

Criticality & China: A Matter of Perspective

written by InvestorNews | April 23, 2024

In the latest thinkpiece from [Hallgarten & Company](#), editor Christopher Ecclestone analyzes the issue of critical metal and mineral supply, drawing attention to the complexities faced by both China and the West. The report, titled “[Criticality & China: A Matter of Perspective](#),” points out that China, commonly perceived as dominating the supply of various critical metals, faces significant challenges in maintaining this control. The document highlights how critical metals such as Antimony, Heavy Rare Earths, and Cesium, although seen as China-dominated, are also problematic for China to procure and maintain due to long supply lines and geopolitical instabilities.

Ecclestone argues that the West, particularly the U.S., has overlooked Chinese encroachments in the global metals market due to an inward-looking approach. “The US allowed its total dominance of Cesium to transfer to total China dominance at the stroke of a pen,” he states, underscoring the strategic missteps in managing critical metal supplies. Furthermore, he discusses the geopolitical risks associated with metal supply chains, noting that a change in government in supplier countries like the DRC, Zambia, and Burma can quickly turn supply certainty into doubt.

The report criticizes the current state of criticality rankings, which Ecclestone claims are corrupted by “carpetbagging promoters” who influence government listings to favor their interests, thereby devaluing the concept of criticality. He stresses the need for more rigorous methodologies in evaluating critical metal lists to prevent them from becoming as valueless

as “Monopoly money.”

Ecclestone’s analysis also contemplates a hypothetical Chinese criticality list, considering the metals and minerals China truly needs, especially in potential conflict scenarios. He points out the strategic disadvantage China faces due to its dependence on foreign sources for essential metals required in wartime, drawing parallels with historical precedents where resource scarcity impacted military campaigns.

Overall, the thinkpiece serves as a wake-up call to the West to reevaluate its approach to critical metals and the broader implications of geopolitical dynamics on global supply chains. To read the full report, [click here](#)

Tuan Tran Joins the Critical Minerals Institute (CMI) as the Newest Board Member

written by InvestorNews | April 23, 2024

April 16, 2024 – The [Critical Minerals Institute](#) (CMI) is proud to announce the appointment of Tuan Tran as its latest board member, effective immediately. Tuan, a seasoned professional with over two decades of experience in private equity, investment banking, and equity research, brings a wealth of knowledge and expertise to the CMI Board.

“Tuan’s joining the board is a significant step for the Critical Minerals Institute, enabling us to further our mission of driving progress in the critical minerals industry. His wealth

of experience and strategic insight are crucial additions to our efforts, supporting the sector's growth and its vital role in the transition to a carbon-neutral economy," stated Tracy Weslosky, Executive Director of the CMI.

As a Partner and Investment Committee Member at [Ara Partners](#), a private equity firm with a focus on industrial decarbonization and a portfolio of approximately \$5.6 billion, Tuan has been at the forefront of building companies that significantly reduce carbon emissions. Ara Partners invests across several sectors, including industrial & manufacturing, energy efficiency & green fuels, chemicals & materials, and food & agriculture. Tuan's role at Ara involves overseeing all aspects of the firm's investment process, highlighting his comprehensive understanding of the financial landscape and commitment to sustainable growth.

Before joining Ara Partners, Tuan Tran significantly impacted Intervale Capital as a Partner and Investment Committee Member, where he was pivotal in growing the firm's \$1.3 billion portfolio into a leader in the energy technology, industrial and environmental services sectors, driving top-quartile investor returns through his deal execution, firm building, and portfolio management skills. Tuan began his career on Wall Street, where he had significant Mergers & Acquisitions experience across New York, Tokyo, and Hong Kong. A Harvard University graduate, he dedicates time to community service, volunteering with "Little Brothers, Friends of the Elderly" and mentoring via the Harvard Alumni Association, showcasing his commitment to professional excellence and community involvement.

Tuan Tran adds: "I am honored to join the distinguished Board of Directors of the Critical Minerals Institute. CMI has been at the industry forefront advising policy makers and business leaders on the strategic importance of Western supply chains for critical minerals key to the decarbonization of transport,

energy, battery storage, and other hard-to-abate sectors. Given its global network and industry insights, the Critical Minerals Institute is uniquely positioned to promote collaboration and successful partnerships essential to advancing the energy transition and a lower-carbon future.”

