

# Technology Metals Report (10.11.2024): Rio Tinto's \$6.7B Lithium Acquisition, Canada-Italy Critical Minerals Partnership, and Congo's Push to Reduce Chinese Mining Dominance

written by Tracy Hughes | October 11, 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 highlight the most significant stories from our [CMI Directors](#), reflecting major shifts and developments in the critical minerals and technology metals sector. Among the key stories are Rio Tinto's \$6.7 billion acquisition of Arcadium Lithium PLC, positioning it as a leading player in the lithium market, and the joint initiative between Canada and Italy aimed at strengthening critical mineral supply chains through enhanced international collaboration.

This week's TMR Report also covers Congo's efforts to reduce its reliance on China's dominance in mining, which could reshape global supply routes for copper and cobalt. In a critical analysis, industry expert Jack Lifton discusses why U.S. automakers must pivot away from their dependence on China's critical minerals, drawing on historical parallels to illustrate the urgency of recalibrating strategies in light of shifting geopolitical dynamics.

Other notable stories include POSCO's concerns over U.S. delays in enforcing restrictions on Chinese graphite and the projected sharp decline in electric vehicle battery prices by 2026, which could accelerate the adoption of EVs globally. Together, these stories underscore the significant transformations occurring in the critical minerals landscape, with global supply chain stability and technological innovation at the forefront.

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**Joint Statement on Critical Minerals and Critical Raw Materials Cooperation** (October 10, 2024, [Source](#)) – In the context of the G7 Ministerial Meeting on Industry and Technological Innovation, Canada and Italy have jointly announced their intention to enhance collaboration on critical minerals and raw materials. This initiative, part of the Italy-Canada Roadmap and supported by the 2022 Canadian Critical Minerals Strategy, focuses on advancing energy security and sustainability through an Energy Dialogue. The dialogue will address critical minerals, energy transitions, sustainable fuels, storage solutions, and advanced nuclear technologies. Both nations emphasize the need for diversified, resilient, and sustainable supply chains and aim to foster cooperation through trade, investment, policy exchanges, and technical standards. Key areas of collaboration include strengthening supply chains, international and multilateral engagement, joint research initiatives, and shared exploration strategies. This partnership underscores a commitment to deepen ties and promote sustainable development in critical mineral sectors.

**Congo Wants to Pivot Away From China's Dominance Over Its Mining** (October 9, 2024, [Source](#)) – The Democratic Republic of Congo is actively seeking to reduce China's dominance in its mining

sector by attracting a more diverse group of investors, as stated by Mines Minister Kizito Pakabomba. Efforts to streamline customs and tax processes, coupled with a strategic partnership with the United Arab Emirates, aim to enhance the efficiency of mineral exports, particularly through an upgraded railway system to the Atlantic Ocean, better linking to US and European markets. Amidst global competition for access to vital minerals, Congo, a major player in the production of copper and cobalt, is reassessing control over its resources. This includes opposing the sale of significant mining interests to Chinese companies, considering new export controls, particularly for cobalt, and planning a significant railway project to diversify export routes. The US has committed \$553 million to support part of this rail project, emphasizing its strategic importance.

**Rio Tinto goes all in on lithium with \$6.7 billion Arcadium buy** (October 9, 2024, [Source](#)) – Rio Tinto Group (NYSE: RIO | ASX: RIO | LSE: RIO) is set to acquire U.S.-based Arcadium Lithium PLC (NYSE: ALTM | ASX: LTM) for \$6.7 billion, positioning itself as the world's third-largest lithium miner. This acquisition aligns with Rio's strategy to transform into a major supplier of low-carbon raw materials, vital for the energy transition. Despite current lithium oversupply and market downturns, Rio's CEO Jakob Stausholm foresees a future supply shortfall and strong demand growth driven by electric vehicles and energy storage, projecting over 10% annual growth until 2040. The deal offers Rio access to significant lithium resources across Argentina, Australia, Canada, and the U.S., and customer partnerships including major automakers like Tesla, BMW, and General Motors. While Rio's shares dipped slightly, Arcadium's stock surged post-announcement. The transaction, which is not expected to alter Rio's near-term capital expenditure plans, should close by mid-2025.

**POSCO expresses concerns over delayed US ban on Chinese graphite**

(October 9, 2024, [Source](#)) – POSCO Future M has expressed significant concerns to U.S. Ambassador Philip Goldberg about the negative impacts of the U.S. government's two-year delay in enforcing the Foreign Entities of Concern (FEOC) restrictions under the Inflation Reduction Act. These restrictions, aimed at curbing subsidies for electric vehicles (EVs) with batteries containing critical minerals from countries like China, have been postponed until the end of 2026. POSCO's CEO, Yoo Byeong-og, emphasized the need for consistent U.S. policies during Goldberg's visit to their anode materials plant in Pohang. This delay has adversely affected POSCO Future M by reducing profits and capacity utilization in their anode materials sector, despite domestic battery manufacturers appreciating the continued access to inexpensive Chinese graphite. This situation undermines POSCO's role as a potential stabilizer in the U.S. anode materials supply chain.

