

Technology Metals Report (09.20.2024): U.S. and China Intensify Critical Minerals Rivalry as Biden Administration Announces Over \$3B in Grants for EV Battery Production

written by Tracy Hughes | September 20, 2024

Today's major breaking story in the critical minerals sector involves the Biden administration's [announcement](#) of over \$3 billion in grants to bolster U.S. electric vehicle (EV) battery production. This funding, part of a broader initiative to reduce reliance on China, will support 25 projects across 14 states, focusing on the domestic supply chain for critical minerals such as **lithium, graphite, and rare earth elements** ([CMI Critical Minerals List](#)). The goal is to establish a more resilient and sustainable supply chain for materials vital to EVs and national security.

In a parallel move, China has introduced new [restrictions](#) on exports of key minerals, including antimony, which is used in defense applications such as night-vision goggles and nuclear weapons. These restrictions are expected to drive up prices and increase pressure on Western economies to diversify their mineral supply chains away from China. U.S.-based companies like Perpetua Resources Corp. (NASDAQ: PPTA | TSX: PPTA) are ramping up efforts to produce antimony domestically in response to these supply concerns.

Further to this morning's highlights, the [Critical Minerals Institute](#) (CMI), which monitors the global media, notes that this week's *Technology Metals Report (TMR)* story highlights include China's discovery of nearly 5 million tonnes of rare earth elements in Sichuan's Liangshan Yi autonomous prefecture, reinforcing its global dominance in the rare earth market. China's China Rare Earth Group, formed in 2021, is focusing on expanding resources, enhancing reserves, and fostering innovation in downstream industries, solidifying its competitive advantage amid rising global rivalry with the U.S. Meanwhile, the Biden administration is close to approving Ioneer Ltd.'s lithium mine in Nevada, which could supply enough lithium for 370,000 EVs annually. This project is part of the U.S. strategy to reduce dependence on foreign critical minerals, especially from China, though environmental concerns about the endangered Tiehm's buckwheat flower have raised challenges.

Germany is also advancing its raw materials autonomy with the opening of Europe's first lithium refinery by AMG Critical Materials, set to produce battery-grade lithium hydroxide for around 500,000 EVs annually. This move aligns with the EU's push for supply chain independence and complements Germany's recent billion-euro pledge to support critical raw materials projects. Additionally, Indonesia and Britain have signed a collaboration agreement on critical minerals, emphasizing sustainable practices in resource processing and supply chain resilience. This partnership aims to strengthen their roles in the global supply chain, especially in sectors like nickel and EV battery production.

Special thanks to [Allonnia LLC](#), which joined the [Critical Minerals Institute](#) (CMI) this week as a [Silver CMI Member](#). Allonnia is a biotechnology company focused on using engineered biology to solve environmental challenges related to critical minerals. Their innovative solutions help extract and remediate

metals from mining waste, treat water in mining processes, and break down pollutants associated with mining and mineral processing, contributing to more sustainable and eco-friendly operations in the critical minerals supply chain.

For more information on the CMI, [click here](#), or to become a member (CAD\$250 annually), [click here](#)

Biden-Harris Administration Announces Over \$3 Billion to Support America's Battery Manufacturing Sector, Create Over 12,000 Jobs, and Enhance National Security (September 20, 2024, [Source](#)) – The Biden-Harris Administration has allocated over \$3 billion to support 25 battery manufacturing projects across 14 states, creating more than 12,000 jobs. This investment is part of the broader “Investing in America” agenda, which aims to generate \$16 billion in total investment for the onshoring of critical battery materials like lithium and the expansion of battery production and recycling. These projects will play a crucial role in strengthening the U.S. electric vehicle (EV) supply chain, enhancing national security, and promoting economic competitiveness. The initiatives also align with climate goals by supporting the clean energy transition and the creation of a circular domestic battery supply chain. Additionally, nearly 90% of the selected projects are located in or near disadvantaged communities, advancing the Justice40 Initiative. Many projects involve union labor agreements to ensure good-paying jobs, contributing to a revival of U.S. manufacturing and supporting President Biden's clean energy industrial strategy.

