Technology Metals Report (08.16.2024): Critical Minerals Face Political Crossroads for Government Money and Military Might

written by Tracy Hughes | August 16, 2024

Welcome to the latest issue of the Technology Metals Report (TMR), brought to you by the Critical Minerals Institute (CMI). As we count down to the Critical Minerals Institute Summit III in Toronto, updates are now being made daily at CriticalMineralSummit.com. This landmark event, themed "The Politics of Critical Minerals," will take place on August 21-22, 2024, at the prestigious National Club in Toronto, coinciding with the same week as the Democratic National Convention. This summit promises to be a pivotal gathering for leaders in the critical minerals industry. In this week's TMR, we highlight the top stories identified by the CMI Board of Directors as having the most significant impact on our sector.

Among the key stories this week is China's decision to restrict antimony exports, a critical mineral for military production, as part of its strategy to control essential materials amidst rising geopolitical tensions with the U.S. The ongoing labor walkout at BHP's Escondida copper mine in Chile also poses a major risk to global copper supply, while the Biden administration's $50 million investment in electric vehicle manufacturing across six states underscores the ongoing energy transition. Additionally, we cover new investments in critical minerals in Saskatchewan, India's efforts to incentivize

critical minerals extraction, and challenges in the UK's critical minerals sector, reflecting the broad and complex nature of the issues currently facing our industry.

As we prepare for the CMI Summit III, the discussions will cover a wide range of critical topics that are shaping the future of our industry. The summit will bring together some of the most influential voices in the sector, with keynote addresses from industry leaders who are at the forefront of critical minerals innovation and strategy. Mark Chalmers, CEO of Energy Fuels Inc. (NYSE American: UUUU | TSX: EFR), will discuss the development of the critical minerals company of the future in North America, focusing on how the industry can build a resilient and sustainable supply chain. Pat Ryan, CEO of Ucore Rare Metals Inc. (TSXV: UCU | OTCQX: UURAF), will deliver a keynote titled "Breaking China's Rare Earth Supply Chain Control with Western Innovation," where he will emphasize that "Our goal is to play a vital role in building a robust and independent rare earth supply chain in North America, reducing reliance on Chinese imports and fostering technological innovation."

Terry Lynch, CEO of Power Nickel Inc. (TSXV: PNPN | OTCQB: PNPNF), will also take the stage to highlight the enduring importance of critical minerals in global economic strategies with his keynote, "Critical Minerals Have Always Been Critical." He will remind us that "Critical minerals have always been critical, regardless of who wins the 2024 U.S. election. The demand for these resources will continue to shape global strategies and economic policies." These keynotes, combined with panels on financing in the critical minerals sector, the impact of global elections on the market, and the evolving role of technology in achieving a sustainable supply chain, will provide attendees with invaluable insights and strategies for navigating the complex landscape of critical minerals. The CMI Summit III is set to be an unmissable event, offering a unique opportunity

to connect with industry leaders and shape the future of the critical minerals market.

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China to restrict critical antimony exports as geopolitical tensions target weapons: (August 15, 2024, Source) – China is set to impose export controls on antimony, a critical mineral for military production, as part of its strategy to tighten control over essential materials amid rising geopolitical tensions with the U.S. Effective September 15, the restrictions will apply to antimony metals, ores, and processing equipment for superhard materials. This move is seen as a countermeasure to U.S. sanctions on technology, aiming to hinder American weapons manufacturing. Antimony is crucial in producing military equipment, and China, the world's leading producer, seeks to leverage its dominance. Analysts view this as a retaliation against U.S. export controls on dual-use technologies. The Chinese government asserts that these controls are standard international practice, not targeting any specific country, while emphasizing national security and non-proliferation obligations.

BHP Mine Walkout Poses Risk To Copper Supply: (August 15, 2024, Source) – The Escondida copper mine in Chile, the world's largest, faces significant disruption due to a labor walkout after wage negotiations with BHP Group Ltd. (ASX: BHP | NYSE: BHP) failed. This mine, crucial to global copper supply, accounts for about 5% of the world's mined copper. Union No. 1, representing 90% of the workforce, demands a larger share of profits. The strike poses a risk to copper markets already affected by uncertainties in Chinese and U.S. demand and electric vehicle sales. BHP is operating under contingency plans, with talks expected to resume. The outcome could influence broader industry negotiations in Chile. The situation

has already impacted other mines, including Lundin Mining Corporation's (TSX: LUN) Caserones, where a smaller strike has also begun.