The [Critical Minerals Institute](#) (CMI) is a global hub established to foster collaboration and expertise in the critical minerals market, offering a central point for business resources, networking, and government contracts. With its ‘think tank’ of leading specialists, CMI provides strategic insights and innovative solutions, alongside exclusive access to resources like a monthly Masterclass and weekly Technology Metals Report (TMR), to advance the industry.

Tuan Tran, Partner and Investment Committee Member at [Ara Partners](#) is slated as the keynote speaker for the upcoming [Critical Minerals Institute Summit III](#), scheduled for August 21-22, 2024, in Toronto, Canada, highlighting the sector’s prospects and hurdles.

About Critical Minerals Institute (CMI):

The [Critical Minerals Institute](#) (CMI) is a global entity established to cultivate collaboration and specialized knowledge within the critical minerals market. It acts as a central hub for businesses, capital markets, and professionals seeking vital business-to-business resources, government contracts, and networking opportunities with experts and services in the sector. CMI is dedicated to navigating the challenges and seizing the opportunities in this field through a mix of expert consultation, strategic alliances, and focused services and products. Integral to its offerings is the CMI ‘think tank,’ a collective of leading minds and specialists that provides in-depth analysis, strategic insights, and innovative solutions to

advance the critical minerals industry. The Critical Minerals Institute (CMI) membership package offers access to exclusive resources including a monthly Masterclass and a weekly Technology Metals Report (TMR), along with preferential rates for industry events. **Join the CMI, [click here](#)**

The Critical Minerals Institute (CMI) Summit III

Join us at the prestigious National Club in Toronto for the third iteration of the CMI Summit, a landmark 2-day gathering at the cutting edge of the critical minerals sector. Slated for August 21st and 22nd, 2024, the CMI Summit III, under the theme “Achieving Critical Minerals Mastery in Today’s Markets,” promises to be an essential confluence for industry frontrunners, investors, and experts. **Attend the CMI Summit III, [click here](#)**

Contact Information:

For more information about the [Critical Minerals Institute](#) (CMI) and its initiatives, please visit contact Tracy Weslosky at tracy@criticalmineralsinstitute.com or dial +1 416 792 8228.

U.S. Department of State Minerals Security Partnership (MSP) Aims to Support Biden

Policies on Critical Minerals

written by Melissa (Mel) Sanderson | April 23, 2024

MSP's emphasis on ESG principles reflects a global commitment to transforming and "greening" economic activity and fighting climate change, despite political anti-ESG backlash in the U.S.

To support and advance President Biden's policies on critical minerals and secure supply chains the U.S. Department of State has created the [Minerals Security Partnership](#) (MSP). The program, under the aegis of Under Secretary of State for Economic Growth, Energy and the Environment [Jose Fernandez](#), the MSP "aims to accelerate the development of diverse and sustainable critical energy minerals supply chains through working with host governments and industry to facilitate targeted financial and diplomatic support for strategic projects along the supply chain."

MSP partner States include Australia, Canada, Finland, France, Germany, India, Italy, Japan, Norway, South Korea, Sweden, the United Kingdom, the United States, the European Union (represented by the European Commission) and Estonia (the most recent country to join the MSP, officially welcomed into the fold at the March 2024 PDAC meetings). The member States will coordinate their work through the MSP Forum, established March 3 at PDAC in Toronto. The Forum will promote diverse and resilient supply chains, local value-addition, and beneficiation.

The MSP is focused on addressing four major critical minerals challenges:

1. Diversifying and stabilizing global supply chains;
2. Investment in those supply chains;
3. Promoting high environmental, social, and governance (ESG) standards in the mining, processing, and recycling sectors; and
4. Increasing recycling of critical materials

The MSP operates on the basis of several Principles under which member States strive to elevate environmental, social, and governance (ESG) standards across the global minerals sector. The MSP only will support projects that meet high, internationally recognized ESG standards throughout the life of the project.

