

# Technology Metals Report (04.05.2024): Uranium Price Doubles as the Green Economy Charges Forward

written by Tracy Weslosky | April 5, 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 stories featured in this report are Ford Motor's strategic [decision](#) to delay its all-electric SUV and truck productions in favor of expanding its hybrid offerings, signaling a broader trend in the automotive sector towards hybrid technologies. The [resurgence](#) of the uranium market, with prices doubling due to the growing demand for clean energy, underlines the critical role of uranium in achieving 2050 climate targets. Moreover, the DRC's [decision to suspend](#) nine subcontractors at ERG mines due to non-compliance issues highlights the persistent challenges and evolving regulatory landscape in the cobalt industry. This action reflects a commendable direction by the Congo government towards enhancing industry standards and governance. The entry of Aclara Resources Inc. into the U.S. [rare earth processing](#) market was both newsworthy and offered Jack Lifton an opportunity to update readers on the advancements of REE processes in North America today.

This week's TMR Report also highlights significant developments across the global critical minerals landscape, including the

European Union and the United States' [efforts](#) to broaden their reach in securing critical minerals amidst a stalled bilateral agreement, and Ionic Rare Earths Limited's [joint venture](#) with Viridis Mining to establish a rare earth refining and recycling presence in Brazil. The U.S. Department of Energy's \$75 million [investment](#) in a Critical Minerals Supply Chain Research Facility aims to reduce reliance on foreign sources and bolster national security. Furthermore, the [collaboration](#) between NOVONIX Limited and Lithium Energy Limited to form Axon Graphite Limited through a public listing emphasizes the strategic moves within the natural graphite sector. MP Materials' [awarded](#) tax credit to advance U.S. rare earth magnet manufacturing marks a significant step towards reducing dependency on imported critical materials. Lastly, the [extension](#) of Canada's Mineral Exploration Tax Credit (METC) and the Biden-Harris Administration's [announcement](#) of a \$4 billion initiative in tax credits for clean energy supply chain projects underline the ongoing efforts and investments to strengthen the critical minerals sector, underscoring the importance of these developments for our energy security, economic prosperity, and environmental sustainability.

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**Ford to delay all-electric SUV, truck to focus on offering hybrid vehicles across its lineup by 2030:** (April 04, 2024, [Source](#)) – Ford Motor has announced a strategic shift in its electric vehicle (EV) plans, postponing the production of a new all-electric SUV and pickup truck to focus on expanding its hybrid vehicle offerings across its entire North American lineup by 2030. Despite this delay, Ford remains committed to the EV market, planning to continue its investments in electric technology. The production of a three-row SUV in Canada has been rescheduled from 2025 to 2027, and the launch of a next-generation pickup, codenamed "T3," has been moved from late 2025

to 2026. This decision reflects broader industry trends, with many automakers reassessing their EV strategies amid slower-than-expected adoption rates and high production costs. Additionally, Ford aims to leverage new battery technology to enhance the durability and value of its future EVs, focusing its efforts on newly established plants like the “BlueOval City” in Tennessee, rather than converting existing facilities.

**Uranium price creates new ASX boom:** (April 04, 2024, [Source](#)) – In 2023, uranium prices doubled from US\$48 to US\$91 per pound, peaking at US\$106 in 2024, highlighting a significant recovery from previous lows. This resurgence, fueled by the demand for clean energy and carbon emission reductions, has revived interest in uranium projects, now seen as viable at around US\$100 per pound. Global initiatives to expand nuclear energy, with significant investments in new reactors in the US, China, and France, underscore uranium’s critical role in meeting 2050 climate targets. Despite temporary price dips, the market outlook remains positive, driven by global nuclear expansion and supply constraints. This bullish sentiment has revitalized the uranium sector, particularly benefiting ASX-listed companies engaged in uranium exploration and mining, reflecting a broader industry optimism and investment in nuclear energy’s future.

**Congo Suspends ERG Subcontractors at Major Cobalt Mine:** (April 04, 2024, [Source](#)) – The Democratic Republic of Congo has suspended nine subcontractors at Eurasian Resources Group (ERG) mines, citing non-compliance with laws requiring Congolese ownership. This move, announced on March 14, intensifies tensions between ERG and the government, which is pushing for greater domestic benefits from the mining sector. Congo, a major global supplier of cobalt and a significant copper producer, is enforcing regulations to ensure local control of mining operations. The government’s actions also reflect ongoing disputes with ERG over asset development and environmental

concerns. Despite the suspensions, ERG insists it adheres to local laws, emphasizing its support for Congolese suppliers and its commitment to legal compliance. The sanctions target subcontractors at Metalkol and Frontier, two key ERG projects in Congo, but are not expected to affect output due to a transitional period for bringing in compliant firms. The controversy highlights Congo's efforts to secure more benefits from its mineral resources while navigating challenges with international mining companies.

**Disruptive Shift to Rare Earth Processing as Aclara Moves into American Market:** (April 03, 2024, [Source](#)) – Jack Lifton of the [Critical Minerals Institute](#) (CMI) offered an analysis on [Aclara Resources Inc.](#)'s (TSX: ARA) strategic entry into the U.S. rare earth processing market. Aclara aims to utilize ionic clay deposits from Chile and Brazil for heavy rare earth elements (HREEs) crucial in magnet manufacturing. They've partnered with the Saskatchewan Research Council and Hatch Ltd. for processing facility development. Lifton, however, questioned the project's ambitious timeline and compared Aclara's efforts to established players like [Energy Fuels Inc.](#) (NYSE American: UUUU | TSX: EFR), which is advancing in light rare earth (LREE) separation. The column highlights the competitive nature of the rare earth market, with Aclara facing challenges from Energy Fuels, [MP Materials](#) (NYSE: MP) and [Ucore Rare Metals Inc.](#) (TSXV: UCU | OTCQX: UURAF). Lifton suggests Aclara needs deeper industry integration and strategic partnerships, indicating a complex journey ahead in a competitive and technological landscape.

**EU, US seek broader reach on critical minerals as own deal stalls:** (April 03, 2024, [Source](#)) – The European Union (EU) and the United States (US) are not expected to finalize a critical minerals agreement at an upcoming meeting. Despite this, they plan to launch initiatives to partner with resource-rich countries. The EU aims for an accord allowing minerals processed

in Europe to be eligible for US clean vehicle incentives, focusing on cobalt, graphite, lithium, manganese, and nickel. A senior European Commission official cited the absence of an imminent deal but confirmed a joint commitment to future agreements. Difficulties include US demands for labor standards verification at mining sites. Moreover, the EU and US are seeking to differentiate their offerings from China's by emphasizing infrastructure funding, sustainability, and value-added business opportunities for developing countries, with plans to engage with ministers from Namibia, Ukraine, Kazakhstan, and Uzbekistan among others.

**Ionic Rare Earths Limited (ASX:IXR) and Viridis Mining to Form REE Refining and Recycling JV in Brazil:** (April 03, 2024, [Source](#)) – [Ionic Rare Earths Limited](#) (ASX:IXR) and [Viridis Mining and Minerals Limited](#) (ASX:VMM) have announced a 50:50 joint venture (JV) to establish a dominant position in the global supply chain for Rare Earth Elements (REE) in Brazil. This strategic partnership aims to utilize IonicRE's intellectual property and Viridis' global assets to become a leading supplier of high-quality, reliable rare earths crucial for various industries and energy transition. The JV plans to co-fund a Brazilian production facility, aiming to complete a Scoping Study by the end of 2024 and a preliminary feasibility study within 18 months. IonicRE's recent success in producing rare earth oxides at its Belfast facility and Viridis' promising Colossus Ionic Adsorption Clay REE Project in Brazil highlight the joint venture's potential to accelerate growth and leverage Brazil's rich rare earth resources. This collaboration aligns with Brazil's ambition to become a global leader in rare earth production, offering an exceptional opportunity for both companies to advance their positions in the rare earth supply chain significantly.

**DOE Invests \$75 Million to Strengthen Nation's Critical Minerals**

**Supply Chain:** (April 02, 2024, [Source](#)) – The U.S. Department of Energy (DOE), under President Biden’s Investing in America agenda, announced a \$75 million investment for a Critical Minerals Supply Chain Research Facility, aimed at bolstering the nation’s supply chains for critical minerals and materials essential for energy security, economic prosperity, and national security. This initiative, part of the Bipartisan Infrastructure Law, focuses on reducing reliance on foreign sources by accelerating the production of critical minerals from diverse sources. The facility will collaborate with other government initiatives and aims to enhance supply chain efficiencies and support a circular economy. A supply chain assessment highlighted the risks of over-reliance on foreign and adversarial sources for these materials, underscoring the importance of this project for the U.S.’s clean energy transition, manufacturing sector revitalization, and overall competitive edge. The project will involve nine national laboratories, emphasizing community engagement and benefits in line with the Justice40 Initiative. This is in addition to FECM’s commitment of \$58 million since January 2021 to further support critical mineral and material projects across the country.

**NOVONIX Limited and Lithium Energy Limited to Combine Natural Graphite Interests with Intention to Take Combined Business Public:** (April 02, 2024, [Source](#)) – [NOVONIX Limited](#) (NASDAQ: NVX | ASX: NVX) and [Lithium Energy Limited](#) (ASX: LEL) are combining their natural graphite exploration interests into a newly formed company, Axon Graphite Limited, aiming for a public listing through an initial public offering (IPO) on the Australian Securities Exchange (ASX). Both companies will each retain up to 28.57% ownership post-IPO, intending to create a significant natural flake graphite project. This move is designed to unlock value for shareholders of both NOVONIX and LEL, with eligible

shareholders given priority in the IPO. The combination of NOVONIX's Mt. Dromedary project and LEL's Burke and Corella projects under Axon signifies the development of a major resource aimed at supporting the electric vehicle and energy storage sectors. The IPO seeks to raise between \$15 million to \$25 million, setting the stage for Axon to become a key player in the battery materials sector, benefiting from the anticipated growth in demand for anode materials and high-grade graphite products.

**MP Materials Awarded \$58.5 Million to Advance U.S. Rare Earth Magnet Manufacturing:** (April 01, 2024, [Source](#)) – [MP Materials](#) (NYSE: MP) has been awarded a \$58.5 million tax credit by the IRS and Treasury, under the Section 48C Advanced Energy Project, to support the construction of the first fully-integrated rare earth magnet manufacturing facility in the United States. This grant was part of a competitive process by the Department of Energy assessing around 250 projects for their viability and environmental impact. The facility will focus on producing neodymium-iron-boron (NdFeB) magnets, essential for various applications including electric vehicles, wind turbines, and defense systems. With global demand for these magnets expected to triple by 2035, MP Materials' initiative aims to commence the commercial production of magnet precursor materials in Fort Worth, Texas, by summer and finished magnets by late 2025, supplying to companies like General Motors. This project addresses the U.S.'s near-total reliance on imports for these critical materials, mainly from China, and aims to establish a sustainable, end-to-end supply chain.