China safeguards rare earth reserves with discovery of 5 million tonnes of key metals (September 19, 2024, [Source](#)) – China recently discovered nearly 5 million tonnes of rare earth elements in Sichuan's Liangshan Yi autonomous prefecture, bolstering its rare earth reserves amid rising global competition, particularly with the US. These elements are vital

for technological advancements, including electric vehicles, wind turbines, and military applications. China, the world's largest producer of rare earths, controls around 70% of global production. The China Rare Earth Group, formed in 2021, emphasizes securing national interests by expanding resources, increasing reserves, and improving production. The discovery enhances China's resource advantage in the global market, with experts calling for more focus on downstream industries and technological innovation. Despite a global supply increase, China's rare earth dominance remains critical in the escalating tech rivalry between China and the US.

Biden administration nears approval for Ioneer's Nevada lithium mine (September 19, 2024, [Source](#)) – The Biden administration is nearing approval for Ioneer Ltd's (ASX: INR | NASDAQ: IONR) Rhyolite Ridge lithium mine in Nevada, following the release of a final environmental report from the U.S. Bureau of Land Management (BLM). This marks the last step before the mine can receive its permit. The project is significant as it could supply lithium for 370,000 electric vehicles annually, supporting U.S. efforts to reduce dependence on foreign critical minerals, especially from China. However, environmental concerns loom due to the presence of the endangered Tiehm's buckwheat flower at the site. The BLM, in collaboration with conservation groups, proposed measures to protect the plant. Despite opposition from some environmental organizations, Ioneer has committed to balancing lithium production with ecological preservation. A final decision will follow a 30-day review period.

Germany Moves Toward Greater Raw Materials Autonomy (September 19, 2024, [Source](#)) – Germany is moving towards greater raw materials autonomy with the opening of Europe's first lithium refinery by Dutch company AMG Critical Materials N.V. in Bitterfeld-Wolfen, Germany. The plant will produce 20,000 metric

tons of battery-grade lithium hydroxide annually, enough for around 500,000 electric vehicle batteries. It is the first of five planned modules, with potential expansion to 100,000 metric tons per year. This initiative aligns with the EU's Critical Raw Materials Act, aimed at enhancing Europe's supply chain independence. The German government recently pledged one billion euros to support domestic and international raw materials projects, but it is unclear if AMG received state financial aid. The facility contributes to a growing raw materials sector in Germany, driven by EU battery regulations and a push for a circular economy.

Indonesia, Britain sign collaboration agreement on critical minerals (September 18, 2024, [Source](#)) – Britain and Indonesia have signed a memorandum of understanding to collaborate on critical minerals, focusing on policy dialogue, technical knowledge sharing, and enhancing supply chain resilience. This partnership emphasizes sustainable processing in both upstream and downstream sectors, making both countries key players in the critical minerals supply chain. Indonesia, rich in resources like nickel, tin, copper, and bauxite, seeks to boost investment in mineral processing and electric vehicle battery manufacturing. The agreement, signed by Britain's development minister Anneliese Dodds and Indonesia's energy minister, follows Indonesia's recent efforts to expand its nickel processing industry. Despite these advances, concerns remain about environmental damage caused by smelters, including deforestation and pollution. The partnership aims to balance economic benefits, such as job creation, with environmental protection.

Focus: BHP's Australian nickel stoppages spoil plans for LME alternative (September 18, 2024, [Source](#)) – BHP Group Ltd.'s (ASX: BHP | NYSE: BHP) decision to suspend its nickel operations in Western Australia has disrupted plans for two new nickel

trading platforms aimed at challenging the London Metal Exchange (LME). These platforms, backed by BHP, sought to reform nickel trading after the LME's 2022 market crash, but now face delays as BHP cannot commit its nickel volumes. Global Commodities Holdings Limited (GCHL) and Abaxx Technologies had counted on BHP's participation to launch their respective platforms. GCHL's physical nickel platform and Abaxx's nickel sulphate contract have both been affected, with each seeking alternative supply sources. BHP's suspension comes amid an oversupplied nickel market and plummeting prices. Despite these setbacks, both initiatives remain committed to creating a more transparent and independent pricing system for nickel, adjusting their strategies in response to industry changes.

