Technology Metals Report (11.01.2024): BYD Revenue Beats Tesla, Energy Fuels Q3 Results, and the Appointment of a New CMI Co-Chair for Critical Minerals Advocacy

written by Tracy Hughes | November 1, 2024 Welcome to the latest issue of the Technology Metals Report (TMR), brought to you by the Critical Minerals Institute (CMI). In this edition, we compile the most impactful stories shared by our CMI Directors over the past week, reflecting the dynamic and evolving nature of the critical minerals and technology metals industry. Among the key highlights in this report is the appointment of Melissa "Mel" Sanderson as Co-Chair of CMI, bringing her expertise from the U.S. Foreign Service and Freeport-McMoRan Inc. (NYSE: FCX) to strengthen global advocacy in critical minerals. We also cover the UK's recent decision to leverage export finance to secure essential raw materials for automotive and tech industries, as well as Energy Fuels Inc. (NYSE American: UUUU | TSX: EFR) reporting its Q3-2024 results, spotlighting its uranium and rare earth production centered in the U.S.

This week's TMR Report also highlights new partnerships aimed at diversifying nuclear fuel supplies, such as the TerraPower and ASP Isotopes Inc. (NASDAQ: ASPI) collaboration on high assay low enriched uranium (HALEU) production, which addresses U.S. energy security concerns. Other developments include Saudi Arabia's talks to acquire a stake in a Zambian copper mine, signaling a

strategic shift toward renewable energy resources, and Japan's efforts to tackle a nuclear workforce shortage as it revitalizes its energy sector. Finally, China has tightened control over minerals vital to semiconductor production, further heightening global supply chain security concerns. For more insights and to join CMI's growing network, consider becoming a member here.

Critical Minerals Institute (CMI) Announces the Appointment of Melissa "Mel" Sanderson as Co-Chair, Elevating Its Leadership in Global Critical Minerals Advocacy (October 31, 2024, Source) -The Critical Minerals Institute (CMI) has appointed Melissa "Mel" Sanderson as its new Co-Chair, enhancing its leadership in global critical minerals advocacy. Mel, with a rich background in geopolitics and environmental, social, and governance (ESG) strategies, brings a wealth of experience to CMI. Her career began in the US Foreign Service, where she played a critical role in key diplomatic initiatives across various continents from 1985 to 2006. After her government service, Mel transitioned to the private sector, notably as Director of International Affairs at Freeport-McMoRan Inc. (NYSE: FCX). More recently, she founded Sanderson Consulting LLC and serves on the board of American Rare Earths Limited (ASX: ARR | OTCQX: ARRNF). Mel's extensive diplomatic and corporate experience will significantly support CMI's initiatives, aiming to bridge public and private sector insights for better management of critical mineral resources.

UK approves use of export finance to secure critical minerals (October 31, 2024, Source) — The UK government has empowered UK Export Finance (UKEF) to extend financial support for securing critical minerals essential for the country's major industries. This initiative aims to enhance access to vital raw materials like lithium, graphite, and cobalt, crucial for automotive, defence, aerospace, and technologies like electric vehicles and renewable energy sources. By offering credit guarantees to

overseas companies, UKEF facilitates debt financing for projects that supply critical minerals to UK exporters. This move is in response to the intense global demand and competition for these minerals, vital for industrial growth and the net-zero transition. The effort includes collaborating with international partners and finance bodies to develop secure and resilient supply chains, thereby boosting UK economic resilience and technological leadership. This initiative aligns with the global Minerals Security Partnership, aiming to stabilize critical mineral supplies.