**Relief and Renewal: Canada's METC Extension Breathes New Life into Mineral Exploration:** (March 31, 2024, [Source](#)) – The Canadian government announced the extension of the Mineral Exploration Tax Credit (METC) until March 31, 2025, addressing concerns in the mining sector over the future of flow-through



financings. This move has been met with relief, particularly as the deadline approached without prior confirmation, sparking anxiety among stakeholders. The METC plays a vital role in supporting exploration companies by enhancing flow-through share pricing, thereby facilitating fundraising. Critics, including Peter Clausi from the [Critical Minerals Institute](#) (CMI), had voiced concerns over the uncertainty caused by the government's silence, which hampered planning and investments. The extension is seen as crucial for continued investment in the sector, particularly benefiting junior mining companies and associated industries, including First Nations communities. Despite debates over the sufficiency of the projected \$65 million support, the decision signifies the government's recognition of mining's importance to Canada's economy and its commitment to sustainable development and Indigenous economic participation.

**Central Asia's rising role in global rare earth metal competition:** (March 31, 2024, [Source](#)) – Central Asian countries are becoming increasingly significant in the global competition for rare earth metals, crucial for technological and economic development. Eldaniz Gusseinov and Abakhon Sultonazarov highlight this trend against the backdrop of geopolitical shifts, such as the Ukraine conflict, prompting Western countries to seek alternatives to Russian and Chinese supplies. Central Asia, rich in mineral reserves, is eyed by the West to reduce dependencies, particularly as they move towards renewable energy sources. Kazakhstan emerges as a focal point with substantial reserves of rare earth elements like scandium, yttrium, and lanthanides, pivotal for industries ranging from computing to automobile manufacturing. The U.S. and EU are exploring investments in Kazakhstan to diversify their supply chains. Meanwhile, the U.S. and China vie for influence in the region, leveraging their strategic advantages. Central Asia's untapped mineral wealth, including significant rare earth



deposits, positions it as a critical player in global supply chains, with the potential to alter the dynamics of resource control and economic development amidst great power competition.

**Biden-Harris Administration Announces \$4 Billion in Tax Credits to Build Clean Energy Supply Chain, Drive Investments, and Lower Costs in Energy Communities:** (March 29, 2024, [Source](#)) – The Biden-Harris Administration has announced a groundbreaking \$4 billion initiative in tax credits to foster over 100 projects across 35 states aimed at bolstering clean energy manufacturing, reducing greenhouse gas emissions, and securing the supply chain for critical minerals. This move, part of President Biden's Investing in America agenda and funded by the Inflation Reduction Act, represents a major leap forward in the domestic production of clean energy and the strategic development of critical minerals essential for energy independence and technological advancement. Managed by the Department of Energy (DOE) in partnership with the Treasury and the IRS, the initiative focuses on a diverse range of projects, including significant investment in communities historically dependent on fossil fuels, aiming to create high-quality jobs and promote a transition to a cleaner economy. The Qualifying Advanced Energy Project Tax Credit (48C) program, rejuvenated with a \$10 billion boost from the Inflation Reduction Act, provides up to a 30% investment tax credit for approved projects that meet specific wage and apprenticeship standards. With a particular emphasis on critical minerals recycling, processing, and refining, this program is a key component of the Administration's strategy to ensure a sustainable, secure, and competitive energy future.

**Investor.News Critical Minerals Media**

## Coverage:

- April 03, 2024 – Ecclestone Takes Critical Mineral Hit Lists to Task in the Hallgarten + Co Resource Monthly “Debasing Criticality’s Currency” <https://bit.ly/3IZLkwV>
- April 03, 2024 – Disruptive Shift to Rare Earth Processing as Aclara Moves into American Market <https://bit.ly/43J4C2V>
- March 31, 2024 – Relief and Renewal: Canada’s METC Extension Breathes New Life into Mineral Exploration <https://bit.ly/4cFr1lI>
- March 29, 2024 – Boosting Market Interest Through the Strategic Advantage of a Stellar Advisory Board <https://bit.ly/3vlAWwk>

## Investor.News Critical Minerals Videos:

- April 04, 2024 – Danny Huh on Neo Battery Materials’ Process Innovation, 9th Patent and Position in NBM Korea <https://bit.ly/3VL2V2X>

## Critical Minerals IN8.Pro Member News Releases:

- April 04, 2024 – Power Nickel Announces C\$2 Million Private Placement <https://bit.ly/49meqkQ>
- April 03, 2024 – Voyageur Pharmaceuticals Ltd Grants Deferred Share Units Compensation to Independent Directors <https://bit.ly/3U3sDyH>

- April 03, 2024 – Zentek Announces U.S. Distribution Agreement for ZenGUARD™-Enhanced Surgical Masks with Medwell Solutions <https://bit.ly/4cKM4U3>
  - April 03, 2024 – Defense Metals Appoints Guy de Selliers de Moranville to the Board of Directors <https://bit.ly/3vzlxsj>
  - April 03, 2024 – Panther Metals PLC – Fulcrum Metals Announce Potential Disposal of Uranium Projects <https://bit.ly/44012BX>
  - April 02, 2024 – First Phosphate Drills a 2 m Vein of Massive Apatite at Its Begin-Lamarche Project in Saguenay-Lac-St-Jean, Quebec, Canada <https://bit.ly/3VIAGCb>
  - April 02, 2024 – Fathom Continues to Expand the Historic Gochager Lake Deposit to Depth with Intersections of Semi-Massive to Massive Sulphide Mineralization <https://bit.ly/3TKm07I>
  - April 02, 2024 – CBLT Announces Program at Past Producer Falcon Gold and Revisits Historical High Gold Values <https://bit.ly/49jcVnl>
  - April 02, 2024 – Panther Metals PLC – Obonga Graphite: Awkward East Exploration Permit Application <https://bit.ly/4atD3gm>
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**Danny Huh on Neo Battery Materials' Process Innovation,**

# 9th Patent and Position in NBM Korea

written by InvestorNews | April 5, 2024

In a recent enlightening interview with Tracy Weslosky of InvestorNews, Danny Huh, the Senior Vice President of Strategy and Operations at NEO Battery Materials Ltd., (TSXV: NBM | OTCQB: NBMFF) detailed the company's strides in silicon anode technology for lithium-ion batteries, underlining their consistent progress over the past three years. Particularly notable was the discussion around the application for their 9th patent a month ago, marking a technological leap aimed at significantly enhancing their silicon anode materials' production capacity and efficiency.

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## Technology Metals Report (03.28.2024): China Challenges US EV Plans and the DoE Invests \$6B to Decarbonize Economy

written by Tracy Weslosky | April 5, 2024

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our CMI Directors over the past week, reflecting the dynamic and evolving nature of the critical minerals and technology metals industry. Among the key stories featured in this report are Chile's attempts to spur lithium sector investments amidst regulatory and environmental concerns, France's Orano exploring the possibility of a uranium enrichment plant in the U.S., and China's challenge to U.S. electric vehicle subsidy policies at the WTO. Additionally, we delve into the EU's potential adjustments to its 2035 EV mandate, President Biden's electric vehicle policies influencing American election outcomes, and Kazakhstan's push to increase uranium exports to the U.S.

This week's TMR Report also highlights U.S. Critical Materials' efforts to publicize its Bitterroot gallium deposits, significant for semiconductors and defense technologies; the Department of Energy's largest-ever investment to decarbonize industry; Brazilian Rare Earths Limited's new rare earth discovery in the Pele Project; challenges in America's lithium laws slowing down the pace of domestic production; and collaborative efforts between Australia's Pilbara Minerals and China's Ganfeng to study a new lithium chemical plant. Additionally, we explore CATL's discussions with Tesla and other automakers for U.S. licensing of its battery technology, aiming to navigate the tightening U.S. regulations on the battery sector. Through these stories, the TMR provides a comprehensive overview of the latest developments affecting the critical minerals sector, highlighting the challenges and opportunities ahead. To become a CMI member and stay informed on these and other topics, [click here](#)

**Chile needs to finalize more lithium plan details to spur investment, miners say:** (March 27, 2024, [Source](#)) – Chile's attempt to draw private investment into its lithium sector is met with apprehension due to unresolved details and potential regulatory hurdles. The government plans to open 26 salt flats

for private mining, excluding some reserved for state control, as part of President Gabriel Boric's strategy to double lithium production by decade's end. However, concerns over how contracts will be allocated, opposition from Indigenous communities, and environmental considerations could deter investors. Industry voices also caution against possible legal conflicts over mining rights and the negative impact of heavy state involvement on Chile's investment appeal. With lithium prices and electric vehicle sales currently in a slump, the attractiveness of new projects is further challenged, making neighboring countries more appealing for lithium investment.

**Chile opens lithium salt flats for investment, saves two for state control:** (March 27, 2024, [Source](#)) – Chile has inaugurated a significant move to open more than two dozen lithium salt flats to private investment, while strategically keeping the prolific Atacama and Maricunga deposits under state majority control. This decision is part of President Gabriel Boric's vision to increase state involvement in the nation's lithium sector, which is the second-largest globally. The initiative could potentially double Chile's lithium output within ten years, crucial for electric vehicle batteries, according to Finance Minister Mario Marcel. The tender process for 26 salt flats will start in April, aiming for completion in July. State-run enterprises are initiating projects in five other flats, seeking partners. Currently, only Sociedad Química y Minera de Chile S.A. ("SQM") (NYSE: SQM) and U.S.-based Albemarle Corporation (NYSE: ALB) operate in Chile, specifically in the lithium-rich Atacama salt flat. The government, signaling further interest in lithium ventures beyond Atacama and Maricunga, is also contemplating the establishment of a national lithium company and emphasizes environmental protection and indigenous community involvement in new projects.

**China to challenge Biden's electric vehicle plans at the**

**WTO:** (March 27, 2024, [Source](#)) – China has filed a complaint with the World Trade Organization (WTO) against the United States, alleging that U.S. electric vehicle (EV) subsidy policies unfairly discriminate against Chinese products. This action comes in response to the U.S. Inflation Reduction Act, which, from January 1, disqualifies EVs from receiving tax credits if their critical minerals or battery components are sourced from Chinese, Russian, North Korean, or Iranian companies. China argues that these policies distort fair competition and disrupt the global EV supply chain by excluding Chinese products. The outcome of this dispute is uncertain, particularly if the U.S. appeals a ruling against it, due to the current dysfunction of the WTO's Appellate Body. This complaint underscores the growing tensions in the global EV market, where China is a dominant player in battery technology and aims to expand its auto industry globally.

**France's Orano studying plan to build U.S. uranium enrichment plant:** (March 27, 2024, [Source](#)) – French nuclear fuel company Orano, previously known as Areva, is exploring the possibility of constructing a uranium enrichment plant in the United States, as part of efforts to decrease U.S. dependency on Russian uranium imports. The plan, which had been shelved following the Fukushima disaster due to a surplus in enrichment capacity, is being revisited amidst growing demand and geopolitical tensions. Orano, which is state-owned, aims to support the U.S., the world's largest nuclear power producer, in bolstering its domestic fuel production capabilities. This initiative aligns with recent U.S. legislative moves, including President Biden's approval of significant funding for domestic uranium production. Orano also plans to expand its existing uranium enrichment capacity in France to meet U.S. demand and reduce reliance on Russian supplies.

**EU May Water Down Harsh 2035 EV Mandate And Reprieve**



**Hybrids:** (March 27, 2024, [Source](#)) – The European Union and Britain's ambitious plans to phase out combustion engine vehicles by 2035 in favor of electric vehicles (EVs) are facing scrutiny and potential adjustments. Experts suggest that hybrids may be given more leeway to ensure a smoother transition. The automotive industry is at risk of being dominated by more cost-effective Chinese EVs, prompting concerns over the financial viability of European carmakers in the shift to electric. Stricter CO2 emissions targets are also causing unease among manufacturers. Reports indicate that EV sales growth is slowing, and the current market offerings are deemed too expensive for widespread adoption, with technology and infrastructure not fully meeting consumer needs yet. There's lobbying for regulatory review and more flexible approaches, including a broader acceptance of hybrid models and other technologies to reduce emissions. The upcoming review by the EU, along with potential geopolitical shifts and industry collaborations, could influence the pace and nature of Europe's transition to electric mobility.

