

InvestorTalk Alert: Making Lives Safer through Nanotechnology

written by Tracy Weslosky | February 26, 2024

As we approach the highly anticipated InvestorTalk tomorrow morning, I am delighted to be preparing for an InvestorTalk that promises to be both enlightening and engaging. With Dr. Carolyn Myers at the helm from 9-9:20 AM EST, we are set to do a coffee talk Q&A style, as we secure the latest advancements and strategic directions in the realm of nanotechnology and surface protection coatings from the undeniably talented FendX management team. Dr. Myers, CEO of FendX Technologies Inc., is renowned for her visionary leadership and her pivotal role in steering the company towards groundbreaking innovations...check out her [LinkedIn profile](#), and then – here are tomorrow's details:

9-920 AM EST

Tuesday, February 27, 2024

InvestorTalk with Dr Carolyn Myers from [FendX Technologies Inc.](#)
(CSE: FNDX | OTCQB: FDXTF)

Join Zoom Meeting – [Click Here](#)

One of the most noteworthy achievements that we will be highlighting during the talk is FendX's successful completion of its third pilot run for manufacturing REPELWRAP™ film using Dunmore International Corp.'s commercial equipment. This milestone, announced on [February 13, 2024](#), marks a significant leap forward in the company's quest to optimize the production process of this innovative film.

The journey of REPELWRAP™ film from concept to near-

commercialization is a testament to FendX's relentless pursuit of excellence. The initial pilot run, revealed on October 3, 2023, confirmed the feasibility of scaling up the REPELWRAP™ film formulation for automated manufacturing. This was followed by a second pilot run on January 10, 2024, which introduced a more efficient one-pass coating process, significantly reducing manufacturing time and advancing the scale-up development initiatives.



The third and latest pilot run focused on utilizing the one-pass coating process to further reduce drying times after the nano-coating is applied to the film. This achievement not only enhances the efficiency of the manufacturing process but also supports FendX's ongoing efforts to refine and perfect their production techniques. With each pilot run, FendX has moved closer to realizing a final commercial manufacturing process, demonstrating significant progress in optimizing the

intermediate scale-up of REPELWRAP™ film.

REPELWRAP™ film is poised to revolutionize the way we approach surface protection. Leveraging FendX's award-winning nanotechnology, this protective coating film exhibits unique properties that prevent the adhesion of pathogens, bacteria, and viruses, thereby reducing their transmission on surfaces prone to contamination. Such innovative solutions are crucial in healthcare settings and various industries, offering a new layer of protection in our fight against the spread of infectious diseases.

Dr. Myers' leadership has been instrumental in forging strong collaborations with Dunmore and McMaster University, propelling FendX towards its goals with unmatched expertise and dedication. As we prepare to share these exciting developments with our investors and stakeholders, we look forward to a session filled with insightful discussions, strategic foresights, and a glimpse into the future of surface protection technologies.

Tomorrow's InvestorTalk is not just a presentation of achievements; it's a celebration of the strides FendX is making towards safer, more protected environments. Join us as we explore the cutting-edge innovations that FendX is bringing to the forefront, under the adept guidance of Dr. Carolyn Myers.

As of the latest financial disclosure, FendX Technologies Inc. (CSE: FNDX | OTCQB: FDXTF) has 53.04 million common shares outstanding.

Technology Metals Report (02.23.2024): Yellen to Visit Chile for Critical Minerals and Biden's EV Dreams Are a Nightmare for Tesla

written by Tracy Weslosky | February 26, 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. From the Inflation Reduction Act's challenges for the American EV industry to China's lithium market developments and Treasury Secretary Janet Yellen's strategic visit to Chile, our report covers a wide array of developments crucial for stakeholders. The unveiling of Tesla Inc.'s (NASDAQ: TSLA) lithium refinery in Texas, alongside CATL's confirmation of its lithium mine's normal operations, paints a picture of the industry's efforts to navigate through pricing volatilities, supply chain complexities, and geopolitical tensions. Moreover, the significant moves by major financial institutions in the uranium market and Gecamines' strategic overhaul in the DRC underline the shifting paradigms in the mining and investment landscapes of technology metals.