Biden administration announces $50 million to support electric vehicle manufacturing in 6 states: (August 15, 2024, Source) – The Biden administration has announced a $50 million investment to assist six states in transitioning their automotive manufacturing facilities to support electric vehicle (EV) production. This funding, part of the Investing in America plan, builds on previous awards aimed at revitalizing at-risk manufacturing facilities. Michigan will receive the largest share, $18.4 million, followed by Ohio, Indiana, Kentucky, Tennessee, and Illinois. Eligibility criteria require that recipients have a significant automotive workforce and qualify for at least $4 million in funding. Additionally, $1.5 million will be allocated to three teams led by universities to develop strategies for converting internal combustion engine suppliers to EV supply chains. The Department of Energy's Office of Manufacturing and Energy Supply Chains will oversee the distribution of funds.

Minister Wilkinson announces new investments in critical minerals in Saskatchewan: (August 14, 2024, Source) – On August 14, 2024, Minister Jonathan Wilkinson announced over $16 million in new funding to the Saskatchewan Research Council (SRC) to support critical minerals development. This investment will enable SRC to acquire bastnaesite, a rare earth ore, from Canadian sources and enhance domestic processing capacity. The funding also includes $209,330 from Natural Resources Canada for creating a public database of critical mineral characteristics. The initiative aligns with Canada's goal of becoming a global leader in the supply of critical minerals, essential for the clean economy, such as those used in electric vehicles and wind turbines. The SRC's Rare Earth Processing Facility in Saskatoon,

the first of its kind in Canada, plays a key role in this strategy, positioning Saskatchewan as a critical player in the global market.

India to offer incentives for critical minerals extraction, govt source says: (August 13, 2024, Source) – India is set to offer financial incentives to research institutes for providing technical assistance to miners in an effort to develop a domestic critical minerals industry. This initiative aims to reduce India's heavy dependence on imported lithium and rare earth minerals, crucial for energy transition technologies. Previous attempts to establish a critical minerals industry have struggled, with limited success in attracting interest due to challenges like low mineral concentration and high extraction costs. The government plans to allocate nearly $50 million for collaborations between research institutes and companies to advance extraction technologies. A letter from the Ministry of Mines on July 11 emphasized the need for tailored extraction techniques and invited joint proposals, offering up to 75% funding for approved projects.

UK critical minerals sector warns on banks' aversion to commodities: (August 13, 2024, Source) – The UK's critical minerals sector is facing challenges as domestic banks, like Lloyds, are increasingly hesitant to finance companies involved in volatile commodities markets. This reluctance clashes with the government's strategy, which aims to diversify supply chains for essential metals like nickel, cobalt, and graphite, crucial for clean energy and defense. Stephen Hall's company, Advanced Alloy Services (AAS), experienced significant difficulties securing refinancing due to its exposure to nickel price fluctuations, despite its long-standing profitability. The issue highlights a broader disconnect between the government's goals and the financial sector's risk aversion, which could hinder the development of a resilient critical minerals supply chain in the

UK. The situation has raised concerns that UK banks are not aligned with the national strategy, limiting access to government support mechanisms like UK Export Finance.

The Critical Minerals Institute (CMI) Summit III to Feature Ahmad Ghahreman of Cyclic Materials as Keynote Speaker: "Revolutionizing Rare Earth Recycling from Magnets: A Circular Economy Approach": (August 12, 2024, Source) – The Critical Minerals Institute (CMI) Summit III, scheduled for August 21-22, 2024, in Toronto, will feature Ahmad Ghahreman, President and CEO of Cyclic Materials Inc., as the keynote speaker. Ghahreman's address, titled "Revolutionizing Rare Earth Recycling from Magnets: A Circular Economy Approach," will highlight the significance of recycling rare earth elements from end-of-life products like hard disk drives and electric vehicle motors. He will discuss Cyclic Materials' innovative technologies, including the REEPure™ and Mag-Cycle™ processes, which aim to create a circular supply chain, reduce reliance on traditional mining, and support the transition to green energy. The summit will focus on the politics of the critical minerals market, gathering industry leaders to discuss global supply chains and strategic investments in essential minerals.