Companies interested in participating in the MSP program and funding opportunities must:

- Demonstrate responsible stewardship of the natural environment;
- Engage in consultative and participatory processes regarding land access and acquisition;
- Commit to meaningful, ongoing consultation with communities;
- Ensure safe, fair, inclusive, and ethical conditions in the community and the workplace;
- Provide economic benefits for workers and local communities; and
- Ensure transparent, ethical business operations

These principles strongly suggest that adherence to programs such as Prior Informed Consent (PIC) (governing consultations

between companies, governments, and indigenous populations), the Extractive Industries Transparency Initiative (EITI), and human rights laws prohibiting child labor and protecting the rights of artisanal miners will be required for companies taking part in the MSP. (Note that not every country is fully implementing PIC or EITI and therefore presumably there could be exceptions on a case-by-case basis while maintaining a focus on fulfilling the intention of those programs.)

A large potential complication for the MSP could be the current absence of an internationally agreed standard on ESG implementation and reporting. The EU is considered to have the most rigorous framework, while currently the US does not have an overarching legal standard (the SEC recently postponed announcing its framework, although it is still expected to do so by the end of 2024 after almost 3 years delay). In the absence of a cohesive standard, it is possible that national law will prevail, meaning that companies will have to be fully compliant with whatever ESG laws are in place where their project will be located. Companies applying for MSP funding/participation may find it useful to follow the standards of organizations such as the Global Reporting Initiative (GRI), the IFRS Sustainability Reporting Standards developed by the International Sustainability Standards Board (ISSB) or to become members of ESG-related organizations such as the Institute for Responsible Mining Assurance (IRMA). Likewise, depending on the mineral in question, there are agreed industry standards such as Copper Mark or the International Council on Mining and Metals Principal on ESG. As the MSP grapples with the question of a universal ESG standard they no doubt will be considering the existing principles already developed by institutions and organizations such as those mentioned above.

There currently are 23 projects in the MSP, 16 of which involve mining and mineral extraction, 7 in processing, and 7 in

recycling and secondary recovery. These projects involve cobalt, copper, gallium, germanium, graphite, lithium, manganese, nickel and rare earth elements. Six projects are sited in the Americas, 5 in Europe, 13 in Africa and 3 in the Asia-Pacific region.

The State Department and officials in other participating government agencies are actively looking for additional projects meeting the above standards for production of the identified critical minerals. US Embassies overseas can be a useful resource for companies interested in learning if their projects might qualify for the MSP.

The MSP's emphasis on ESG principles is an important reminder that despite some political anti-ESG backlash in the U.S., the world – and the USG – remains committed to transforming and “greening” global economic activity and fighting to slow climate change, and is increasingly working together to mobilize resources and capabilities to achieve these vitally important goals.

**Technology Metals Report
(04.12.2024): Gina Rinehart
Steps into the Critical
Minerals Ring, while Copper**

Prepares for a Bull Ride

written by Tracy Weslosky | April 23, 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 the surging [success](#) of [Vulcan Energy Resources Ltd.](#) (ASX: VUL), backed by Gina Rinehart, in lithium production, signaling a significant advancement in battery technology. Additionally, we explore the implications of [copper's](#) climb to a 2024 high, heralded by Citi analysts as the start of the metal's second bull market this century, amidst concerns about sustainability and market dynamics. We also delve into the [ramifications](#) of Chinese car manufacturing in Italy on Stellantis and the [challenges](#) faced by Volkswagen amidst a resurgence in petrol car demand in Europe, among other crucial developments shaping the industry landscape.

This week's TMR Report also highlights the strategic moves of influential figures like Gina Rinehart, whose [investments](#) in the U.S. rare earths sector and Brazil hint at potential industry mergers and reshaping of the global rare earths supply chain. Furthermore, we discuss the imperative for the United States to strengthen its commercial ties with African nations to secure key minerals, aiming to reduce dependency on China. Amidst fluctuating rare earths prices in China and U.S. efforts to bolster domestic mining projects, we explore the intersection of environmental concerns with mining practices, exemplified by Australian billionaire Andrew Forrest's call for [greener nickel](#) production. Lastly, we examine Canada's risk of losing its position as a major mining capital due to government opacity

surrounding Chinese investments in the critical minerals sector, highlighting the broader implications of uncertain investment policies on the industry's strategic positioning.