**Electric cars will decide the outcome of the American election:** (March 26, 2024, [Source](#)) – President Biden's aggressive promotion of electric vehicles (EVs) may jeopardize his political standing, particularly in critical Midwestern swing states. His administration's focus on EVs, marked by substantial price differences and practicality issues compared to traditional vehicles, risks alienating a significant voter base. This strategy, characterized by stringent mileage requirements and incentives for EV adoption, could undermine the traditional auto industry, a cornerstone of states like Michigan and Wisconsin. Furthermore, the policy may inadvertently bolster China's position in the global EV market, while threatening job losses across America's automotive sector, including sales, maintenance, and after-market services.

**World's Top Uranium Miner Seeks to Boost Exports to US:** (March 26, 2024, [Source](#)) – Kazakhstan, the leading uranium producer globally, is intensifying efforts to increase its uranium exports to the United States. This initiative follows discussions on energy cooperation with U.S. Senator Steve Daines. Kazakhstan already holds contracts for uranium product supply until 2032 with key U.S. energy companies. The push for expanded uranium exports comes at a time when the demand for this critical metal is rising, driven by a global shift towards nuclear power to combat climate change. Furthermore, the U.S. is contemplating a ban on imports of enriched Russian uranium, used in both nuclear reactors and weapons, highlighting the strategic importance of identifying alternative uranium sources.

**Mining company touts Bitterroot gallium deposits:** (March 26, 2024, [Source](#)) – U.S. Critical Materials is stepping up its public outreach concerning its mining claims in the Bitterroot's headwaters, with a focus on valuable gallium deposits over 6,700 acres, essential for semiconductors, 5G, smartphones, satellite systems, and defense technologies. The U.S. government, recognizing the strategic importance of gallium—especially amidst a Chinese export embargo—is heavily involved in funding and driving the production of REE and other critical minerals, with significant contributions from federal agencies. Preliminary exploration at Sheep Creek has seen support from the DOD and collaboration with academic and geological institutions, utilizing advanced survey techniques. Amidst concerns over national security due to dependency on imported gallium, U.S. Critical Materials boasts high-grade gallium deposits and is exploring environmentally sustainable separation processes. The company's partnership with Idaho National Laboratories aims to develop new processing methods to establish a domestic supply chain, a crucial step given the current lack of processing facilities in North America and the environmental and commercial

challenges of existing separation technologies.

**Department of Energy announces largest-ever investment to decarbonize industry:** (March 25, 2024, [Source](#)) – The Department of Energy has announced a substantial \$6 billion funding for 33 projects across the U.S. to reduce emissions in energy-intensive industries. This effort, part of the largest-ever investment to decarbonize industry, leverages the Bipartisan Infrastructure Law and Inflation Reduction Act, aiming for a combined investment of \$20 billion including company contributions. Targeting major sectors like steel, aluminum, cement, and food production, the initiative is expected to cut down 14 million metric tons of CO<sub>2</sub> annually, equivalent to removing 3 million gas-powered cars from the roads. Highlighted projects include Constellium's zero-carbon aluminum plant in West Virginia, with potential federal funding up to \$75 million, and Kraft Heinz's \$170.9 million investment to electrify and decarbonize food production at 10 facilities. Additionally, nearly 80% of the projects are located in disadvantaged communities, emphasizing the investment's broader social and environmental benefits.

**Brazilian Rare Earths Limited (ASX:BRE) Announces New Rare Earth Discovery – the Pele Project:** (March 25, 2024, [Source](#)) – Brazilian Rare Earths Limited (ASX:BRE) has unveiled the Pele Project, a significant new rare earth discovery in Bahia, Brazil, positioned 60km southwest of their Monte Alto Project. This district-scale endeavor is set to explore ultra-high grade REE-Nb-Sc mineralization across a target area vastly exceeding that of Monte Alto. Key findings include extensive geophysical anomalies, the largest known hard rock monazite outcrop extending over 30m, and promising high-grade monazite sand intercepts. Initial results suggest a substantial rare earth mineralization potential, mirroring the successful exploration techniques employed at Monte Alto. With comprehensive surveys and an imminent diamond drilling program, CEO Bernardo da Veiga

anticipates accelerating exploration to uncover this area's full potential, marking another stride in expanding their rare earth province footprint.

**America's lithium laws fail to keep pace with rapid development:** (March 25, 2024, [Source](#)) – Efforts to make the United States a leading global lithium producer are hindered by a tangled set of state regulations, creating a significant barrier against reducing dependence on foreign lithium supplies, particularly from China. Confusion over ownership, valuation, and processing of lithium resources across states like Texas and Louisiana, combined with fluctuating commodity prices and technical challenges, are major obstacles. This situation complicates the Biden administration's ambitions for electrification and increasing domestic lithium production. Despite the urgent need for regulatory clarity to attract investment and advance projects, states vary widely in their approaches to lithium extraction and regulation. The uncertainty around regulatory frameworks is delaying the development of lithium projects, thus affecting the U.S.'s ability to meet its lithium production and electrification goals.

**Pilbara Minerals and China's Ganfeng agree to study for lithium chemical plant:** (March 24, 2024, [Source](#)) – Australia's Pilbara Minerals and China's Ganfeng Lithium have agreed to study the feasibility of building a lithium chemical plant capable of producing 32,000 metric tons of lithium carbonate or hydroxide annually, at an undecided location. The study, set to complete by March 2025, explores potential sites, including Australia, aiming for greater supply chain diversification. Pilbara Minerals, which has partnerships in other lithium projects, seeks to reduce transportation volumes and carbon footprint through midstream lithium chemicals production. Preliminary discussions have shown strong international interest in the venture, with incentives such as economic benefits and support

for permitting. The venture would be a 50:50 partnership, with Ganfeng considering a stake sale based on U.S. Inflation Reduction Act benefits. Pilbara is increasing spodumene production to 1 million tons annually and may expand further, committing 300,000 tons annually to this project if it proceeds.

**CATL in talks with Tesla, global automakers for US licensing, WSJ reports:** (March 25, 2024, [Source](#)) – Contemporary Amperex Technology Co. Ltd. (CATL), a leading Chinese electric-vehicle battery maker, is currently in discussions with Tesla Inc. (NASDAQ: TSLA) and other automakers to license its battery technology in the U.S. This approach comes as an alternative to establishing its own manufacturing facility in the country. These negotiations, still in the early stages, revolve around the extent of the collaboration and the specifics of the technology Tesla would license, influenced by the EV giant's financial health. CATL's existing partnership with Ford, which recently adjusted its investment strategy for a Michigan battery plant to use CATL's licensed technology amid legislative pushback, serves as a blueprint for potential agreements with other U.S. car manufacturers. This development is amidst a global downturn in EV demand and tighter U.S. regulations on the battery sector to curb Chinese influence, with CATL also focusing on innovations like faster charging batteries for Tesla.

**CATL Working With Tesla on Fast-Charging Cells, Supplying Nevada:** (March 25, 2024, [Source](#)) – CATL is enhancing fast-charging batteries for Tesla, targeting an electric car under \$25,000. Emphasizing cost-efficiency and longevity, CATL's collaboration extends to supplying Tesla's Nevada factory and innovating in battery technology. Despite global EV market challenges, CATL sustains growth through a diversified clientele including BMW and Mercedes-Benz, and is adapting to U.S. market restrictions by licensing its technology, notably to Ford. With

geopolitical tensions affecting trade, CATL values client trust and plans to expand production in Europe and Southeast Asia. The company's strong financial standing allows it to delay further funding rounds, focusing instead on technological advancement and strategic partnerships to navigate the evolving electric vehicle landscape.

## **Investor.News Critical Minerals Videos:**

- March 25, 2024 – Western Uranium & Vanadium's George Glasier on Gearing up for SMC to Commence Production in Colorado <https://bit.ly/3ITmUVA>

## **Critical Minerals IN8.Pro Member News Releases:**

- March 28, 2024 – American Clean Resources Group Establishes Environmental Sustainability Board <https://bit.ly/43JkN0o>
- March 28, 2024 – Scandium Canada Forms a Strategic Advisory Committee and Confirms its Initial 3 Members <https://bit.ly/3ISuHTM>
- March 28, 2024 – Nano One Reports Q4 2023 Results and Provides Progress Update <https://bit.ly/3IXI2Km>
- March 26, 2024 – Voyageur Pharmaceuticals Files Audited Annual Financial Statements and Grants Stock Options <https://bit.ly/4a0gTFV>
- March 26, 2024 – First Phosphate Reports Published Research Studies for its Lac à l'Original, Mirepoix and Bégin-Lamarche Properties in the Saguenay-Lac-St-Jean

region of Quebec, Canada <https://bit.ly/3T0TEWq>

- March 26, 2024 – Kraken Energy Confirms Elevated Radioactivity in Both Initial Drill Holes at Harts Point Property, Utah <https://bit.ly/3VskYem>
  - March 25, 2024 – Bechtel contract to support ASM with engineering at the Dubbo Project <https://bit.ly/3Vsx8E3>
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# Technology Metals Report (03.22.2024): US pledges \$1.28B for ASX rare earths stocks and Biden takes a major step in tackling climate change

written by Tracy Weslosky | April 5, 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 Director's over the past week, reflecting the dynamic and evolving nature of the critical minerals and technology metals industry. Among the key stories featured in this report are the US's pledge of \$1.28 billion to ASX-listed rare earths firms to lessen China's dominance in the sector, the looming uncertainty over the future of Flow-Through Financings in Canada as the METC deadline approaches, and Albemarle Corporation's



groundbreaking lithium auction aimed at enhancing pricing transparency. Additionally, the Biden administration's ambitious rule to expand electric vehicles (EVs) and the examination of factors behind cooling EV sales growth emphasize the ongoing transformations and challenges within the critical minerals sector.

This week's TMR Report also highlights several significant developments that further shape our understanding and approach to the critical minerals industry. The urging by the US Energy Secretary for Congress to ban uranium imports from Russia supports domestic nuclear fuel development, while China's rebound in graphite exports for batteries signals geopolitical tensions and strategic resource control. The US's efforts to incorporate Central Asia into its critical minerals supply chains, Indonesia's investment in a new HPAL plant by Vale to boost nickel production for EV batteries, and CATL's enduring ambitions despite a slight dip in quarterly earnings showcase the global landscape's complexity and interconnectedness. Furthermore, Graphjet Technology's innovative approach to producing greener graphite and the push to recognize phosphate and potash as critical minerals in the US underscore the ongoing efforts to secure and diversify supply chains. Lastly, Kazakhstan's emerging potential to rival China in the production of rare-earth metals points to the shifting dynamics of global supply and the continuous search for strategic alternatives to current market dominators.