This TMR report also highlights the broader implications of these developments on the global stage, including efforts to diminish reliance on China for essential metals, the impact of Tesla's pricing strategies on the used EV market, and the

strategic dialogues around rare earths markets. The visit by US Treasury Secretary Janet Yellen to Chile is spotlighted as a key initiative to bolster ties around critical minerals, emphasizing the urgency of diversifying supply chains amid growing demands for green transition materials. Additionally, the narrative around the challenges posed by the Inflation Reduction Act for Tesla and the US car industry, coupled with BHP's cautionary stance on the Australian nickel sector, illustrates the complex interplay between policy, market dynamics, and strategic resource management. As we delve into these stories, our aim is to provide a comprehensive overview that informs and stimulates discussion among policymakers, industry leaders, and stakeholders, navigating the intricate pathways towards a sustainable and competitive future for critical minerals and technology metals.

MP Materials swings to quarterly loss on falling rare earths prices (February 22, 2024, [Source](#)) – MP Materials Corp. (NYSE: MP) reported a fourth-quarter loss, attributed to declining rare earths prices and increased production costs, despite expectations of a larger deficit. Amidst unsuccessful merger discussions with Lynas Rare Earths Ltd. (ASX: LYC) and competition from Chinese firms, CEO Jim Litinsky emphasized the potential for mutual learning and cost reduction among companies. Despite a 2.7% drop in shares on Thursday, a slight recovery was observed in after-hours trading. The company experienced a significant shift from previous year's profit to a \$16.3 million loss. Sales of rare earths concentrate to China decreased by 34% due to lower production at its Mountain Pass mine, exacerbated by facility issues. However, MP is advancing in refining rare earths domestically, with ongoing projects in California and Texas, and has initiated production in a new facility in Vietnam.

Stalling the American EV Industry: The Unintended Consequences

of the Inflation Reduction Act's Attempt to Bypass China for Critical Minerals (February 22, 2024, [Source](#)) – The Inflation Reduction Act (IRA), integral to President Joe Biden's environmental strategy, seeks to transition the American automotive industry towards a US-centric electric vehicle (EV) supply chain, reducing reliance on Chinese materials. This shift, exemplified by initiatives like Tesla Inc.'s (NASDAQ: TSLA) lithium refinery in Texas, aims to enhance the competitiveness of American-made EVs. However, the IRA's stringent requirements for sourcing materials domestically or from approved countries by 2024 pose significant challenges, complicating efforts by major manufacturers to maintain affordability and quality. Jack Lifton, an expert in the field, highlights the complexity of creating a new EV supply infrastructure and the strategic challenges of overtaking China's advanced position in the EV sector. The article emphasizes that realizing the IRA's vision demands innovation, strategic foresight, and time, presenting both obstacles and opportunities for the U.S. automotive industry in its quest for sustainability and energy independence.

Battery factories: Europe's mechanical engineering companies are lagging behind (February 22, 2024, [Source](#)) – The report "Battery Manufacturing 2030: Collaborating at Warp Speed" by Porsche Consulting and the German Engineering Federation (VDMA) highlights the expansion of battery factories, with around 200 set to be constructed worldwide in the next decade, predominantly in Europe. Despite this growth, European mechanical engineering firms are trailing behind their Asian counterparts, particularly in supplying high-tech equipment for these factories, with only 8% of such technology currently coming from Europe. This low market share limits Europe's influence on technical development in the battery sector. The study suggests that to avoid technological dependency and

enhance their market position, European companies must aim for at least a 20% market share, requiring significant growth and collaboration to offer integrated factory solutions competitive with turnkey plants from China. The study emphasizes the potential for growth and the critical need for European firms to innovate and collaborate to secure a substantial stake in the rapidly expanding battery production technology market, estimated at 300 billion euros by 2030.