China says will negotiate 'until the last minute' on EU EV probe (September 18, 2024, [Source](#)) – China's commerce minister, Wang Wentao, announced that Beijing will negotiate "until the last minute" regarding the European Union's investigation into Chinese electric vehicles (EVs). The probe, which examines whether China's EVs benefit from unfair subsidies, has raised concerns among Chinese companies about investing in Europe. Wang made the remarks during a China-Europe EV event in Brussels, where industry leaders from both regions discussed the issue. On Thursday, Wang is scheduled to meet EU trade commissioner Valdis Dombrovskis to address increasing trade tensions. The European Commission is considering final tariffs of up to 35.3% on Chinese-built EVs, in addition to the EU's standard 10% import duty. The EU's 27 member states will vote on these duties by September 25, with implementation possible by October's end if not overturned.

Saudi Arabia, UK to enhance cooperation in critical minerals' sector (September 18, 2024, [Source](#)) – Saudi Arabia and the United Kingdom have committed to strengthening cooperation in the critical minerals sector, recognizing its growing importance

for global energy transitions and advanced industries like aviation and electric vehicles. Saudi Arabia's Minister of Industry and Mineral Resources, Bandar Alkhorayef, met with UK Minister for Business and Trade, Jonathan Reynolds, to discuss expanding collaboration, particularly in industrial and mining sectors. The two nations aim to enhance their economic partnership, with Saudi Arabia offering British investors incentives, including rich natural resources, modern infrastructure, and diverse energy sources. Both countries noted record trade levels, with a target of increasing bilateral trade to \$37.5 billion by 2030. The UK emphasized support for Saudi Arabia's international mining conference, and both nations stressed the need for safe, diversified mineral supplies.

US probes uranium imports from China to prevent circumventing Russian ban (September 17, 2024, [Source](#)) – The U.S. is investigating potential circumvention of its ban on Russian uranium imports through China. Following the December 2023 ban, China significantly increased uranium shipments to the U.S., raising concerns that China might be re-exporting Russian uranium, aiding Russia's nuclear industry despite sanctions. U.S. officials are closely monitoring these imports to ensure compliance with the Prohibiting Russian Uranium Imports Act. The surge in Chinese uranium exports, along with growing imports of Russian uranium into China, has alarmed U.S. industry groups, prompting calls for higher tariffs. Analysts suggest China might be positioning itself as a major player in the global uranium market, using Russian supplies to boost its exports. Any circumvention could undermine U.S. efforts to sever its dependence on Russian nuclear fuel and build a domestic uranium supply chain.

The Pentagon's 'Rare Earth' Problem is a China Problem, Too (September 17, 2024, [Source](#)) – The U.S. faces a significant challenge in securing rare earth elements, vital for defense and

civilian sectors, due to its heavy reliance on China. A recent Government Accountability Office (GAO) report highlighted that over 95% of U.S. rare earth consumption is imported, with most coming from China. These materials, essential for military equipment such as fighter jets, missiles, and submarines, lack suitable substitutes. Over the years, cheaper foreign production and environmental concerns caused U.S. rare earth production to decline. The Department of Defense (DoD) is investing in efforts to rebuild domestic supply chains, including contracts with companies like Rare Earth Salts Separations & Refining LLC and MP Materials Corp. (NYSE: MP). While progress is being made, the U.S. has yet to fully determine how much domestic capacity it needs to meet future defense-related demands, underscoring the growing competition with China.