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Gina Rinehart-Backed Lithium Hopeful Surges After Demo Batch: (April 11, 2024, [Source](#)) – [Vulcan Energy Resources Ltd.](#) (ASX: VUL), an Australia-listed lithium developer, experienced a surge of nearly 40% in its stock value after announcing the successful production of a demo batch of lithium chloride using direct-extraction technology (DLE) at its demonstration plant in Landau, Germany. This marks a significant advancement in lithium production for batteries, showcasing the potential of DLE to streamline the production process. Vulcan, backed by Australia's wealthiest individual Gina Rinehart, has established supply agreements with major European car manufacturers like Stellantis, Renault SA, and Volkswagen AG. The company's achievement was hailed as a validation of Vulcan's efforts and the viability of DLE in the lithium supply chain. Vulcan aims to commence commercial production in 2026, targeting an annual output sufficient to support half a million electric vehicles, while still seeking necessary funding. The project promises reduced carbon emissions by utilizing geothermal energy.

Copper prices climb to 2024 high as Citi calls the start of the metal's second bull market this century: (April 10, 2024, [Source](#)) – Copper prices have surged to their highest levels since June 2022, with May delivery trading at \$4.323 per pound in New York and three-month prices on the London Metal Exchange rising to \$9,477 per metric ton. This increase reflects growing demand for copper, seen as an indicator of economic health and a vital component of the energy transition, including electric vehicles, power grids, and wind turbines. Citi analysts herald

the start of copper's second secular bull market of the century, predicting prices could average \$10,000 per metric ton by year's end and potentially rise to \$15,000 in a bullish scenario. However, concerns exist about the sustainability of these price levels, with some analysts warning that high prices could dampen demand through substitution or demand destruction, emphasizing the self-regulating nature of commodity markets.

Chinese car manufacturing in Italy could force tough decisions, says Stellantis CEO: (April 10, 2024, [Source](#)) – Stellantis N.V. (NYSE: STLA) CEO Carlos Tavares warned of tough decisions, including potential plant closures, as Chinese car manufacturing in Italy could introduce new competition, notably from automakers like Chery Auto. The Italian government's negotiations with Tesla Inc. (NASDAQ: TSLA) and Chinese companies aim to boost Italy's automotive production. Tavares emphasized the pressure on Stellantis, Italy's only major automaker, could lead to efforts to increase productivity to stay competitive, potentially affecting market share and necessitating a reduction in the number of plants. Despite rumors, Tavares confirmed Stellantis's commitment to Italy, highlighting investments such as the extension of Fiat Panda's production until 2030 and the inauguration of a facility for electrified transmissions at Mirafiori. He dismissed speculation about divesting from Italy as "fake news."

Volkswagen electric car sales plunge as Europe returns to petrol: (April 10, 2024, [Source](#)) – Volkswagen's electric vehicle (EV) sales in Europe plummeted by nearly a quarter in the first quarter of the year, amid a resurgence in petrol car demand, driven by high inflation and rising energy costs. This decline contrasts with a modest 3% global dip in all-electric sales and a 4% rise in combustion engine vehicle sales. The shift comes as governments reevaluate EV subsidies and emissions targets, with the UK delaying its ban on new petrol and diesel

sales from 2030 to 2035, and the EU considering allowances for synthetic fuels. This backdrop of diminishing government support and increased competition from more affordably priced Chinese EVs, such as those from BYD, has pressured Volkswagen's sales. Despite these challenges, Volkswagen experienced a significant 91% surge in EV sales in China, underscoring the regional disparities in EV adoption trends. Other manufacturers like BMW and Tesla also report varying EV sales performance, highlighting the evolving and competitive landscape of the global electric vehicle market.

China's Tianqi Lithium's \$4bn bet on Chile at risk of backfiring: (April 9, 2024, [Source](#)) – In 2018, Tianqi Lithium, a major Chinese lithium producer, invested \$4 billion to acquire a significant stake in Chile's SQM, a move aimed at securing a strong position in the global lithium market, essential for electric vehicles. This investment in the heart of the "lithium triangle" (Argentina, Bolivia, and Chile) now faces challenges due to Chile's government seeking greater control over lithium resources, particularly in the Atacama Desert where SQM operates. SQM's agreement with Codelco, a state-owned enterprise, to form a joint venture aligns with Chilean policies for public-private partnerships in strategic sectors, potentially diminishing Tianqi's influence and future prospects in SQM's lithium venture. This development is part of a broader trend where countries are reclaiming control over critical minerals for the green transition, affecting companies like Tianqi, whose profitability and market position are under pressure from changing regulations, market dynamics, and operational challenges, both in Chile and globally.