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**US pledges \$1.28b for ASX rare earths stocks (March 21, 2024, [Source](#))** – The US aims to allocate \$1.28 billion to ASX-listed rare earths firms, Meteoric Resources NL (ASX: MEI) and [Australian Strategic Materials Limited](#) (ASX: ASM) (ASM), to

diminish China's dominance in critical minerals necessary for decarbonization and defense. The US Export Import Bank's (US EXIM) potential loans aim to support projects in Brazil and New South Wales, contingent upon US companies obtaining project contracts. This funding is part of wider US and Australian efforts to establish non-Chinese critical mineral supply chains, with additional support from the US Department of Defence and other agencies for various projects. This initiative underscores the strategic importance of diversifying global supply chains and bolsters the credibility and development prospects of companies like Meteoric and ASM in the critical minerals sector.

**Anxiety Rises on the Future of Flow-Through Financings as METC Deadline Looms, Canadian Government Keeps Quiet (March 20, 2024, [Source](#))** – Facing the potential expiration of the Mineral Exploration Tax Credit (METC) at the end of March, the Canadian mining industry is gripped by uncertainty. This credit, crucial for supporting exploration companies through Flow-Through Share pricing, might not be renewed, threatening to raise capital costs by 15-20%. The federal government's silence on the issue heightens anxiety, affecting planning and investments, especially for junior miners. Provincial credits in Ontario and Saskatchewan face similar fates, though Manitoba and British Columbia have permanent solutions. The industry is anxiously awaiting the federal budget announcement on April 16, hoping for a resolution. The potential loss of METC, combined with recent tax changes, could significantly impact exploration investment in Canada, underscoring the importance of government policy in the sector's financial health.

**Albemarle Lithium Auction offers a bold move forward in pricing transparency in the critical minerals market (March 20, 2024, [Source](#))** – [Albemarle Corporation](#) (NYSE: ALB), the largest lithium producer, is initiating a landmark auction on March 26 to enhance transparency and address price discovery issues in the

lithium market. This move, highlighted by Jack Lifton of the [Critical Minerals Institute](#) (CMI), aims to mitigate the opacity and volatility that have long plagued the sector, exacerbated by the electric vehicle (EV) boom. Traditionally, lithium prices have been privately negotiated, lacking a clear global benchmark. Albemarle's auction represents an innovative step towards establishing more transparent pricing, inviting competitive bidding for a significant lithium quantity. Although this initiative marks progress towards addressing market challenges, Lifton cautions it may not fully resolve the industry's volatility and unpredictability, signaling a critical evolution in lithium pricing strategies amidst growing global demand.

**Biden Administration Announces Rule Aimed at Expanding Electric Vehicles (March 20, 2024, [Source](#))** – The Biden administration unveiled a pivotal climate regulation, aiming to revolutionize the U.S. auto industry by ensuring a majority of new passenger vehicles sold by 2032 are electric or hybrid. This marks a major step in tackling climate change, given transportation's status as the top carbon emitter in the country. Despite electric vehicles (EVs) constituting only 7.6% of car sales last year, this rule mandates a significant increase to meet a 56% EV sales target, with hybrids contributing an additional 16%. President Biden highlighted the initiative's potential for economic growth, job creation, and significant environmental benefits, including a projected reduction of over seven billion tons of carbon dioxide emissions over three decades. However, the transition faces challenges, including manufacturing and infrastructure overhaul, political opposition, and consumer acceptance. The regulation, which introduces stringent emissions caps, has garnered both support for its environmental impact and criticism for its feasibility and potential economic implications. Critics argue it may impose undue pressure on the

auto industry and consumers, while supporters see it as a crucial step toward a more sustainable future.

**The cars, the chargers or the customers? A look at what's behind cooling EV sales growth (March 20, 2024, [Source](#))** – Facing cooling growth in electric vehicle (EV) sales, automakers are adjusting their production strategies amidst increasing model availability. The sector balances optimism with skepticism regarding the shift away from fossil fuels, underlined by challenges like inadequate charging infrastructure impacting consumer choices. Events like CERAWeek by S&P Global highlight EVs' potential to reduce oil demand, emphasizing the transition's significance. Despite slower sales growth, companies like Ford report significant increases, pointing to the essential role of EVs in future automotive competitiveness. Addressing consumer concerns, particularly around charging reliability and infrastructure, alongside educating an evolving customer base, is pivotal for sustaining the industry's growth momentum.

**US energy secretary encourages Congress to ban uranium supplies from Russia (March 20, 2024, [Source](#))** – U.S. Energy Secretary Jennifer Granholm has urged Congress to ban uranium imports from Russia to support domestic nuclear fuel development. This call comes in light of legislation passed by the U.S. House last December, aimed at halting these imports as part of the response to Russia's invasion of Ukraine. However, the Senate has faced delays due to a hold by Senator Ted Cruz on unrelated issues. Granholm emphasized that passing this ban would release funds for expanding domestic uranium enrichment and producing high assay low enriched uranium (HALEU) for advanced nuclear reactors. She expressed optimism during a House hearing on her department's budget, highlighting the urgency of this action to advance domestic nuclear energy capabilities.

**China's exports of graphite for batteries rise from December low (March 20, 2024, [Source](#))** – China's natural graphite exports, essential for electric vehicle batteries, rebounded after Beijing's December controls aimed at tightening its grip on vital minerals for advanced manufacturing. From a December low of 3,973 tonnes, exports rose to 6,275 tonnes in January and 10,722 tonnes in February, despite previously averaging about 17,000 tonnes monthly. The restrictions, viewed as a response to Western trade barriers, notably impact trade flows. Rising tensions are evident as the U.S. considers blacklisting Chinese semiconductor firms linked to Huawei Technologies, signaling an escalation in the technological rivalry. These developments underscore the strategic importance of graphite in the global tech industry and the geopolitical tensions surrounding access to critical manufacturing resources.

**US Looks to Draw Central Asia Into Critical Minerals Supply Chains (March 18, 2024, [Source](#))** – The United States is actively seeking to integrate Central Asia into its critical minerals supply chains, a move underscored by the February 2024 inauguration of the Critical Minerals Dialogue (CMD) in the C5+1 format. This initiative, bolstered by the collective will of the U.S. and Central Asian nations—Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan—aims to bolster Central Asia's role in global supply chains, thereby enhancing economic cooperation, facilitating clean energy transitions, and protecting regional ecosystems. Central Asia, rich in critical minerals like nickel, cobalt, palladium, rare earth elements (REEs), and others vital for high-tech, defense, and green technologies, represents a strategic alternative to China's dominance in these supply chains. The U.S. is particularly keen to mitigate risks associated with China's control over a significant portion of the world's critical minerals processing and production. Through the CMD and other partnerships, the U.S.

seeks to foster investment in Central Asia's vast mineral resources, promising a potential shift in global economic and technological power dynamics while confronting strategic vulnerabilities and enhancing national security.

**Indonesia says nickel miner Vale to build another \$2 bln HPAL plant (March 18, 2024, [Source](#))** – Nickel miner PT Vale Indonesia is considering a \$1.91 billion investment in a new high-pressure acid leaching (HPAL) plant on Sulawesi island, announced Indonesia's Investment Ministry. This plant, named "SOA HPAL," aims to produce mixed hydroxide precipitate (MHP), essential for electric vehicle batteries, with an expected annual output of 60,000 metric tons of nickel in MHP. Vale Indonesia, which is in the final stage of exploration, plans to collaborate with automakers for this venture. The company already has two HPAL projects underway in Sulawesi, partnering with Zhejiang Huayou Cobalt, and has Ford's involvement in the \$4.5 billion Pomalaa project. Additionally, Indonesia's state mining company MIND ID recently acquired a 14% stake in Vale Indonesia, bolstering its position as a top shareholder.

**CATL earnings slip masks charged-up ambitions (March 18, 2024, [Source](#))** – Contemporary Amperex Technology (CATL), the world's largest electric car battery manufacturer, experienced a slight 1.2% decline in quarterly earnings, marking its first downturn since early 2022. Despite reduced factory utilization and the broader industry's cooling sales growth, CATL is ambitiously expanding, planning new facilities to increase its production potential significantly. The company dominates the global market, boasting a 36.8% share and leading innovation with a large R&D team focused on advanced battery chemistries. Although facing challenges in the United States, CATL is making strategic moves abroad, including constructing a factory in the European Union. Investors remain optimistic, reflected in a stock price increase, as CATL's scale, innovation, and strategic expansion

position it to potentially outpace competition and maintain market leadership, despite potential overcapacity risks.

**Startup Offers EV Firms Greener Graphite in Alternative to China (March 18, 2024, [Source](#))** – Graphjet Technology, an alternative energy startup in Malaysia, is offering electric-vehicle (EV) manufacturers a sustainable source of graphite by converting agricultural waste into this critical battery component. Utilizing palm kernels, the company can produce graphite with an 83% lower carbon footprint and at 80% less cost than traditional methods. Starting in the second quarter, Graphjet aims for an annual production capacity of 3,000 tons from its facility in Malaysia, a leading palm oil producer. This move provides a significant alternative to China's dominance in the synthetic graphite market, responsible for 90% of the global supply. The U.S. is keen on diversifying its EV battery supply chain away from Chinese control, especially in light of China's recent export restrictions on graphite. Graphjet's initiative is timely, as it plans expansions in Nevada, Korea, Japan, and Europe, aiming to address the growing global demand and the U.S.'s need for a reliable graphite source outside China.

**TFI: Phosphate and Potash are Critical Minerals, Senate Bill to Solidify (March 14, 2024, [Source](#))** – The Fertilizer Institute (TFI) has commended the U.S. Senate's bipartisan effort to classify phosphate and potash as critical minerals, highlighting the move as crucial for securing the nation's agricultural future and food supply. The legislation, backed by Senators from both parties, aims to ensure a resilient and sustainable domestic fertilizer supply for American agriculture by addressing the vulnerabilities in the global supply chain and geopolitical instability. With the majority of the world's phosphate and potash concentrated in a few countries, and the U.S. heavily reliant on imports for its potash needs, this initiative seeks to mitigate supply chain risks. Recognizing



these minerals as critical could streamline the permitting process for expanding and opening new mines in the U.S., a necessary step given the extensive time and financial investment required.

**Kazakhstan's Potential to Overtake China in Production of Rare-Earth Metals (March 14, 2024, [Source](#))** – Kazakhstan is on the verge of becoming a significant contender in the global rare-earth elements (REEs) market, challenging China's dominance. With China controlling 70% of the market and facing strained relations with the West, North American and European investors are turning to Kazakhstan's rich reserves as a strategic alternative. This shift is driven by the need to diversify supply chains away from China, given REEs' critical role in technology and manufacturing. The US and EU are prepared to invest in Kazakhstan, aiming to secure a stable, sustainable supply of these vital materials. However, Kazakhstan must modernize its mining practices and carefully select investors to fully leverage its potential as a global REE supplier.