**Exit Strategy: Why U.S. Automakers Must Leave China's Critical Mineral Market** (October 9, 2024, [Source](#)) – Jack Lifton makes a compelling case for American OEM automotive industries to exit the Chinese market, drawing from his extensive experience in the chemical and automotive sectors. He highlights historical parallels, notably the 1972 Arab Oil Price Shock, to emphasize strategic missteps and the over-reliance on Chinese critical minerals. Lifton critiques the shortsightedness of American strategies against China's proactive, long-term approach to securing dominance in mineral production and pricing. He warns of the potentially irreversible consequences of current policies, urging a reassessment of American dependencies on Chinese markets. Through historical insights, Lifton illustrates the urgent need for the U.S. automotive industry to adapt and avoid the economic decline faced by predecessors who failed to respond to shifting global dynamics.

**China is oversupplying lithium to eliminate rivals, US official**

**says** (October 8, 2024, [Source](#)) – Chinese lithium producers are reportedly saturating the global market, significantly dropping prices in a strategy to undercut competitors, according to a senior U.S. official, Jose Fernandez. During a briefing in lithium-rich Portugal, Fernandez highlighted that China's production far exceeds current global demand, aligning with a deliberate tactic to challenge the objectives of the U.S. Inflation Reduction Act. This act represents the largest U.S. investment in climate and energy, amounting to over \$400 billion. As a consequence of this "predatory" pricing, even Chinese companies like CATL are halting production at some mines due to the downturn. The falling lithium prices are also hampering efforts in Europe, particularly Portugal, to diversify and develop its lithium mining sector. This situation has exacerbated trade tensions, with the EU and U.S. taking measures against perceived unfair practices by China in green technologies.

**Cameco Eyes Expansions of Uranium Mines on Rising Nuclear Demand** (October 8, 2024, [Source](#)) – Cameco Corp. (NYSE: CCJ | TSX: CC0), a leading uranium producer, is planning to expand its mining operations due to increasing global demand for nuclear power. CEO Tim Gitzel highlighted the company's high-quality uranium deposits and potential project expansions, though specifics were not disclosed. Despite a significant rise in uranium prices over the past three years, driven by heightened investment and nuclear energy initiatives, prices have recently declined by 22% from a record peak earlier this year. Gitzel, with four decades in the industry, described the current market dynamics as the most favorable he has witnessed for nuclear power.

**Copper demand for electric vehicles is intact, trader IXM says** (October 7, 2024, [Source](#)) – The demand for copper in the electric vehicle (EV) industry remains robust despite a recent slowdown in EV sales, according to Tom Mackay, head of refined

metal at commodity trader IXM. Factors such as inadequate charging infrastructure and concerns over resale values have impacted EV sales, yet the market's overall growth persists. Despite the challenges in forecasting due to the nascent state of the EV market and varying battery technologies, Mackay notes that the adoption rates and advancements in battery chemistries like lithium iron phosphate (LFP) contribute to a complex but growing demand landscape. LFP batteries, initially developed for the Chinese market, have improved significantly, offering longer distances and faster charging times. Additionally, recyclability remains a key factor for automakers in choosing battery chemistries, with a preference for nickel cobalt manganese (NCM) due to its higher recycling value.

**Electric vehicle battery prices are expected to fall almost 50% by 2026** (October 7, 2024, [Source](#)) – Goldman Sachs Research forecasts a significant drop in electric vehicle (EV) battery prices, projecting a nearly 50% reduction by 2026, potentially reaching as low as \$80 per kilowatt-hour. This decline is attributed to advancements in technology increasing energy density and decreasing costs, coupled with a downturn in green metal prices such as lithium and cobalt, which constitute a substantial portion of battery costs. These factors are set to enhance the affordability and competitiveness of battery electric vehicles, possibly achieving cost parity with gasoline-powered vehicles in the U.S. without subsidies. Further developments are expected in battery technology, including the potential of solid state batteries, which could revolutionize energy density and safety standards, although their commercial viability remains a challenge. Current lithium-based technologies, particularly lithium ferrophosphate (LFP) and advanced nickel batteries, dominate the market and are likely to continue leading amid ongoing R&D investments by established manufacturers.