Energy Fuels Announces Q3-2024 Results, Including Active Uranium Mining and Processing, Successful Rare Earth Production, and Continuing to Build a World-Scale Rare Earth Supply Chain Centered in the U.S. (October 31, 2024, Source) - Energy Fuels Inc. (NYSE American: UUUU | TSX: EFR) reported its Q3-2024 results, showcasing strong performance in uranium mining and rare earth element (REE) production, alongside the strategic expansion of its rare earth supply chain in the U.S. The company highlighted its robust balance sheet with \$183.16 million in working capital and no debt. Notable achievements include the successful commissioning of the Phase 1 REE separation circuit, producing 38 tonnes of separated NdPr, and acquiring Base Resources Limited (ASX: BSE), enhancing its heavy mineral sands and monazite projects. Despite a net loss of \$12.08 million, primarily due to acquisition costs, the company continues to drive revenue through uranium sales and has expanded its uranium production capacity while also focusing on medical isotope development and vanadium stockpiling. The upcoming earnings call on November 1, 2024, will further detail these developments and future strategies.

Gates-backed reactor company, ASP Isotopes plan plant to make nuclear fuel (October 30, 2024, <u>Source</u>) — Bill Gates-backed <u>TerraPower LLC</u> and <u>ASP Isotopes Inc.</u> (NASDAQ: ASPI) have

partnered to produce high assay low enriched uranium (HALEU), a nuclear fuel crucial for next-generation reactors but currently mainly produced in Russia. This collaboration is significant as it addresses the U.S. strategic need to diversify HALEU suppliers, especially after Russia's monopoly became a concern following its invasion of Ukraine, which delayed TerraPower's Natrium plant project in Wyoming until 2030. While the location for the new HALEU production facility remains undecided, South Africa is a probable candidate. Financial specifics of the deal are undisclosed, but starting costs are estimated in the tens of millions. HALEU is enriched up to 20%, raising non-proliferation concerns due to its potential weapons risk, with suggestions to limit enrichment to 10%-12% for safety.

Chinese EV maker BYD's revenue beats Tesla for first time (October 30, 2024, Source) - Chinese electric vehicle (EV) maker BYD surpassed Tesla Inc. (NASDAQ: TSLA) in quarterly revenue for the first time, posting a significant increase in its third-quarter net profit by 11.5% to 11.6 billion yuan (\$1.63 billion). The profit for the first nine months increased by 18.1% to 25.2 billion yuan. BYD's third-quarter revenue rose by 24% year-over-year to 201.1 billion yuan (\$28.24 billion), outpacing Tesla's \$25.2 billion for the same period. Despite this financial growth, Tesla still led in global EV sales from July to September. BYD's robust sales, particularly in plug-in hybrids which surged by 75.6%, were bolstered by Chinese government incentives for greener vehicles. However, BYD's market share in pure EVs has declined amid stiff competition within China. The company has also increased its focus on expanding internationally, particularly in Europe, despite additional tariffs.

Nuclear fuel producer calls for more incentives to end Russia reliance (October 30, 2024, <u>Source</u>) — Nicolas Maes, CEO of Orano, the second-largest western supplier of enriched uranium,

emphasizes that Western dependence on Russian nuclear fuel can only be reduced with significant incentives for alternative suppliers or stricter sanctions on Moscow. Following Russia's 2022 invasion of Ukraine, nuclear fuel chains were less affected by sanctions compared to oil and gas, given Russia's dominant market share. Although the U.S. has initiated a ban on Russian nuclear fuel, complexities arise in Europe due to its heavy reliance on Russian supplies. Maes suggests that constructing new uranium enrichment facilities, a feasible task over a few years, requires guaranteed demand through long-term contracts to encourage investment. Despite potential sanctions facilitating new investments, Maes warns that without them, providers might continue sourcing from Russia.