## **Investor.News Critical Minerals Media Coverage:**

- March 20, 2024 – Anxiety Rises on the Future of Flow-Through Financings as METC Deadline Looms, Canadian Government Keeps Quiet <https://bit.ly/3IKHmI7>
- March 20, 2024 – Albemarle Lithium Auction offers a bold move forward in pricing transparency in the critical minerals market <https://bit.ly/3vkpBwf>
- March 20, 2024 – The Top 5 Reasons Why YouTube Will Transform Marketing for Public Companies <https://bit.ly/3PvPnEC>

# Investor.News Critical Minerals Videos:

- March 20, 2024 – CBLT'S Peter Clausi on de-risking exploration projects with M&A <https://bit.ly/3vfU6Uf>
- March 20, 2024 – Chris Buncic on the “shocking” Chrysalis Copper timeline for production <https://bit.ly/49ZGRGm>
- March 19, 2024 – World Renowned Critical Minerals Expert Constantine Karayannopoulos is Bullish on Lithium <https://bit.ly/43m0vbk>
- March 19, 2024 – Peartree's Ron Bernbaum on how Charitable Flow-Through Financings Connects Donors, Investors, and Mining Companies for Canada's Exploration Capital <https://bit.ly/4cj303V>
- March 19, 2024 – Xcite Resources' Jean-Francois Meilleur on the Athabasca Basin's untapped potential for significant uranium discoveries <https://bit.ly/49YQ9SK>
- March 19, 2024 – Scandium Canada's Guy Bourassa on One of the Largest Primary Scandium Projects in the World <https://bit.ly/3TlHeUp>
- March 18, 2024 – Rowena Smith Highlights ASM's Operational Success at Korean Metals Plant in Rare Earth Metals Production <https://bit.ly/3TH1jWS>
- March 18, 2024 – Jack Lifton Sits Down with 'Bobby' Stewart, the Driving Force Behind Geophysx Jamaica's Charge into the Global Arena with Critical Minerals <https://bit.ly/3vhDtaG>
- March 18, 2024 – WEALTH's Peter Nicholson on the Added Benefits of Critical Mineral Flow Through Investment Deals in Quebec, Saskatchewan and Manitoba <https://bit.ly/4a37xGk>
- March 17, 2024 – John Passalacqua on First Phosphate's groundbreaking achievements in the phosphate mining

industry <https://bit.ly/3VgRlwt>

- March 17, 2024 – America Rare Earths’ Donald Swartz on the recent increase in in-situ resources at Halleck Creek by 64% to 2.34 billion tonnes <https://bit.ly/3IGgvNv>
- March 17, 2024 – Rowena Smith sits down with Jack Lifton on ASM’s ‘Mines to Metal’ Advantage in Supplying Rare Earths <https://bit.ly/4cmIlMc>

## Critical Minerals IN8.Pro Member News Releases:

- March 21, 2024 – Hearty Bay Drilling Suggests Till Sampling May Lead to Source of Radioactive Boulders <https://bit.ly/3ILHjvL>
- March 21, 2024 – ASM receives US\$600M (A\$923 million) Letter of Interest from US EXIM for Dubbo Project, as US partnerships begin to play a significant role <https://bit.ly/4ahxWQR>
- March 20, 2024 – NEO Battery Materials Announces Change of Auditor to MNP LLP <https://bit.ly/3VrGyQf>
- March 20, 2024 – Power Nickel Continues to Expand its Near Surface High-Grade Cu-Pt-Pd-Au-Ag Zone 5km Northeast of its Main Nisk Deposit <https://bit.ly/3IM5Cd5>
- March 19, 2024 – First Phosphate Drills 9.44% P2O5 Over 89.10 m at Its Begin-Lamarche Project in Saguenay-Lac-St-Jean, Quebec, Canada <https://bit.ly/43wi4qT>
- March 19, 2024 – Defense Metals Appoints HCF International Advisers for Strategic Funding Review of Wicheeda REE Project <https://bit.ly/3IGNMIO>
- March 18, 2024 – American Rare Earths’ Scoping Study confirms low-cost, scalable world-class REE project <https://bit.ly/3IJJID2l>

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# Rowena Smith Highlights ASM's Operational Success at Korean Metals Plant in Rare Earth Metals Production

written by InvestorNews | April 5, 2024

In a conversation with InvestorNews host Tracy Weslosky, Rowena Smith, the Managing Director of [Australian Strategic Materials Ltd.](#) (ASX: ASM), highlighted the company's innovative edge in the rare earth sector. Smith detailed ASM's end-to-end approach from mining to metal production, underscoring its capability to control the entire supply chain outside China—a key differentiator in the market. She also pointed to the operational success of the Korean Metals Plant (KMP), which is already producing essential rare earth metals and alloys. Smith mentioned plans to expand KMP's production to include heavy rare earths, reinforcing ASM's competitive advantage and commitment to technological advancement.

Smith also delved into the technological innovations at the KMP, showcasing ASM's forefront position in metallurgical advancements. The KMP's current production of neodymium-praseodymium (NdPr) and the development of neodymium iron boron (NdFeB) alloys are pivotal for high-performance magnets used in renewable energy and electric vehicles. This technological edge not only demonstrates ASM's capacity to meet critical global demands but also reinforces its role as a leader in reducing dependency on the conventional rare earth supply chains. Smith's narrative underscores ASM's commitment to sustainability and

innovation, highlighting its readiness to meet the increasing demands for rare earth elements critical to modern technology and green energy solutions.

To access the complete InvestorNews interview, [click here](#)

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## About Australian Strategic Materials Ltd.

Australian Strategic Materials (ASX: ASM) is a vertically integrated 'mine to metals' producer of critical metals for new growth industries, high technologies and sustainable energy solutions. ASM operates a metals plant in Ochang, South Korea which is currently producing critical metals and alloys to customer specifications. The initial production focus is on neodymium praseodymium (NdPr) and neodymium iron boron (NdFeB). Currently, ASM sources the rare earth oxides for the production of the critical metals at its Korean Metals Plant (KMP) from a third party located in Vietnam. The company's Dubbo Project, is a long-term resource of rare earth elements, zirconium, niobium and hafnium, located in New South Wales, Australia. ASM intends to develop the Dubbo Project to produce metal oxides which will be used for refining into critical metals at ASM's KMP and subsequent plants that may be established in other jurisdictions.

To learn more about Australian Strategic Materials Limited, [click here](#)

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# **The Australian Government Steps into the Critical Minerals Supply Chain Ring**

written by Jack Lifton | April 5, 2024

A recent monumental development within the mining and rare earths sectors is the Australian government's [financial endorsement](#) of [Arafura Rare Earths Limited](#)'s (ASX: ARU) rare earth mine and refinery project. This marks a significant step forward in the global pursuit of sustainable and secure Non-Chinese owned or operated sources for critical minerals. This move, underscored by an impressive A\$840 million in loans and grants, signals a strong Australian governmental belief in the necessity and potential profitability of domestically sourced rare earth elements, vital for electric vehicle (EV) motors and renewable energy technologies.



Gina Rinehart's Hancock Prospecting, alongside other private equity interests, has seen a notable appreciation in value following this announcement, illustrating the private sector's growing confidence in rare earth ventures as a viable and lucrative investment avenue. This confidence is buoyed by government backing, which often acts as a catalyst for further private investment by demonstrating a commitment to the sector's success and stability.

Australia's strategic decision to support Arafura's project, situated near Alice Springs, showcases its ambition to become a frontrunner in the production of rare earth elements, crucial for EVs and wind turbines. This initiative not only addresses the immediate financial hurdles faced by the mining industry but also aligns with broader goals of establishing Australia as a key player in the global supply chain for renewable energy technologies.

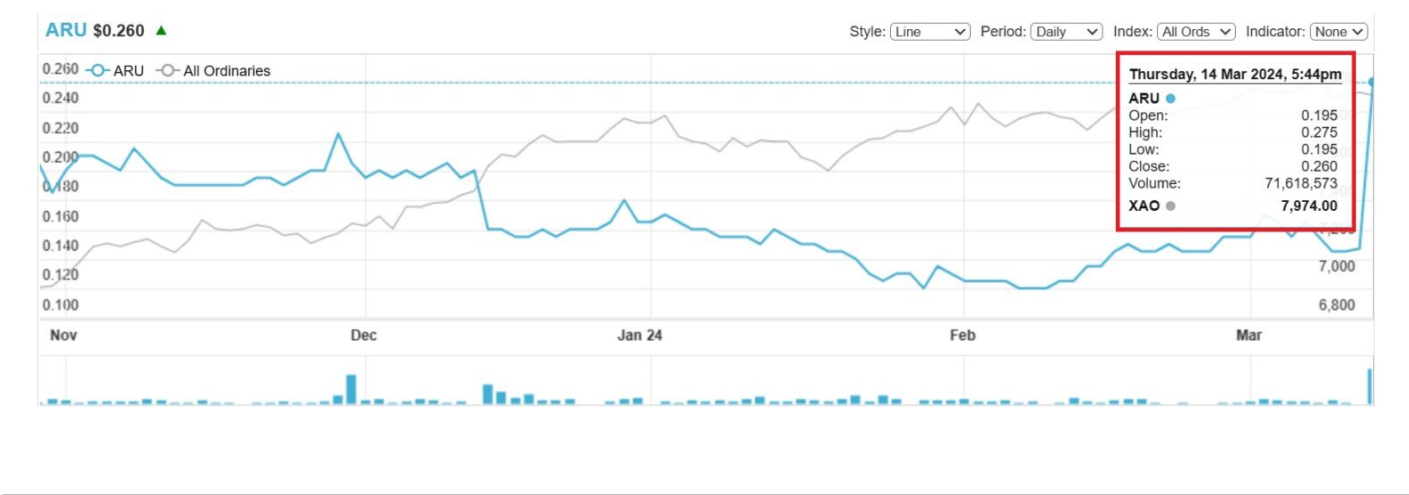
The involvement of figures like Gina Rinehart and Andrew Forrest, both of whom have substantial stakes in mining ventures, underscores a deeper shift towards mining as an investment that offers both substantial returns and strategic value in the context of the global green transition. Their investments in rare earths and the potential for vertical integration, as seen in the partnership between Forrest's [Hastings Technology Metals Limited](#) (ASX: HAS) and [Neo Performance Materials Inc.](#) (TSX: NEO), highlight a keen understanding of the sector's critical role in future technologies and energy solutions.

Australia's proactive stance, contrasted with the more cautious approaches of other Western nations, illustrates a deep understanding of the strategic importance of rare earths and the necessity for domestic processing capabilities. This is not just about securing supply chains but also about capturing more value

within the country, creating jobs, and fostering technological advancements in green energy and EV production.

Moreover, the broad financial and strategic implications of this government support extend beyond the immediate economic benefits. They underscore a pivotal moment for the global rare earths market, emphasizing the critical need for diversified, reliable sources of these essential materials. As tensions and competitions intensify on the international stage, Australia’s move represents a significant step towards greater independence and resilience in the face of geopolitical and market pressures.

In conclusion, this development is a clarion call to nations and investors alike to recognize the indispensable role of rare earths in the modern world. It is a testament to the vision and audacity of those like Rinehart and Forrest, who see beyond the immediate to the immense potential that rare earths hold for the future of technology, energy, and national security. As Australia forges ahead, it sets a compelling example for others to follow, highlighting the comprehensive strategy needed to fulfill the burgeoning demand for domestic sourcing of rare earth magnets, especially among European and American EV automotive OEMs.



# Codemge's CEO on Leveraging Minas Gerais' Position as Brazil's Niobium Mining Powerhouse

written by InvestorNews | April 5, 2024

In this interview with [Critical Minerals Institute](#) (CMI) Director Melissa (Mel) Sanderson at PDAC 2024, Thiago Coelho Toscano, CEO of [Companhia de Desenvolvimento de Minas Gerais](#) (Codemge), discussed the strategic endeavors and visionary pursuits of Codemge in Brazil's mining sector. As the economic development agency for the state of Minas Gerais, Toscano shared insights into the state-owned company's role in leveraging Minas Gerais' position as Brazil's mining powerhouse.

