MSP nations to outline how nations can work together outside and inside this grouping to develop international partnerships for critical minerals and draw on their individual strengths for collective gain.

# • 11:30 – 11:40 – Canada: Your Trusted Critical Minerals Producer

• Address: Hon. Ralph E. Goodale, High Commissioner for Canada in the UK

Canada is a secure, sustainable and responsible supplier of critical minerals and a destination of choice for investment all along the critical minerals value chain. With outstanding mining expertise, extensive technology and manufacturing capabilities, strong ESG credentials, and a long history of friendly and close collaboration with the UK, Canada is ready to work with partners and investors to help grow both nations' economies. Hon. Ralph Goodale will be speaking about the role of Canada as a trusted partner in the development of alternative, responsible, and resilient critical mineral supply chains.

#### • 11:40 – 12:15 – The Provinces and Regions

- Address: *Tony Knight, (Government of Queensland)*
- Fireside Chat: David Stewart (Agent-General, Queensland)
- Fireside Chat: *Hon. George Pirie (Minister of Mines, Ontario)*
- Fireside Chat: *Ranj Pillai (Premier, Yukon)*
- Fireside Chat: *Nathalie Camden (Deputy Minister of Mines, Quebec)*
- Chair: Jeff Townsend (Critical Minerals International Alliance)
- 12:15 12:35 Break, The Geological Society of London
- 12:35 12:45 Saudi Arabia: An Emerging Minerals & Metals Hub

# • Address: *HE Khalid Al-Mudaifer, Vice-Minister for Mining Affairs for the Kingdom of Saudi Arabia*

Saudi Arabia is investing significantly into critical minerals. The Future Minerals Forum, held in January each year, is becoming one of the major events of the critical minerals calendar, and earlier this year, the UK and Saudi Arabia signed a bilateral critical minerals agreement. This presentation will outline how and why Saudi Arabia is becoming an important minerals and metals hub on the world stage.

# • 12:45 – 12:55 – The EU's Critical Raw Materials Approach

• Presenter: *Dylan Geraets (Mayer Brown)* 

The Critical Raw Materials Act (CRMA) will equip the European Union with the tools to ensure their access to a secure and responsible supply of critical raw materials. This presentation will provide an overview of the EU's CRMA approach, including its differentiation of critical and strategic minerals, shorter planning and permitting timeframes, and clear benchmarks for domestic capacities.

# • 12:55 – 13:20 – A Just Transition in Africa

- Chair Baroness Northover (House of Lords)
- Panel Stacy Hope (Women in Mining UK), Madeline R. Young (University of Northampton), Veronica Bolton Smith (The Connect Africa Network), Joseph Mansour (Foreign, Commonwealth & Development Office)

Many countries across the African continent have rich geological potential for critical minerals such as rare earth elements (REEs), graphite, cobalt, copper, and platinum group metals (PGMs). These countries will be looking to develop their resources to boost economic growth and improve standards of living. How can foreign nations work with resource-rich developing nations to ensure that extraction is in line with the goals of socio-economic welfare and sustainable development?

# 13:20 - 14:30 - Lunch, Royal Society of Chemistry

Lunch will be served at the Royal Society of Chemistry. The Science Room will be filled with booths represented by our conference sponsors and UK and foreign Government delegations. Our platinum sponsor Satarla will also be hosting an interactive Dialogue Table on the issues of Environmental, Social, and Governance (ESG) for the mining industry.

# 14:30 – 15:30 – Session 2 – The UK Opportunity

# • 14:30 – 14:40 – The UK's Geological Potential

• Presenter: Kathryn Goodenough (British Geological Survey)

This presentation will provide an overview of the UK's rich mining history, the projects the British Geological Survey (BGS) are engaged in within the UK, the findings of their April paper on prospective areas for critical minerals, as well as their hosting of the Critical Minerals Intelligence Centre (CMIC), which has recently published a report on a revised methodology for measuring criticality.

- 14:40 15:05 Fertile Ground: Minerals Rights, Planning & Permitting, and Developing Local Infrastructure & Utilities
  - Chair Mike Armitage (Geological Society Business Forum)
  - Panel Eva Marquis (Camborne School of Mines), Richard Williams (Cornish Metals), Nick Pople (Northern Lithium), Charles Pembroke (ERM)

To attract investment a nation must have the right conditions to demonstrate stability and predictability, and governments have a vital role to play in providing a reliable concierge service to demonstrate support to business. This panel discussion will cover the UK's conditions for business in critical minerals mining, processing, and recycling, covering topics that affect industry such as mineral rights, planning & permitting, and access to local infrastructure and utilities.