Saudi Arabia in advanced talks over Zambia copper mine stake, Ma'aden CEO says (October 30, 2024, Source) — Saudi Arabia is nearing a deal to acquire a stake in a copper mine in Zambia through discussions led by Ma'aden CEO and Manara Minerals vice chairman, Robert Wilt. The negotiations, expected to conclude by year's end, are part of a broader effort to expand Saudi Arabia's mining sector and reduce oil dependency, aligning with Crown Prince Mohammed Bin Salman's Vision 2030. Manara, a joint venture between Ma'aden and the Saudi Public Investment Fund, is also in talks to buy 15% to 20% of First Quantum Minerals Ltd.'s (TSX: FM) copper and nickel assets in Zambia, valued between \$1.5 billion and \$2 billion. This follows Manara's initial significant investment in Vale Base Metals, reflecting Saudi Arabia's strategic focus on copper for its role in the global energy transition.

Abandoned copper mines embraced as fast track to boost output (October 30, 2024, <u>Source</u>) — In response to the surging demand for copper due to its essential role in clean energy and AI technologies, companies are reactivating abandoned copper mines to accelerate supply. These once-dormant assets, now seen as

valuable, could contribute around 7 million metric tons of copper within the next five years. Rehabilitating old mines, which is seen as a quicker and cheaper alternative to building new ones, can cut down the typical decade-long and multi-billion dollar development process. This strategy is also gaining traction due to copper's role in critical applications like electric vehicles and renewable energy, with demand expected to exceed supply by 2035. Efforts are underway globally, from Canada to Spain, involving diverse entities including Indigenous groups and private equity firms, with several projects on track to contribute significantly to copper output by the decade's end.

Japan's Nuclear Power Revival Threatened by Lack of Workers (October 29, 2024, Source) - Japan's recent move to restart the Onagawa nuclear power plant, near the epicenter of the 2011 earthquake, marks a significant push towards reviving nuclear energy—a sector left crippled by a severe skilled worker shortage post-Fukushima disaster. The plant's operational staff illustrates this challenge vividly, with over a third lacking real reactor experience, instead having only simulator training. This workforce gap threatens Japan's nuclear resurgence, critical for achieving carbon neutrality and supporting techdriven demands, such as AI data centers. A nationwide drop in nuclear industry workers, coupled with a decline in nuclear engineering students, exacerbates the situation. Efforts are underway, including job fairs and enhanced training, to rebuild expertise and interest in nuclear careers, essential for Japan's energy security and environmental goals.

China Tightens Its Hold on Minerals Needed to Make Computer Chips (October 28, 2024, Source) — China has escalated its control over the supply of rare minerals crucial for advanced technologies like computer chips, implementing stringent export restrictions and increasing state ownership in the sector.

Already a dominant force, producing almost the entire global supply of these materials, Beijing's new measures have solidified its market dominance further. Starting October 1, exporters are required to provide detailed tracking of how rare earth metals are utilized in Western supply chains, enhancing China's authority to dictate which foreign companies receive these critical supplies. Additionally, in a largely unnoticed move, China is acquiring the last two foreign-owned rare earth refineries, further centralizing control. These actions coincide with restrictions on other essential minerals like antimony, intensifying concerns over supply chain vulnerabilities and national security among global semiconductor manufacturers and nations dependent on these materials.

China's Cobalt King Hits Output Goal Months Ahead of Schedule (October 28, 2024, Source) — CMOC Group Ltd., the world's leading cobalt miner, exceeded its annual production target for 2024 in just nine months, producing 84,722 tons of cobalt, significantly surpassing the projected 70,000 tons. This acceleration in output has contributed to a global surplus of cobalt, driving prices to an eight-year low. CMOC, which overtook Glencore Plc as the top cobalt supplier last year, has also seen substantial growth in copper production, with a 78% increase in the first three quarters and potential to reach 600,000 tons by year-end. The company's earnings for the third quarter reflected a 64% increase in net income, buoyed by high copper yields. Additionally, CMOC has signed a significant three-year supply deal with battery giant CATL, marking a deepening collaboration in the supply of critical metals.

DOE Announces \$2.26 Billion Loan to Lithium Americas Corp. (October 28, 2024, <u>Source</u>) — The U.S. Department of Energy (DOE) has finalized a \$2.26 billion loan to Lithium Americas Corp.'s (TSX: LAC | NYSE: LAC) subsidiary, Lithium Nevada Corp., to support lithium processing facilities at Thacker Pass, Nevada.