Toscano highlighted Codemge's collaboration with CBMM to exploit niobium deposits in Minas Gerais, a venture that not only boosts regional development through significant profit-sharing but also invests in diverse sectors including real estate and other minerals. Toscano shed light on the innovative use of niobium in enhancing steel and revolutionizing battery technology for electric vehicles (EVs). Niobium, when used in conjunction with lithium in batteries, significantly reduces charging times due to its ability to maintain lower temperatures, thus preventing overheating. For instance, an electric bus utilizing this technology could be charged in just 10 minutes. This breakthrough has implications beyond EVs, potentially benefiting energy storage solutions in wind turbines as well.

The discussion also touched upon Codemge's efforts to attract global investors to the rich mineral sector of Minas Gerais. By simplifying the mining license acquisition process and creating

a more transparent marketplace, Codemge aims to create a conducive environment for investors, thereby accelerating economic development within the state.

To access the complete interview, [click here](#)

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# **Technology Metals Report (03.08.2024) : Chinese Investment in Asia rose 37% in 2023, and the BYD Push in Australia is Underway**

written by Tracy Weslosky | April 5, 2024

Welcome to the latest Technology Metals Report (TMR) where we highlight the top news stories that members of the [Critical Minerals Institute](#) (CMI) have forwarded to us in the last week. Key highlights in this Technology Metals Report include the announcement of Australia and Vietnam upgrading their relations to begin talks on critical minerals, focusing on diversifying supply chains away from China. This significant move aims to enhance cooperation in several sectors, particularly in the energy and resources sector, emphasizing the critical minerals supply chain. Both countries, known for their substantial roles in the production and reserves of critical minerals, are looking

to strengthen their global supply chain positions amid rising geopolitical tensions and efforts to reduce dependency on China. Additionally, this edition features updates on Chinese investments in Asia, notably in Indonesia, which have surged by 37% in 2023 despite global economic challenges. This growth, largely concentrated in Belt and Road Initiative (BRI) countries, underscores China's strategic shift towards green energy and mining investments, especially in Southeast Asia.

Moreover, this edition of the TMR delves into several crucial developments in the critical minerals and technology metals landscape. The United States outlined its critical minerals strategy for the clean energy transition, emphasizing the need to secure and diversify supply chains for essential minerals such as nickel, manganese, cobalt, and lithium. The EU's move to register Chinese electric vehicle (EV) imports for potential retroactive tariffs reflects growing concerns over fair trade practices. Kazakhstan's emergence as a potential major supplier of lithium, along with investments aimed at expanding lithium operations by companies like Albemarle, highlights the global race to secure essential components for green and digital technologies. Furthermore, the report covers strategic shifts in the supply chain, such as Posco's agreement with Syrah Resources for graphite supply from Mozambique and Toyota's multi-pathway approach to CO2 emissions reduction. These stories collectively point to a dynamic and rapidly evolving global landscape for critical minerals and technology metals, underlining the strategic importance of diversification, cooperation, and sustainable development in securing the materials essential for the future of technology and clean energy.

**Australia and Vietnam upgrade relations, to begin talks on critical minerals (March 7, 2024, [Source](#))** – Australia and Vietnam have elevated their relations to a comprehensive strategic partnership, announced by Australian Prime Minister

Anthony Albanese. This upgrade includes an annual dialogue on minerals, focusing on diversifying supply chains away from China. The partnership aims to enhance cooperation on climate, environment and energy, defense and security, and economic engagement and education. Additionally, it will foster collaboration in the energy and resources sectors, especially in critical minerals supply chains. Both countries, significant in the production and reserves of critical minerals, seek to strengthen their positions in global supply chains amid rising tensions and efforts to reduce dependency on China. This move also signifies Vietnam's success in "bamboo diplomacy," enhancing its relations with major global powers. The partnership reflects a deep mutual political trust and commits to expanded cooperation across various sectors, marking a milestone in the bilateral relationship between Australia and Vietnam.

**Chinese investment in Asia rose 37% in 2023, led by Indonesia (March 7, 2024, [Source](#))** – In 2023, Chinese investment in the Asia-Pacific region surged by 37% to nearly \$20 billion, outperforming global trends amid economic challenges. Construction contracts also grew by 14% to about \$17 billion, supported by Chinese loans. This contrasts with a 12% decrease in foreign direct investment into Asia's emerging economies. The investment was predominantly in Belt and Road Initiative (BRI) countries, focusing on infrastructure that connects Asia to Europe. Non-BRI country investment plummeted by 90% to a mere \$120 million. Notably, investment strategies shifted towards green energy and mining, with 50% of China's regional investment directed towards Southeast Asia, and Indonesia receiving the largest share at \$7.3 billion. However, certain countries like the Philippines and Pakistan saw significant drops in Chinese engagement due to political and economic risks. The report anticipates a further increase in Chinese investment and

construction, especially in green transition initiatives and strategic infrastructure projects, despite China's own economic challenges.

**Under Secretary Jose Fernandez Discusses U.S. Critical Minerals Strategy for Clean Energy Transition (March 6, 2024, [Source](#))** –

Under Secretary Jose W. Fernandez discussed the U.S.'s strategy for securing and diversifying the supply chain of critical minerals crucial for the clean energy transition in a conversation with InvestorNews' Tracy Weslosky. Highlighting minerals like nickel, manganese, cobalt, and lithium, Fernandez underscored efforts to expand their supply and engage with countries possessing these resources through concrete projects, investment, and financing. He emphasized the challenge of reducing dependency on China, which currently controls a significant share of these minerals, pointing out the strategic vulnerability this poses. Fernandez stressed the importance of adhering to values such as environmental respect, community collaboration, and transparency in these endeavors. Despite slow progress, the U.S. aims to not only secure but also ethically source these minerals to support the global shift towards clean energy.

**EU set to allow possible retroactive tariffs for Chinese EVs (March 6, 2024, [Source](#))** –

The European Commission will start registering Chinese electric vehicle (EV) imports for potential retroactive tariffs, in response to an anti-subsidy investigation. This investigation aims to determine if Chinese EVs benefit from unfair subsidies, potentially harming EU producers. If found guilty, tariffs could be imposed, with provisional duties possible by July and a final decision expected by November. The Commission has found preliminary evidence of subsidy and a significant 14% year-on-year increase in imports since the investigation began in October, suggesting potential harm to EU producers. The China Chamber of Commerce



expressed disappointment, attributing the import surge to growing European demand for EVs.

**Kazakhstan positions itself for lithium windfall (March 6, 2024, [Source](#))** – Kazakhstan is emerging as a significant potential supplier of lithium, crucial for power-storage technology, with reserves estimated at around 75,600 tons. Research by the Korea Institute of Geoscience and Mineral Resources highlighted substantial reserves in eastern Kazakhstan, potentially worth up to \$15.7 billion. This discovery, along with European interest in Kazakhstan's critical raw materials, underscores the country's growing importance in the global lithium market. The European Commission and European Bank for Reconstruction and Development have allocated funds for lithium exploration, highlighting the strategic value of Kazakhstan's resources amidst increasing global demand. With investments from various countries, including China and potentially European entities, Kazakhstan is set to play a crucial role in the lithium supply chain, essential for green and digital technologies.

**BYD spearheads Chinese electric car push in Australia, a friendlier market (March 5, 2024, [Source](#))** – BYD and other Chinese automakers are making significant inroads into the Australian electric vehicle (EV) market, leveraging the friendly trade environment and benefiting from the government's aggressive EV adoption policies under Prime Minister Anthony Albanese since 2022. With no trade barriers, EV subsidies, and tax benefits, EV sales in Australia have soared, with EVs making up 7.2% of new car sales in 2023. BYD, supported by Warren Buffett, has quickly captured 14% of Australia's EV market since its entry in 2022, trailing only behind Tesla. The company plans to expand its product lineup and dealership network in Australia, aiming for mainstream market penetration. Similarly, SAIC Motor under its MG brand is set to launch new models. Incumbent automakers like Ford and Toyota are also adapting,

introducing electrified vehicles to compete. Despite being a relatively small market, Australia's lack of local car manufacturing and openness to international trade make it an attractive destination for Chinese EV manufacturers, especially given the geopolitical tensions in other key markets.

**Canada and Australia boost collaboration on critical minerals (March 4, 2024, [Source](#))** – Canada and Australia have committed to enhancing their cooperation on critical minerals, vital for battery production and clean energy transition, according to a joint statement released on the margins of the PDAC conference in Toronto. Both countries, rich in these essential minerals, aim to bolster their partnership through R&D collaboration, trade, and investment in the mining sector based on a non-legally binding agreement. This collaboration seeks to ensure supply chain transparency and promote high Environmental, Social, and Governance (ESG) standards globally. The initiative will be spearheaded by Canada's Natural Resources Ministry and Australia's Critical Minerals Office, focusing on policy and investment coordination to support the burgeoning demand for these minerals in the upcoming decades.

**Albemarle (ALB) Accelerates Lithium Growth With \$1.75B Offering (March 4, 2024, [Source](#))** – Albemarle Corporation (NYSE: ALB) announced a \$1.75 billion offering in depositary shares, each representing a 1/20th interest in Series A Mandatory Convertible Preferred Stock, with a potential additional offering of \$262.5 million under certain conditions. The proceeds are intended for general corporate uses, notably to fund growth capital expenditures for expanding lithium operations in Australia and China, as well as repaying outstanding commercial paper. The depositary shares will carry rights and preferences similar to the Preferred Stock, including conversion into common stock on or around March 1, 2027. Despite a 52.1% decrease in Albemarle's share price over the past year, the company forecasts a 10-20%

increase in Energy Storage volumes for 2024, with expected net sales in its Specialties and Ketjen segments ranging from \$1.3 to \$1.5 billion and \$1 to \$1.2 billion, respectively.

**Posco to source 60,000 tons of graphite from Africa in pull away from China (March 3, 2024, [Source](#))** – Posco Future M, a subsidiary of Posco Group, is shifting its supply chain for natural graphite, a crucial battery material, away from China towards Africa. This move is highlighted by a new deal with Australian mining firm Syrah Resources Limited (ASX: SYR), which will provide Posco Future M with up to 60,000 tons of natural graphite annually for six years from its Mozambique Balama operation, starting no later than 2025. This supply is expected to cover 40% of Posco Future M's anode production, translating to about 30,000 tons of anodes. The agreement comes amid concerns over China's control over graphite exports, potentially as leverage against international policies such as the U.S.'s Inflation Reduction Act. Posco's decision reflects a broader strategy to diversify supply sources and reduce dependency on China, amid rising geopolitical tensions and supply chain vulnerabilities.

**Total EV Adoption Is Not The Way Forward, Says Toyota Chairman (March 3, 2024, [Source](#))** – Akio Toyoda, Toyota's Chairman, expresses skepticism towards full adoption of battery electric vehicles (BEVs), arguing they will not dominate the market beyond a 30% share despite other markets already exceeding this percentage. In a presentation in Tokyo, he emphasized a multi-pathway approach to combating CO2 emissions, suggesting that consumer choice should drive the future of automotive powertrains rather than regulations. Toyota plans to focus on a diverse range of technologies including internal combustion engines, hybrids, and hydrogen vehicles, alongside BEVs. Despite the global push towards electric vehicles, with countries like Norway showing an 80% market share for EVs, Toyoda's stance

reflects a broader strategy to embrace multiple solutions for emission reduction. This perspective aligns with Toyota's goal to comply with future regulations and its commitment to sell 1.5 million EVs by 2026, while also investing in alternative technologies like e-fuels.