- 15:05 15:30 UK Innovation, Scientific Cooperation & Skills Gaps
  - Chair Dan Smith (University of Leicester)
  - Panel Sheena Hindocha (Innovate UK KTN), Nic Stirk (Materials Nexus), Christian Peters (Seloxium), Sabine Anderson (SRK Consulting)

The UK is home to world-class universities and research institutions that specialise in geoscience, mining, metallurgy, and materials engineering. Innovation will be key to developing technologies for emitting lower carbon emissions, boosting recycling capability, and enabling material substitution and novel extraction methods for critical minerals. However, the UK is struggling with a shortage of skills needed across a multitude of disciplines. This panel will discuss the importance of innovation, scientific collaboration, and bridging skills gaps in sustaining the UK's place in the global value chain.

# 15:30 - 15:50 - Break with Teas & Coffees, The Geological Society of London

# 15:50 – 17:35 – Session 3 – Integration & Collaboration

- 15:50 16:15 Waste Collection & Recycling
  - Chair Julie-Ann Adams (European Electronics Recyclers Association)
  - Panel Lilia Giuttari-Lickovski (Department for Business & Trade), Chris O'Brien (AMTE Power), Ros Lund (Coal Authority)

Recycling is a key pillar of developing alternative, responsible, and diversified supply, as domestic waste streams provide a valuable secondary source of critical minerals. However, without guaranteed waste feedstock, it can be challenging to develop capital-intensive recycling and processing facilities. This panel will assess how the right conditions can be created to catalyse the development of recycling opportunities, and how governments should build these capabilities, from legislative changes to industry collaborations.

- 16:15 16:40: Essential Materials: Uniting Industries
  - Chair Lucy Smith (Materials Processing Institute)
  - Panel David Payne (Mineral Products Association), Izzi Monk (Royal Society of Chemistry, Sarah Connolly (Innovate UK), Jacqui Murray (National Manufacturing Institute Scotland)

Cross-sector collaboration is required to ensure material development and recycling advances in line with the goal of a circular economy. This panel discussion will explore what challenges and opportunities exist for critical minerals to align with the foundation industries, and what policy can do to support the transition to a circular economy.

## • 16:40 – 17:05 – Responsible Financing

- Chair Sarah Gordon (Satarla)
- Panel Amanda van Dyke (ARCH Emerging Markets Partners), Fiona Clouder (ClouderVista), Christophe Roux (Societe Generale), Jamie Strauss (Digbee)

As pressure mounts on nations to achieve their industrial and decarbonisation targets in time for 2050, critical mineral mining, processing, and recycling projects will require significant funding to meet projected demand. Investors have a vital role to play in picking the winners and deciding which projects will receive funding. As ESG continues to grow in importance for companies, governments, and consumers, how are investors ensuring they reward responsible practices?

- 17:05 17:30 Chemicals & Downstream: Joining up Supply Chains
  - Chair Margery Ryan (Johnson Matthey)
  - Panel Anna Gibbs (Phillips66), Luke Hampton (Society of Motor Manufacturers and Traders), Grant Smith (Less Common Metals)

Critical minerals cut across multiple industries. Downstream and chemical industries like automotives, aerospace and defence require a stable supply of critical minerals that are sourced transparently and responsibly. Given the complexity of the upstream sector, how are downstream and chemical industries building their networks and knowledge of where their materials come from? How are they navigating challenges around legislation, energy costs, and access to local infrastructure? This panel will explore areas of common interest, and how different sectors can work together to integrate vertically and champion issues collectively.

# • 17:30–17:35 – **Closing Remarks** – *Mike Armitage (Geological Society Business Forum)*

The Geological Society Business Forum (GSBF) is a Professional and Scientific Group founded in 2011, aimed at raising the profile of geoscience in the business world and in society at large, as well as supporting the Geological Society in its scientific endeavours. The GBSF has organised over 30 geoscience business events encompassing a number of issues, including critical minerals, ethical investment, transparency, exploration, electrification and Net Zero.

# 17:35 – 21:00 – Drinks Reception, Royal Society of Chemistry

Attendees will move on to the Royal Society of Chemistry, where they will be joined by UK and foreign Ministers and government officials that will have completed a ministerial roundtable at Parliament, for an evening of canapes, refreshments, and networking.