US allies struggle to break China's dominance of rare earths (September 17, 2024, [Source](#)) – Efforts by the US and its allies to reduce dependency on China's rare earth dominance face significant challenges. China controls around 70% of global rare earth production and over 90% of refining, making it difficult for other nations to break its stronghold. While projects like Australia-based Lynas Rare Earths Ltd.'s (ASX: LYC) Texas plant aim to reduce reliance, economic pressures, such as declining rare earth prices, have undermined business viability. Despite government subsidies, delays, funding shortages, and low market prices have stymied many initiatives. For example, Lynas' Texas project faces permitting delays, while other companies, like Australia's Arafura Rare Earths Limited (ASX: ARU) and Iluka Resources Limited (ASX: ILU), struggle to secure sufficient investment. Past efforts by Japan show that reducing reliance on China is a long and costly process, requiring patient capital and government support. However, geopolitical factors and market conditions continue to hamper progress.

Chinese electric vehicles could be 'weaponized' and should be

banned from government use, report warns (September 17, 2024, [Source](#)) – A new report from the China Strategic Risks Institute (CSRI) warns that Chinese electric vehicles (EVs) could pose a national security risk, as they are equipped with Cellular Internet of Things Modules (CIMs) that can be remotely accessed and controlled. These devices handle critical operations like traffic data and software updates, creating vulnerabilities in cybersecurity. The report argues that China could exploit these systems to coerce or disrupt rival governments, and calls for bans on Chinese EVs in government use unless manufacturers share source codes or clarify data storage practices. It draws parallels to Russia's weaponization of energy supplies, cautioning against relying on Chinese technology. While the immediate risk is considered low, the report stresses the need for proactive measures, particularly as global geopolitical tensions rise.

Government releases list of 35 critical minerals as part of mining strategy (September 16, 2024, [Source](#)) – The New Zealand government has released a draft list of 35 critical minerals essential to its economy, forming part of its broader mineral strategy. The list includes minerals crucial for national security and technological advancements, as well as those in demand from trading partners. The government aims to double the sector's export value to \$2 billion by 2035. Minister Shane Jones emphasized that New Zealand needs a comprehensive understanding of its mineral reserves to attract investors and bolster economic resilience. However, environmental groups, like Forest and Bird, raised concerns that mining these minerals could lead to significant ecological damage, particularly on conservation land. The consultation period for the public to provide feedback on the list will run until October 10.

Investor.News Video Highlights:

- September 17, 2024 – Brent Willis on Voyageur Pharmaceuticals' Shift to Innovative Barium Contrast Formulations and an FDA Update <https://youtu.be/409KcZwE8hY>
- September 16, 2024 – Peter Nicholson of WEALTH (WCPD Inc.) on Setting a Record with \$100 Million Charity Flow-Through (CFT) Financing for Skeena Resources <https://youtu.be/NzfdWlgCoL0>

Investor.News Member News:

- September 20, 2024 – Nano One Closes on \$5 Million Sale of Vacant Land <https://bit.ly/3Zy8a8e>
- September 20, 2024 – Notice of Annual General Meeting and Proxy Form <https://bit.ly/3MRXYjn>
- September 18, 2024 – Scandium Canada Announces a Private Placement of \$1,000,000 <https://bit.ly/4dajcDN>
- September 18, 2024 – First Phosphate Reports Initial Mineral Resource Estimate on its Bégin-Lamarche Phosphate Deposit in the Saguenay-Lac-Saint-Jean Region of Québec, Canada <https://bit.ly/3TxEsM0>
- September 18, 2024 – Panther Metals PLC Corporate Update: Termination of Manitou Lakes Option Agreement <https://bit.ly/3ZvFJrG>
- September 17, 2024 – Voyageur Pharmaceuticals Appoints Dr. Iryna Saranchova as Chief Science Officer, Enhancing the Company's Research and Innovation Leadership <https://bit.ly/3XMPpMY>
- September 16, 2024 – Neo Opens State-of-the-Art Environmental Emissions Control Catalysts Production Facility in China <https://bit.ly/3Xv8UIN>