**Kazakhstan plans to export aluminum, gallium and scandium to the US (March 1, 2024, [Source](#))** – Kazakhstan is aiming to strengthen its trade ties with the United States by proposing to export aluminum, gallium, and scandium. This initiative was unveiled during Minister of Industry and Construction Kanat Sharlapayev's official visit to the U.S., focusing on promoting Kazakhstani interests globally and expanding cooperation in critical materials. In addition to these exports, Kazakhstan is offering tolling services and exploring the production of other precious minerals like wolfram, cobalt, lithium, and titan, aiming to discuss long-term contracts and investment support. The country, which processes 17 of the 50 minerals critical to the U.S. economy, already exports several strategic minerals to American companies. Sharlapayev's visit also involved meetings with leading American companies to discuss opportunities in industrial production and geological exploration. The talks highlighted the potential for joint projects in various sectors, including infrastructure development and technology, with the U.S. International Development Finance Corporation expressing interest in deepening cooperation with Kazakhstan.

**Chinese money still chasing Canadian critical mining deals despite Ottawa's scrutiny (February 27, 2024, [Source](#))** – A year after Canada tightened its foreign investment rules for the critical minerals sector to enhance national security, Chinese investments continue to flow into Toronto-listed mining companies, as per research by the University of Alberta. Despite Canada forcing three Chinese investors to divest their stakes in 2022 and increasing scrutiny on foreign deals, especially in

critical minerals, investments from China and Hong Kong surged to C\$2.2 billion in 2023, a significant leap from C\$62 million in 2022. This influx is buoyed by the perception that Canada remains open to Chinese investments, with junior miners finding it easier to secure funding. The critical minerals sector, vital for Canada's national security, has seen Chinese entities actively investing, notably in copper assets. For instance, MMG Africa Ventures acquired a copper mine for C\$1.7 billion, and Jiangxi Copper Co increased its stake in First Quantum Minerals Ltd. (TSX: FM). Some Canadian miners are lobbying for more Chinese investments due to difficulties in raising capital elsewhere, despite the government's stringent stance on safeguarding critical resources.

## **Investor.News Critical Minerals Videos:**

- March 08, 2024 – Mark Chalmers on Energy Fuels as a Profitable Uranium Producer in the U.S. <https://bit.ly/3P9nl1J>
- March 07, 2024 – Critical Metals Russell Fryer on Copper and Cobalt Plans for Production in 2024 <https://bit.ly/43bGYvJ>
- March 06, 2024 – Under Secretary Jose Fernandez Discusses U.S. Critical Minerals Strategy for Clean Energy Transition <https://bit.ly/433yBSZ>

## **Critical Minerals IN8.Pro Member News Releases:**

- March 8, 2024 – F3 and Traction Begin Drilling to Locate

Source of Radioactive Boulders <https://bit.ly/436k09t>

- March 7, 2024 – American Clean Resources Group Commits to Transfer Federal Tax Credits to Investors to Accelerate the Development of Its Renewable Energy Assets <https://bit.ly/3wCIjzu>
- March 6, 2024 – Halleck Creek Project Update <https://bit.ly/3InYYJV>
- March 6, 2024 – Karbon-X Announces Appointment of Brett Hull and Justin Bourque to its Board of Directors <https://bit.ly/3TpdYxt>
- March 5, 2024 – Panther Metals PLC – Australia: Coggia Nickel-Cobalt Mineral Resource Exceeds 100Mt <https://bit.ly/3IptcMI>
- March 5, 2024 – Panther Metals PLC – Obonga: Extension of Purchase Agreement <https://bit.ly/3TmYLge>
- March 4, 2024 – Ucore Progresses Through Heavy Rare Earth Processing as It Completes Second Milestone of Strategic US DoD Contract <https://bit.ly/3uSunkx>
- March 4, 2024 – First Phosphate Corp. Receives Mining Research and Innovation Grant from Quebec Ministry of Natural Resources <https://bit.ly/3Iny84z>
- March 4, 2024 – Voyageur Pharmaceuticals and API Forge Alliance for Carbon-Based Imaging Drug Advancement <https://bit.ly/3wBuem6>
- March 4, 2024 – Defense Metals Ships Mixed Rare Earth Carbonate Samples to two major REE companies <https://bit.ly/43iwmlT>
- March 4, 2024 – Power Nickel Defines Initial Volume on its High-Grade Cu-Pt-Pd-Au-Ag Zone 5km Northeast of its Main Nisk Deposit <https://bit.ly/3TiZNde>

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# Technology Metals Report (03.01.2024): Biden Calls Chinese EVs a Security Threat and the Greenest Car in America May Surprise You?

written by InvestorNews | April 5, 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 members over the past week, reflecting the dynamic and evolving nature of the critical minerals and technology metals industry. Among the key stories featured in this report are President Joe Biden's initiatives to restrict Chinese electric vehicles (EVs) citing national security concerns, the American Council for an Energy Efficient Economy's report naming the Toyota Prius Prime SE as the greenest car in America, and insights into the lithium market with investors remaining keen despite a price plunge. We also delve into the broader context of these developments, including the potential solution to the rare earth crisis through tetrataenite, BYD's exploration for a factory location in Mexico, and the ongoing challenges and opportunities facing the global electric vehicle and critical minerals markets.

This week's report also highlights various strategic collaborations and developments, including the significant challenge posed by China's EV industry to Detroit's Big Three



automakers and Australia's navigation of a critical minerals market meltdown amidst declining prices for key exports such as iron ore, nickel, and lithium. Furthermore, we cover Lynas Rare Earths Ltd.'s (ASX: LYC) call for government vigilance in the volatile nickel market, China's lithium-ion battery industry facing excess inventory and production capacity issues, Energy Fuels Inc.'s (NYSE American: UUUU | TSX: EFR) record net income and uranium production ramp-up, and Mercedes-Benz's adjustment of its electrification goal. These stories underscore the rapidly changing landscape of the technology metals and critical minerals industry, spotlighting strategic collaborations, market dynamics, and the critical role of innovation and policy in shaping the future of sustainable technology and energy.

**Biden Calls Chinese Electric Vehicles a Security Threat (February 29, 2024, [Source](#))** – President Joe Biden has initiated measures to potentially restrict the entry of internet-connected Chinese electric vehicles (EVs) into the U.S. market, citing national security concerns over their ability to transmit sensitive data to Beijing. The Commerce Department has launched an investigation into these security threats, marking the beginning of a broader strategy to prevent low-cost Chinese EVs from undermining U.S. automakers. This move comes amid growing tensions between the U.S. and China over trade and technology, with Biden emphasizing the need to protect the domestic auto industry from unfair Chinese practices. The investigation, a result of discussions with major automakers and unions, could lead to new regulations on vehicles using Chinese software, which is feared to collect extensive data on American users. This action is part of Biden's wider efforts to bolster U.S. technology restrictions against China and maintain competitiveness in the global auto market.

**The 'greenest' car in America might surprise you (February 29, 2024, [Source](#))** – A new report from the American Council for an



Energy Efficient Economy challenges the common perception that electric vehicles (EVs) are the greenest cars in America by naming the Toyota Prius Prime SE, a plug-in hybrid, as the top environmentally friendly vehicle. The Prius Prime SE can travel 44 miles on electricity before switching to hybrid mode, combining electric and gasoline power. The report assesses over 1,200 vehicles on their road and manufacturing emissions, including pollutants beyond carbon dioxide. Despite the growing market for EVs, the report emphasizes that a car's green credentials depend on factors like weight, battery size, and overall efficiency, not just its electric capabilities. Plug-in hybrids like the Prius Prime offer a balance for drivers by allowing short electric commutes and longer gas-powered trips, presenting a practical alternative amidst America's evolving charging infrastructure. Critics argue that fully electric vehicles remain the best option for environmental benefits, especially as renewable energy sources increase. However, the report suggests the importance of offering consumers a range of environmentally friendly choices to suit different needs.

**Lithium Investors Are Looking Beyond Price Plunge, Chile Minister Says (February 28, 2024, [Source](#))** – Despite a recent downturn in lithium prices, investors remain keen on new lithium projects in Chile, as confirmed by the country's Mining Minister, Aurora Williams. This interest is fueled by the long-term prospects associated with the global shift towards renewable energy and electric vehicles, rather than short-term price fluctuations. Chile, home to the world's largest lithium reserves, has seen prices drop significantly since the introduction of a new public-private partnership model aimed at attracting investment while ensuring major deposits remain under state control. Despite this, major international companies like Rio Tinto Group and Tsingshan Holding Group have continued discussions with Chilean authorities, demonstrating a sustained

interest in the sector. Chile plans to offer exploration rights in certain salt flats, with the possibility of private investors gaining either minority or majority stakes depending on the strategic importance of the area. This initiative is part of a broader effort to maintain Chile's status as a key player in the global lithium market, amidst growing competition and as the country also seeks to bolster its position in the copper industry.

**Navigating the Climate Change Storm of ESG Withdrawal and Climate Change Commitment (February 28, 2024, [Source](#))** – Recent decisions by JPMorgan, State Street, and Pimco to exit Climate Action 100+ (CA+), amid political pressures, have sparked debate over the fate of global ESG initiatives. Nevertheless, CA+'s extensive network, including over 700 members and its collaborations with high-emission companies for a low-carbon transition, exemplifies the resilience of ESG efforts. Despite these withdrawals, the broader commitment to ESG principles, especially in the extractive industries with initiatives like Copper Mark and Responsible Steel, remains robust. This commitment is further reinforced by regulatory measures against greenwashing and heightened public activism for environmental protection and equitable benefits. These trends underscore that, far from diminishing, ESG remains a crucial driver of corporate strategy and societal expectations, suggesting a sustained impact on global business practices.

**Tetrataenite as a solution to the rare earth crisis (February 28, 2024, [Source](#))** – The rare earth crisis, pivotal for modern technologies such as electric motors and wind turbines, stems from the scarcity and environmental impact of mining rare earth elements like yttrium and neodymium. As demand for these materials grows due to their importance in reducing fossil fuel reliance and combating climate change, shortages are anticipated. A potential breakthrough in 2023 by an

international research team suggests tetrataenite, a meteorite mineral with similar magnetic properties to rare earths, as a solution. Unlike its natural slow formation in space, the team discovered a method to synthesize tetrataenite on Earth rapidly using common materials like iron, nickel, and phosphorous, potentially offering an alternative to address the rare earth crisis.

**Chinese automaker BYD looking for Mexico plant location, executive says (February 28, 2024, [Source](#))** – Chinese electric vehicle manufacturer BYD is scouting locations in Mexico for a new factory, targeting the local market to enhance its share, as stated by BYD Americas CEO Stella Li. With an annual production capacity of 150,000 cars, the company plans to finalize the plant location by year-end. Recently surpassing Tesla in global EV sales, BYD's expansion into Mexico signals a potential competitive challenge to U.S. auto companies, amidst concerns from the Alliance for American Manufacturing about low-cost Chinese cars impacting the U.S. auto sector's viability. BYD's strategy focuses on serving the Mexican market, particularly eyeing central and southern regions for factory sites. The company's cost competitiveness is attributed to early investments in EV technology and extensive vertical integration. BYD also announced the launch of its Dolphin Mini EV in Mexico, priced significantly lower than the cheapest Tesla, aiming to make electric cars accessible to more Mexican consumers. However, challenges remain, such as the limited network of charging stations in Mexico.