This site harbors North America's largest confirmed lithium reserve, with the planned facilities poised to generate about 40,000 tonnes of battery-grade lithium carbonate annually. This endeavor is aligned with the Biden-Harris Administration's strategy to bolster the U.S. clean energy sector and reduce dependence on foreign critical minerals, specifically targeting the electric vehicle (EV) battery supply chain. The project is set to create 1,800 construction jobs and 360 permanent jobs, further enhancing local economic growth.

Investor.News Media Highlights:

- October 31, 2024 Critical Minerals Institute (CMI) Announces the Appointment of Melissa "Mel" Sanderson as Co-Chair, Elevating Its Leadership in Global Critical Minerals Advocacy https://bit.ly/3UurK1M
- October 29, 2024 Demand arises from military or civilian procurement of critical minerals? https://bit.ly/3NL8aL2

Investor.News Video Highlights:

 October 30, 2024 — Meteoric Resources CEO Nick Holthouse Discusses Caldeira Project's Rare Earths Advantage and Recent Scoping Study https://youtu.be/ZIfKhlA18 I

Investor.News Member News:

- October 31, 2024 First Phosphate Files NI 43-101
 Technical Report for Initial Mineral Resource Estimate at Begin-Lamarche Property, Saguenay-Lac-Saint-Jean Quebec https://bit.ly/3Aq7cAP
- October 31, 2024 F3 Announces Closing of Private

- Placement for Aggregate Gross Proceeds of C\$8 Million https://bit.ly/40u31yv
- October 31, 2024 Energy Fuels Announces Q3-2024 Results, Including Active Uranium Mining and Processing, Successful Rare Earth Production, and Continuing to Build a World-Scale Rare Earth Supply Chain Centered in the U.S. https://bit.ly/3Ant0lm
- October 30, 2024 Critical Metals PLC Final Results https://bit.ly/3UyDhNF
- October 30, 2024 Appia Announces Closing of \$1,070,000 Non-Brokered Private Placement https://bit.ly/3C2RPia
- October 30, 2024 Meteoric Resources NL: Quarterly Activities Report September 2024 https://bit.ly/4hoxeFg
- October 29, 2024 Nord Precious Metals Update on Miller Creek Tailings Reprocessing and Backfilling Near-Surface Open Stopes https://bit.ly/4hiMHGK
- October 29, 2024 NEO Battery Materials Enters into Letter of Intent with Canadian Municipality for Commercial Facility Land Lease https://bit.ly/3YFlXck
- October 29, 2024 F3 Hits 12.0% U308 Over 2.0m Within 2.66% Over 10.5m https://bit.ly/4hovgV9
- October 29, 2024 Australian Strategic Materials: Quarterly Activities Report to 30 September 2024 <u>https://bit.ly/3C12oSS</u>
- October 29, 2024 American Rare Earths: Quarterly Activities Report for the Period Ending 30 September 2024 https://bit.ly/4f4S0Iy
- October 28, 2024 Media Advisory Neo Performance Materials Inc. Third Quarter 2024 Earnings Release & Conference Call https://bit.ly/3YESsY5
- October 28, 2024 NEO Battery Materials Announces Closing of Non-Brokered Private Placement https://bit.ly/40knNQX
- October 28, 2024 Power Nickel Announces Biggest Intersection Yet! https://bit.ly/4f0plUW

The upcoming **CMI Summit IV**, themed *The War for Critical Minerals and Capital Resources*, is scheduled to take place in Toronto, Ontario, on May 13-14, 2025. This event aims to unite industry leaders to tackle pressing issues in the global critical minerals market. To learn more about the **CMI Summit IV**, <u>click here</u> — or to secure a **CMI Summit IV** 2-day Delegates Pass, <u>click here</u>