**KoBold Metals, which uses AI to help find critical minerals for the energy transition, raises \$491M** (October 7, 2024, [Source](#)) – KoBold Metals, an AI-driven startup focused on finding critical minerals like copper, lithium, nickel, and cobalt, has successfully raised \$491 million of a targeted \$527 million in funding. Earlier this year, KoBold discovered a potentially monumental high-grade copper deposit in Zambia, which could produce hundreds of thousands of metric tons annually. This find has propelled the company toward a significant funding round aimed at developing this vast resource and advancing other exploration projects. KoBold, previously valued at \$1 billion, is now targeting a \$2 billion valuation. The startup, backed by high-profile investors such as Bill Gates and Jeff Bezos, plans to use artificial intelligence to enhance its prospecting success rates, shifting from pure discovery to also developing the Zambia copper resource, a project estimated to cost \$2.3 billion.

**TotalEnergies considers foray into copper trading, top executive says** (October 6, 2024, [Source](#)) – TotalEnergies SE (NYSE: TTE), a French energy conglomerate, is contemplating a venture into copper trading, as part of a strategy to diversify its trading portfolio beyond oil and gas. Rahim Azouni, a senior executive, disclosed the company's considerations at a private conference in London, highlighting the energy transition as a primary motivation for this potential expansion. Although a final decision has not been made, this move aligns with a trend where traditional oil traders are shifting towards metals, driven by surging global demand for copper, crucial for electric vehicles and renewable energy infrastructures. This strategic pivot comes amidst the backdrop of a stagnant oil market influenced by reduced demand from China and ongoing geopolitical tensions. Other trading giants like Vitol and Mercuria are also adapting, with increased focus on metals like aluminium and copper,

indicating a broader shift in the trading sector towards commodities essential for future energy solutions.

**Critical Minerals, Economic Decline, and the Role of Gold in Global Dominance** (October 6, 2024, [Source](#)) – The acquisition of critical minerals, pivotal for economic dominance, is handled differently by the U.S. government and military versus the influence of the Chinese market on private industry prices. While the U.S. operates under specific economic conditions, private industries follow pricing set in the Chinese marketplace, a major hub for the global trade of minerals and manufacturing. The column critiques Western governments for their hypocrisy in condemning Chinese subsidies, which they deem as unfair competitive advantages, while simultaneously advocating for similar subsidies to support their faltering domestic industries. This discussion extends to broader geopolitical shifts, noting the decline of American economic dominance and the rise of new powers like China and Russia, who are enhancing their economic strength through gold accumulation. The analysis foresees a move toward U.S. isolationism, impacted by poor financial and political decisions, and predicts an inevitable degradation in the American standard of living due to lack of self-sufficiency in critical mineral production and processing.

## **Investor.News Media Highlights:**

- October 10, 2024 – Inside the CMI Hitlist: The Five Critical Minerals Shaping Global Supply Chains <https://bit.ly/3NlcFM1>
- October 09, 2024 – Exit Strategy: Why U.S. Automakers Must Leave China's Critical Mineral Market <https://bit.ly/4dEvQLI>
- October 08, 2024 – The Critical Minerals Challenge: A Look

- at the Elements Powering the Future <https://bit.ly/4dyljBH>
- October 07, 2024 – Hallgarten + Company Initiates Coverage on First Phosphate: Advancing Phosphate Production for the LFP Battery Market <https://bit.ly/4e0UREK>
  - October 06, 2024 – Critical Minerals, Economic Decline, and the Role of Gold in Global Dominance <https://bit.ly/47XZeet>
  - October 4, 2024 – Why Jet-Setting Billionaires Should Defer to the Scientists in Determining the Critical Minerals List <https://bit.ly/4euZPH6>

## **Investor.News Video Highlights:**

- October 10, 2024 – Guy Bourassa and Dr. Luc Duchesne of Scandium Canada Discuss the Advancement of 3D Printing with Breakthrough Aluminum-Scandium Alloys <https://youtu.be/eQZ-QjuBuPs>

## **Investor.News Member News:**

- October 11, 2024 – Defense Metals Announces Closing of Fully Subscribed Convertible Bridge Financing; Raises Gross Proceeds of \$4 Million & Provides Update on Prefeasibility Study and CEO Search <https://bit.ly/3zVZga6>
- October 11, 2024 – Disposal of Panther Metals Ltd Holding <https://bit.ly/4gYJ8p9>
- October 10, 2024 – F3 Announces Revised Bought Deal Private Placement for Gross Proceeds of C\$7 Million <https://bit.ly/4eEtzkH>
- October 9, 2024 – F3 Announces Bought Deal Private Placement for Gross Proceeds of C\$5 Million <https://bit.ly/4h19NkZ>

- October 9, 2024 – Panther Metals PLC Dotted Lake: Drill Targets <https://bit.ly/3YcIzR7>
- October 7, 2024 – NEO Battery Materials Signs Joint Development Agreement with Fortune Global 500 Chemical Materials Company <https://bit.ly/3ZT0hc3>
- October 7, 2024 – Panther Metals PLC – Dotted Lake: Technical Update, Inversion & Drill Targets <https://bit.ly/3TUhP5t>