**China's Electric Vehicles Are Going to Hit Detroit Like a Wrecking Ball (February 27, 2024, [Source](#))** – China's electric vehicle (EV) industry, led by automakers like BYD, poses a significant challenge to Detroit's Big Three (Ford, General Motors, and Stellantis). Despite recent profits and optimistic forecasts for 2024, these American giants are struggling with

their EV sales goals amidst the rapid emergence of affordable and efficient Chinese EVs. BYD, in particular, has sold millions of electrified vehicles, expanding its global manufacturing footprint to meet increasing demand. The competitive pricing and technological efficiency of Chinese EVs underscore China's evolving industrial capabilities, transitioning from basic manufacturing to complex, high-tech production including cars and batteries. This shift represents a broader challenge to American automakers, who must navigate a changing market landscape while addressing structural vulnerabilities in their business models, heavily reliant on sales of trucks and SUVs to a niche market. The U.S. government faces a delicate balance of supporting domestic industries through subsidies and trade restrictions while fostering a competitive environment that encourages innovation and adaptation to the global shift towards electrification.

**Australia's Precarious Position: Navigating a Critical Minerals Market Meltdown (February 26, 2024, [Source](#))** – Australia is at a critical juncture, facing a significant downturn in the prices of key exports such as iron ore, nickel, and lithium, which underscores the country's vulnerability due to its heavy reliance on these commodities and its dependence on China, its main buyer. The global implications of this market meltdown are profound, with the economic viability of mining and refining operations being challenged, as demonstrated by Lynas Rare Earths Ltd.'s (ASX: LYC) struggles at its Kalgoorlie ore processing plant. The decline in the nickel industry has uncovered manipulations of market prices, reflecting China's strategic dominance over the global supply chain for rare earth elements and other critical minerals. In response, Australia is attempting to reduce dependence on Chinese processing by offering subsidies to local mining and processing operations, while also dealing with the economic repercussions of collapsing

metal prices. This situation necessitates a strategic reevaluation of Australia's role in the global minerals market, exploring options like underwriting national processing facilities to enhance the value of its mineral exports and diversify its economic base amidst changing global trade dynamics.

**Rare earths leader Lynas warns govt on nickel fallout (February 26, 2024, [Source](#))** – Lynas Rare Earths Ltd. (ASX: LYC), a leading rare earths producer, has highlighted the importance of government vigilance in response to the nickel market's volatility and its broader impact on the mining sector. The company reported a 74% decrease in net profit to \$39.5 million for the half-year ending December 31, attributing this decline to subdued prices for critical minerals, largely due to China's dominance in supply. Despite the market challenges, Lynas, the largest producer of rare earths outside China, emphasizes its strategy of being a low-cost producer to sustain profitability even in a weak market. Lynas is expanding its operations, including projects in the United States, and making contingency plans for potential disruptions in supply chains, such as sourcing sulphuric acid due to the possible closure of BHP's nickel refinery. The company's experience underscores the interconnected nature of the minerals industry and the need for strategic planning and government engagement to ensure resilience and competitiveness, especially in securing sovereign supplies of critical minerals.

**China's lithium-ion battery industry faces excess inventory, production capacity as EV market downshifts: industry analysts (February 25, 2024, [Source](#))** – China's lithium-ion battery industry, pivotal in the global EV market, is navigating through a phase of excess inventory and production capacity due to decreased demand for electric vehicles. Analysts predict a challenging year ahead, with companies facing losses amidst a

price war triggered by overcapacity. The situation has led to significant price drops in lithium carbonate and battery cells, exacerbated by reduced subsidies for EVs. With production far exceeding installation into products, further price declines are expected. The market is undergoing a clearing phase, with expectations of breaking even next year. Investment in new capacity is likely to decelerate. Despite a forecasted slowdown in domestic EV sales growth, the global lithium market faces a ballooning excess supply, raising concerns over the long-term growth prospects for lithium. Top battery and lithium mining firms may only see profitability by 2025, as the industry grapples with these challenges.

**Energy Fuels Announces 2023 Results: Record Net Income and Earnings per Share, Uranium Production Ramp-Up, and Near-Term Production of Separated Rare Earth Elements (February 23, 2024, [Source](#))** – In 2023, [Energy Fuels Inc.](#) (NYSE American: UUUU | TSX: EFR) announced significant achievements including a record annual net income of nearly \$100 million and the commencement of uranium production across three mines, aiming for a production rate of 1.1 to 1.4 million pounds per year by mid-to-late 2024. The company highlighted a strong balance sheet with over \$220 million in liquidity and no debt. Revenue was primarily driven by uranium sales, with significant contributions from rare earth elements (REE) and vanadium. The sale of the Alta Mesa project funded investments in uranium and REE production. Energy Fuels is preparing for the near-term production of separated REEs, anticipating to become a leading producer outside of China. With a focus on growth, the company is also exploring expansions into additional uranium and REE sources, aiming to significantly increase production capabilities while capitalizing on market opportunities in both sectors.

**Mercedes-Benz delays electrification goal, beefs up combustion engine line-up (February 22, 2024, [Source](#))** – Mercedes-Benz

announced a postponement of its electrification target by five years, aiming for electrified vehicles to comprise up to 50% of its sales by 2030, a shift from the initial 2025 goal focused mainly on all-electric cars. This adjustment reflects a broader trend among automakers recognizing the slower-than-anticipated adoption of electric vehicles (EVs), as investments in EV technology and capacity have surpassed current demand. CEO Ola Källenius highlighted that even in Europe, a complete switch to electric vehicles by 2030 is unlikely, noting that EVs currently represent a small fraction of total sales. Mercedes-Benz reassured investors and customers of its commitment to refining its combustion engine vehicles alongside its EV ambitions, with plans for a significant lineup refresh by 2027. The announcement, coupled with a €3 billion share buyback program, positively impacted the company's stock, which saw a 5.9% increase. However, challenges such as economic slowdowns, supply chain issues, and geopolitical tensions have led the automaker to anticipate lower sales and reduced profitability for 2024.

## **Investor.News Critical Minerals Media Coverage:**

- February 28, 2024 – Navigating the Climate Change Storm of ESG Withdrawal and Climate Change Commitment  
<https://bit.ly/3SXymnP>
- February 26, 2024 – Australia's Precarious Position: Navigating a Critical Minerals Market Meltdown  
<https://bit.ly/3uWQo0Z>

**Investor.News Critical Minerals**



## Videos:

- February 29, 2024 – PDAC President Raymond Goldie Bolsters Toronto's Status as Global Mining Investment Capital in Lead-Up to PDAC 2024 <https://bit.ly/42VBDss>

## Critical Minerals IN8.Pro Member News Releases:

- March 1, 2024 – Voyageur Pharmaceuticals Ltd. Announces Closing of Private Placement <https://bit.ly/432eRzi>
- February 29, 2024 – Ucore Rare Metals to Present at the 2024 PDAC Conference <https://bit.ly/3TglcUa>
- February 28, 2024 – First Phosphate and Craier Sign MOU for the Development of Global Logistical Competencies to and from the Saguenay-Lac-St-Jean region of Quebec, Canada <https://bit.ly/49xD5DI>
- February 27, 2024 – American Rare Earths to present at two leading industry conferences in March PDAC and International Battery Seminar <https://bit.ly/49uaFuu>
- February 27, 2024 – Nano One Commences Feasibility Study for First Commercial LFP Plant and “Design-Once-Build-Many” Growth Strategy <https://bit.ly/3TaFtum>
- February 27, 2024 – Media Advisory – Neo Performance Materials Inc. Fourth Quarter 2023 Earnings Release & Conference Call <https://bit.ly/3uSkeU0>
- February 26, 2024 – Appia Reports High-Grade Total Rare Earth Oxide Results up to 22,339 ppm or 2.23% on Diamond Drill Hole #1 Within Target IV at PCH IAC Project, Brazil <https://bit.ly/48DKQHe>
- February 26, 2024 – Kraken Energy Commences Drilling at Harts Point & Provides Corporate Update



# Riding the EV Revolution Rollercoaster Amid the West's Electric Car Climbdown

written by Tracy Weslosky | April 5, 2024

Embarking on the electric vehicle (EV) revolution journey has felt like being on a rollercoaster filled with surprising developments, especially when we consider the insights from Jack Lifton, the Co-Chairman of the [Critical Minerals Institute](#) (CMI), who recently shared his thoughts on the opinion published in The Telegraph titled [The West's humiliating electric car climbdown has begun](#). Lifton's sharp analysis pierces through the prevailing chatter, offering a lucid view of the EV market's complex trajectory. He navigates us through the shifting sands of government and auto manufacturers' strategies, the intensifying competition from the East, and the shifting tides of consumer demand. Lifton's insights serve as a guiding light for deciphering the intricate forces shaping the EV landscape.

The recent shifts in the electric vehicle (EV) industry, as observed by Jack Lifton, Co-Chairman of the Critical Minerals Institute (CMI) and a notable expert in the field of technology metals, illuminate the complex interplay of government policy, market dynamics, and consumer preferences. Lifton's insights provide a nuanced understanding of the challenges and potential

misalignments within the EV sector, particularly as it pertains to the impact of government strategies, competition, and market dynamics, and the role of consumer demand in shaping the industry.

## **Impact of Government Strategies on the EV Market**

Lifton critiques the effectiveness of state-led industrial strategies in the rapidly evolving EV market, highlighting the retreat of major manufacturers like Renault and Volvo from their ambitious EV initiatives. This move, compounded by a reduction in government support, raises questions about the foresight and adaptability of such strategies. Lifton notes, "It shows that, as always, the invisible hand of the market rules... the automotive companies have suddenly discovered the market's supply demand... government doesn't dictate markets." This observation underscores the limitations of state intervention in forecasting and influencing market demands and suggests a need for more market-responsive approaches.

## **Competition and Market Dynamics**

The competition from Chinese manufacturers has significantly influenced the trajectory of the Western electric vehicle industry. Lifton points out the stark reality facing Western EV manufacturers, stating, "The cost of making electric vehicles in the United States is too high... People are buying a Chevrolet EV for \$50,000. That car cost \$100,000 to make." This price disparity, alongside the aggressive expansion of Chinese EV manufacturers into global markets, underscores the challenges Western companies face in maintaining competitiveness. The scenario posits a crucial reflection on the sustainability of

the current business models and the need for innovation and efficiency improvements.

## **The Role of Consumer Demand in Shaping EV Industry**

Lifton's commentary on the shift in consumer preference back to petrol models reveals a significant misalignment between the production of EVs and actual market demand. He remarks on the sudden interest in hybrids by companies like General Motors, indicating a rapid strategic pivot to align with consumer preferences for efficiency and practicality. Lifton argues, "Hybrids... maximize the efficiency of electric and internal combustion and therefore will allow us to have the longest supply of fuels." This perspective highlights the importance of flexibility in product offerings and the need to closely monitor and adapt to consumer demand trends.

Jack Lifton's insights offer a candid reflection on the electric vehicle industry's current state, pointing towards a future where adaptability, market intelligence, and innovation are paramount. His observations remind us that success in the EV market is not solely about ambitious government strategies or manufacturing prowess but about understanding and responding to the nuanced dance of supply, demand, and the global competitive landscape. As we consider the path forward, Lifton's analysis underscores the importance of striking a balance between visionary goals and the pragmatic realities of consumer needs and market dynamics. The electric vehicle revolution is far from over, and its success will hinge on the industry's ability to navigate these challenges with agility and foresight.