Rinehart's MP Buy Could Trigger Rare Earths Mining Mega Merger: (April 9, 2024, [Source](#)) – Gina Rinehart, Australia's wealthiest person and iron ore magnate, has made a significant move into the U.S. rare earths sector by acquiring a 5.3% stake in MP

Materials Corp. (NYSE: MP), which owns the Mountain Pass mine in California. This purchase has led to a 20% increase in MP's share price within five days. Rinehart's investment extends beyond MP to a 10% stake in [Arafura Rare Earths Limited](#) (ASX: ARU), an Australian rare earth producer, and 5.8% in a Brazilian company. Amidst growing competition with China and threats to "weaponize" its dominance in rare earths essential for modern technologies, Rinehart's actions hint at potential for a major merger, particularly between MP and Australia's Lynas Rare Earths Ltd. (ASX: LYC), aiming to create a significant non-Chinese rare earth supply. This development could signal strategic shifts in global rare earths production, with potential large-scale industry consolidation on the horizon.

China's EV export boom fuels surge in demand for new car-carrying ships: (April 9, 2024, [Source](#)) – Amidst a burgeoning demand for electric vehicles (EVs), Chinese automakers and shippers are investing heavily in a fleet expansion, ordering a record number of car-carrying ships. This surge places China on a trajectory to possess the world's fourth-largest car-carrying fleet by 2028, ascending from its current eighth position. Major corporations like SAIC Motor, Chery Automobile, and EV titan BYD, along with shippers such as COSCO and China Merchants, are spearheading this initiative, accounting for a quarter of global orders. This influx primarily benefits Chinese shipyards, capturing 82% of the global orders. The expansion into foreign markets, buoyed by a cost-efficient supply chain, has been crucial for Chinese automakers facing domestic challenges like price competition and a slow economy. Notably, China has surpassed Japan as the premier auto exporter, with significant contributions from companies like BYD. However, this export growth has raised concerns in the U.S. and EU about market oversaturation with low-priced goods, though China rebuts, highlighting innovation and downplaying state support's role.

US must boost Africa ties to secure key minerals, report says: (April 9, 2024, [Source](#)) – To secure vital minerals critical for sectors ranging from electric vehicle production to defense, the United States must strengthen its commercial relationships with African nations, a report from the United States Institute of Peace emphasizes. This is to reduce dependency on China, which currently dominates the supply of these critical minerals. The U.S.'s near-total reliance on foreign sources, especially China, for these materials poses significant economic and national security risks. The report highlights the lag of Western mining companies behind Chinese counterparts in tapping into Africa's rich mineral resources. It suggests enhanced U.S. commercial diplomacy, particularly with leading mineral suppliers like the Democratic Republic of Congo and Zambia. Additionally, it points out the competition from Middle East firms and proposes measures like increasing project financing and reopening the U.S. consulate in Lubumbashi to facilitate U.S. investment. Despite challenges, the report argues for a more vigorous approach to match China's influence in Africa's mining sector.

Rare earths prices in China hit 7-week high on post-holiday restocking: (April 9, 2024, [Source](#)) – Rare earths prices in China, the world's leading producer, reached a seven-week peak on April 8 due to increased post-holiday restocking, before slightly declining the following day. With China dominating 70% of mining and 90% of the refined rare earths market, notable increases were observed in praseodymium oxide and terbium oxide prices, highlighting the country's significant influence on the market. The demand surge, particularly after the QingMing Festival, led to a depletion of in-plant stocks among magnetic materials producers, who then turned to the spot market for replenishment. Additionally, the use of ore cargoes as collateral by some to alleviate financial pressures contributed to the price hike. The start of the rainy season in Myanmar, a

major supplier, is expected to reduce ore availability, potentially increasing market volatility as companies rely more on spot market purchases, impacting long-term contract stability. Consequently, shares in China Northern Rare Earth (Group) High-Tech saw a 4.3% increase.