Uranium Market Heats Up: A Market Review Ahead of the Critical Minerals Institute Summit III: (August 12, 2024, Source) – The uranium market is experiencing significant shifts due to geopolitical changes, rising production costs, and evolving regulatory environments. As the world increasingly turns to nuclear energy to meet zero-carbon goals, uranium demand is projected to rise significantly, with estimates reaching 250 million pounds of U3O8 annually by 2040. However, the market faces challenges, including supply constraints, geopolitical risks, and price volatility. Key developments include the U.S. prohibition on Russian uranium imports, mergers in the industry, and advancements in mining operations. The upcoming Critical

Minerals Institute (CMI) Summit III will feature industry leaders discussing these market dynamics and the future of uranium as a critical mineral.

The Case for Critical Minerals versus Military Metals: (August 12, 2024, Source) – Rare earth permanent magnets (REPMs) are often considered vital for military use, but the U.S. Department of Defense (DoD) has a relatively small demand for neodymium-iron-boron (NdFeB) REPMs compared to civilian markets. The DoD has initiated efforts to develop a domestic supply chain to reduce reliance on China, yet challenges in sourcing and processing persist. The military'as demand should not be seen as a benchmark for the civilian market, where the need for REPMs in electric and hybrid vehicles is significantly larger. The DoD's goal to eliminate Chinese content from its supply chain faces skepticism due to the complexities involved. The broader market, particularly the automotive industry, is likely to play a more critical role in shaping the future of REPM supply and demand.

China Drives African Lithium Surge to Lock in Key Battery Metal: (August 12, 2024, Source) – Chinese companies are significantly boosting African lithium production, aiming to secure future supplies despite concerns of an oversupply. Africa's share of global lithium output has surged from nearly zero at the start of the decade to an expected 11% this year, with projections reaching over 14% by 2028. Chinese firms have heavily invested in countries like Zimbabwe, Mali, and Nigeria, commissioning mines and processing plants. As demand for lithium, a key component in batteries, grows, Africa is poised to play a critical role, especially as Chinese involvement faces resistance elsewhere. While informal mining still accounts for much of Africa's lithium production, industrial operations are rapidly expanding. Western companies are also eyeing African lithium, with several projects underway to diversify global supply chains.

InvestorNews.com Media Highlights:

- August 13, 2024 – InvestorTalk Alert: Rahim Suleman from Neo Performance Materials Inc. to host on Wednesday, August 14, 2024 https://bit.ly/3SOUstn
- August 12, 2024 – The Critical Minerals Institute (CMI) Summit III to Feature Ahmad Ghahreman of Cyclic Materials as Keynote Speaker: "Revolutionizing Rare Earth Recycling from Magnets: A Circular Economy Approach" https://bit.ly/3WZcN9H
- August 12, 2024 – The Case for Critical Minerals versus Military Metals https://bit.ly/3YDoqEB
- August 12, 2024 – Uranium Market Heats Up: A Market Review Ahead of the Critical Minerals Institute Summit III https://bit.ly/4dIYsUt

InvestorNews.com Video Highlights:

- August 12, 2024 – Terra Balcanica's Aleksandar Miskovic on uncovering high-grade uranium deposits in the Athabasca Basin https://youtu.be/HmB8gS8rmAw

InvestorNews.com Member News:

- August 16, 2024 – F3 Uranium and F4 Uranium Announce Completion of Arrangement https://bit.ly/3X5Z4xJ
- August 14, 2024 – Nano One Reports Q2 2024 Results and Provides Update https://bit.ly/3M90WQ0
- August 14, 2024 – Nord Precious Metals Announces Effective Date of Share Consolidation https://bit.ly/4fHXMR0
- August 13, 2024 – Scandium Canada Announces Closing of a Private Placement of $226,850 https://bit.ly/3M4ZgXR
- August 13, 2024 – NGen Awards Nano One and Worley $2.8

Million https://bit.ly/3SP2AdD

- August 13, 2024 – Coniagas Battery Metals Announces Results of Annual Meeting https://bit.ly/3WDUmpE
- August 13, 2024 – Technical Update: NEO Battery Advances Silicon Anode Technology with Extended Battery Capacity Performance https://bit.ly/3WLI8v1
- August 13, 2024 – F3 Expands B1 Shear by 80% with 700m Step-Out Hole https://bit.ly/3AnkwFG
- August 13, 2024 – Power Nickel Provides Exploration Update https://bit.ly/3SL0NpP
- August 12, 2024 – First Phosphate Announces Insider Purchases of Shares https://bit.ly/3X08H0X
- August 12, 2024 – American Rare Earths Forges a New Path to Accelerate Development of Key Wyoming Asset https://bit.ly/4dlbHL4
- August 12, 2024 – F3 Shareholders to Receive a Free Dividend F4 Share https://bit.ly/46MIUwK