Perpetua Resources gets nod to seek \$1.8 bln US loan for antimony mine: (April 8, 2024, [Source](#)) – [Perpetua Resources Corp.](#) (NASDAQ: PPTA | TSX: PPTA) has received preliminary approval from the U.S. Export-Import Bank (EXIM) for a \$1.8 billion loan to develop an antimony and gold mine in northern Idaho, aligning with efforts to reduce China's dominance in critical minerals. This potential loan marks one of the largest U.S. investments in the mining sector, reflecting the Biden administration's strategy of using federal funds to support projects that compete with Chinese firms. In addition to this loan, Perpetua will seek extra equity funding. The Stibnite mine aims to become the only U.S. source of antimony, vital for military hardware and electric vehicle batteries, while also harboring substantial gold reserves. This venture is part of a broader U.S. initiative to secure domestic supplies of essential minerals and counter China's market influence.

Mining billionaire Forrest urges China to demand greener nickel: (April 7, 2024, [Source](#)) – Australian mining billionaire Andrew Forrest has publicly called for China to implement and enforce higher environmental standards within its global supply chains, especially focusing on nickel processing in Indonesia, citing severe environmental damage. In a Financial Times interview, Forrest, who is the chair and largest shareholder of Fortescue Ltd. (ASX: FMG), criticized the extraction of Indonesian nickel for its extensive environmental degradation and urged electric vehicle manufacturers to be cautious when sourcing nickel from Indonesia. Forrest highlighted that China's increasing control over Indonesia's nickel production, vital for electric car

batteries and steelmaking, comes with significant environmental concerns, including deforestation, mining waste pollution, and high carbon emissions from coal power. Despite shutting down his nickel mines in Western Australia due to price drops influenced by Indonesian nickel, Forrest remains vocal about the need for a “green premium” for sustainably produced nickel and criticizes the lack of differentiation in the market. The call comes amid rising environmental scrutiny and the potential for market-driven adjustments to reflect the environmental cost of production.

Canada risks losing mining capital because of government opacity around Chinese investment in critical minerals sector: (April 5, 2024, [Source](#)) – The opacity of the Canadian government regarding Chinese investment in the critical minerals sector is leading to investor uncertainty and risking Canada’s position as a major capital source for mining. Despite Ottawa’s late 2022 announcement allowing Chinese investments only under “exceptional circumstances” without defining them, transactions continue, confusing the market. For instance, Shenghe Resources acquired a 10% stake in Vital Metals Ltd. (ASX: VML), owner of Canada’s only operating rare earths mine, even purchasing a significant stockpile of rare earths mined in Canada. Critics, including those from the Macdonald-Laurier Institute, find it problematic, especially given China’s dominance in the rare earths market. The unclear stance and handling of investments, such as the blocked financing deal for SRG Mining Inc. (TSXV: SRG)., reflect a broader uncertainty and potential discouragement of future critical minerals companies from basing in Canada, fearing the government’s unpredictable investment policies. This situation may drive new companies to other countries, impacting Canada’s mining capital and strategic positioning in critical minerals.

Investor.News Critical Minerals Videos:

- April 12, 2024 – Defense Metals Dr. Moreno on the Wicheeda Project Poised to Become North America's Next Rare Earth Mine <https://bit.ly/3TXs7kh>

Critical Minerals IN8.Pro Member News Releases:

- April 10, 2024 – American Rare Earths' Assay Results Expand Rare Earth Enrichment Within the Cowboy State Mine Area at Halleck Creek, Wyoming <https://bit.ly/3JecW0T>
- April 10, 2024 – Critical Metals PLC: Issue of Convertible Loan Notes and Corporate Update <https://bit.ly/4aLZ75P>
- April 10, 2024 – Mount Squires Project Option Agreement to unlock potential further rare earth supply <https://bit.ly/440rco4>
- April 09, 2024 – Pekuakamiulnuatsh First Nation and First Phosphate Announce Collaboration Agreement <https://bit.ly/4d2nH4C>

Technology Metals Report

(04.05.2024): Uranium Price Doubles as the Green Economy Charges Forward

written by Tracy Weslosky | April 23, 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 ZenGUARDTM-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>

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

Decarbonize Economy

written by Tracy Weslosky | April 23, 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 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 CO₂ 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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Austrian Mining and Steel Association's Roman Stiftner on the Power of European Collective Voice

written by InvestorNews | April 23, 2024

In a comprehensive interview hosted by Stephen Lautens of the [Critical Minerals Institute](#) (CMI) with Roman Stiftner, Managing Director of the Austrian Mining and Steel Association during PDAC 2024, Stiftner shared valuable insights into the European Union's growing focus on the mining sector. Stiftner, who also serves as the vice president of Euromines, outlined the strategic efforts by these organizations to consolidate the industry's voice within Europe. Highlighting the importance of a

united front, he remarked, “Coming from a small country, it’s sometimes important to collect a bit more the strength of a common voice and be vocal in this way.” This collective approach aims to enhance the visibility and impact of the mining, steel, and non-ferrous metals industries at an international level, particularly through advocating for the sector’s interests to the European Commission, Parliament, and the wider public. Stiftnier emphasized the importance of mining to achieving carbon neutrality across the continent and the planet, underscoring the sector’s foundational significance in the transition towards a more sustainable future.

The discussion explored the evolving importance of Europe in global mining, influenced by recent crises such as the pandemic, geopolitical tensions, and the urgent need to combat climate change. Stiftnier identified these challenges as catalysts for a paradigm shift towards securing local mining operations and raw material supplies to bolster resilience and support the ecological transition. “We have to do something against climate change... Having mines in Europe and having the raw material side available for a more resilient supply of raw materials is key to make this transformation happen,” Stiftnier explained, highlighting Europe’s active role in the green technology and electric vehicle revolutions. Furthermore, he advocated for stronger transatlantic cooperation based on shared ESG values, aiming to establish global standards for responsible sourcing. Recognizing Europe’s dependence on strategic partnerships for essential raw materials, Stiftnier’s presence at PDAC underscored the Europe’s pursuit of collaboration with reliable partners like Canada, aiming to mutually enhance economic and environmental outcomes through mining.

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

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Albemarle Lithium Auction offers a bold move forward in pricing transparency in the critical minerals market

written by InvestorNews | April 23, 2024

In a notable development within the lithium industry, [Albemarle Corporation](#) (NYSE: ALB), the world's largest producer of lithium, has announced its plan to host an auction for a significant quantity of lithium on March 26. This move marks a strategic attempt to address the persistent issue of price discovery in a market characterized by its lack of transparency and high volatility. Jack Lifton, Co-founder of the [Critical Minerals Institute](#) (CMI), offers insightful commentary on the implications of this event, tying it to the broader challenges facing the lithium market today.

The auction by Albemarle, according to a [news story](#) published on Reuters yesterday is a response to the dramatic shifts witnessed in the lithium sector, propelled by the electric vehicle (EV) revolution. Since 2007, lithium production has surged from less than 4,000 tons to 186,000 tons, underscoring the metal's critical role in the transition towards electrification. Despite this growth, the industry has struggled with establishing a clear and stable pricing mechanism, a challenge that Lifton identifies as a major impediment to investment and development

within the sector.

Historically, the pricing of lithium has been opaque, often negotiated privately between producers and buyers. This lack of clarity has been further complicated by the introduction of lithium contracts on Chinese exchanges, which, despite their potential, have failed to provide a global benchmark due to issues of transparency and accessibility for international market participants. Western attempts to establish futures trading for lithium, such as those by the London Metal Exchange (LME) and the Chicago Mercantile Exchange (CME), have also seen limited success, highlighting the disconnect between traditional commodity trading mechanisms and the unique dynamics of the lithium market.

Albemarle's upcoming auction represents an innovative approach to tackling these pricing challenges. By opening up the sale of a substantial quantity of lithium to competitive bidding, the company aims to foster greater transparency and provide a more accurate reflection of current market valuations. This initiative not only seeks to bridge the gap in price discovery but also serves as a potential model for future transactions in the industry.

Lifton emphasizes the importance of this auction in the context of the lithium market's evolution. The shift towards digital auctions and the potential for establishing more transparent pricing indices reflect the industry's adaptability and its search for solutions that align with the realities of global lithium supply and demand. However, he also cautions that while this auction may offer valuable insights, it is not a definitive solution to the market's overarching issues of volatility and unpredictability.

In conclusion, Albemarle's decision to host an auction for its

lithium products is a significant step towards addressing the critical challenge of price discovery in the lithium market. As Lifton notes, this approach represents a move away from traditional pricing mechanisms and towards a more transparent and dynamic model. While the long-term impact of this and similar initiatives remains to be seen, they underscore the lithium industry's ongoing efforts to adapt to the complexities of a rapidly evolving global market.

World Renowned Critical Minerals Expert Constantine Karayannopoulos is Bullish on Lithium

written by InvestorNews | April 23, 2024

In an insightful interview with Tracy Weslosky of InvestorNews, Constantine Karayannopoulos, a renowned expert in the field of critical minerals, shared his perspectives on the current state and future prospects of the critical minerals market. Karayannopoulos highlighted the pivotal role of critical minerals such as rare earths, lithium, and nickel in the burgeoning sectors of battery technology and electric vehicles (EVs), underscoring the global buzz around these resources. He noted the current challenges faced by small companies in raising funds and the general market sentiment. Despite these hurdles, he expressed optimism, suggesting that the downturn in valuations and financing is temporary. "We're at close to or at the bottom of the cycle with a lot of these commodities," he

stated, advising resilience for these firms in anticipation of a market rebound fueled by sustained demand for technologies reliant on critical minerals.

Karayannopoulos offered insightful commentary on the critical minerals market, particularly focusing on lithium and rare earths. With a bullish stance on lithium, he reminisced about the industry's past pricing projections and observed the current market's resilience despite recent price drops. "Lithium still is the workhorse in the battery space... for the next decade, lithium will be the workhorse of the EV battery," he affirmed, advocating for strategic investments in this area during market lows. His observations extended to the rare earths market, noting its sensitivity to Chinese economic dynamics and the potential for price stabilization in the near term. Highlighting Brazil's emerging role in diversifying the global supply of heavy rare earths, he emphasized the importance of exploring favorable mineralogy and environmental practices in new geographies. This strategic diversification, he argued, is crucial for addressing the geopolitical and social concerns associated with current heavy rare earths sourcing, primarily from Myanmar.

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

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Scandium Canada's Guy Bourassa on One of the Largest Primary Scandium Projects in the World

written by InvestorNews | April 23, 2024

In an insightful interview with InvestorNews host Tracy Weslosky, Guy Bourassa, CEO and Director of [Scandium Canada Ltd.](#) (TSXV: SCD | OTCQB: SCDCF), highlighted their unique position in the global scandium market as the owner of "...one of the largest primary scandium projects in the world". Bourassa emphasized that this distinction is particularly significant given the current scarcity of scandium, which is primarily sourced as a byproduct from regions such as Russia and China. The scarcity of scandium underscores the strategic importance of Scandium Canada's Crater Lake Project, as industries worldwide are increasingly in need of reliable and scalable sources of scandium to meet the growing demand for this high-performance metal.

Bourassa discussed how scandium offers remarkable benefits when added to aluminum alloys, significantly enhancing their properties. These enhanced scandium-aluminum alloys exhibit increased strength, improved thermal resistance, and greater weldability compared to their standard aluminum counterparts. This combination of traits makes scandium-alloyed materials highly sought after, especially in sectors where material performance and weight reduction are critical, such as aerospace, automotive, and defense industries. Bourassa explained that incorporating scandium leads to significant weight reduction, facilitating more efficient aircraft and vehicles which, in turn, contributes to a reduction of greenhouse gas emissions.

Bourassa drew an intriguing parallel to the history of niobium, an element that revolutionized the steel industry by enhancing steel's properties when alloyed. He added, "Scandium Canada is going to do the same thing for the aluminum sector." Furthermore, the strategic initiatives undertaken by Scandium Canada, including leveraging significant grants and government programs available for critical mineral projects in Canada, position the company advantageously for rapid project advancement with minimal shareholder dilution. This financial acumen, coupled with the project's significance in providing a primary source of scandium, places Scandium Canada in a strong competitive position.

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About Scandium Canada Ltd.

Scandium Canada is a Canadian technology metals company focused on advancing its flagship Crater Lake scandium and rare earth project in Québec.

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