“This is a very important article, because it illustrates that the EV battery manufacturing industry has become technologically dependent upon Chinese manufacturing technology for efficient and economical production. Is this the beginning of the end for any attempt by the non-Chinese world to catch up? No, we’ve already reached that point, and what other manufacturing industries in the West are circling the drain?” – Jack Lifton, CMI Co-Chair & Co-Founder

China’s CATL says its lithium mine operating normally (February 22, 2024, [Source](#)) – Chinese battery giant Contemporary Amperex Technology Co. (CATL) has confirmed that its lithium mine in Jiangxi province is operating normally, amidst market speculation of a halt due to falling lithium prices. The Jianxiawo mine, rich in hard rock lepidolite and a subsidiary of CATL, faced rumors of reduced or stopped production due to economic challenges. However, CATL asserts production is ongoing as planned, despite market rumors suggesting otherwise. After the Lunar New Year holiday, it was noted that only one of two production lines resumed operation. The mine, which began phase-one production recently, aims for a 200,000 tons capacity of lithium carbonate equivalent (LCE) upon completion of all phases. Despite high production costs compared to current market prices, analysts predict significantly lower output this year than initially expected, with potential delays in future expansion due to these costs. The speculation had earlier

boosted Australian lithium stocks.

China's lithium carbonate futures jump on talk of environmental crackdown (February 21, 2024, [Source](#)) – On Wednesday, China's lithium carbonate futures prices experienced a significant rally, driven by market speculation regarding potential environmental inspections in a key production area. This speculation raised concerns about possible output restrictions, leading to a 6.35% increase in the most-active July contract on the Guangzhou Futures Exchange, reaching 99,600 yuan per metric ton. Speculation centered around Yichun, a major lithium production city in Jiangxi province, facing environmental checks that could limit operations for producers failing to properly manage lithium slag. Despite these rumors, major producers in Jiangxi continued their operations as planned, with some undergoing scheduled maintenance. The price surge, reflecting concerns over supply constraints, followed a rally in Australian lithium stocks prompted by rumors that Chinese battery maker CATL had closed its Jianxiawo mine.

Yellen to Visit Chile in Push to Boost Ties on Critical Minerals (February 21, 2024, [Source](#)) – US Treasury Secretary Janet Yellen is scheduled to visit Chile next week as part of an effort to strengthen the United States' ties with Chile, focusing on the South American nation's significant role in the green transition through its contribution to renewable energy policies and as a supplier of critical minerals. This visit is a strategic move by the US to diversify its critical minerals supply chain and reduce its dependence on China, which currently leads the market for essential metals necessary for energy transition technologies. Chile, possessing one of the world's largest lithium reserves, is seeking foreign investment to expand its capacity within the global battery supply chain. The visit, which follows Yellen's attendance at a G20 finance ministers' meeting in Sao Paulo, aims to deepen bilateral

economic relations, particularly in the context of Chile's potential to benefit from President Biden's green stimulus program due to a free-trade agreement with the US, thereby supporting North American electric vehicle production.

Tesla's price cuts are driving down car values so much that EV makers are sending checks to leasing firms to compensate them (February 21, 2024, [Source](#)) – Tesla's price reductions have significantly lowered the resale value of used electric vehicles (EVs), prompting automakers to issue compensation to leasing companies like Ayvens to cover these losses. This adjustment comes as the industry is pushed to sell more EVs to avoid fines, with leasing firms seeking protections against further depreciation in the \$1.2 trillion second-hand car market. The demand for used EVs fell due to Tesla's price cuts, affecting companies that play a vital role in the corporate car market. To mitigate risks of depreciation, negotiations for buyback agreements and re-leasing options are underway. Regulatory pressures for lower fleet emissions compound the issue, as unstable used-EV pricing challenges the transition to electric mobility by 2035. Corporate shifts, like SAP SE discontinuing Teslas for employees, underscore the broader impacts of volatile EV pricing on the industry.

Biden's EV Dreams Are a Nightmare for Tesla and the US Car Industry (February 20, 2024, [Source](#)) – The Inflation Reduction Act (IRA), initiated by President Joe Biden to foster a US-centric electric vehicle (EV) supply chain and reduce reliance on Chinese components, poses significant challenges for Tesla and other American car manufacturers. Despite Tesla's initial steps towards compliance, including sourcing batteries from within the US and building a lithium refinery in Texas, the company's substantial procurement of Chinese lithium-ion batteries underscores the complexity of shifting away from China's supply network. The IRA mandates stringent sourcing

requirements for battery components and raw materials, aiming to cut China's dominance in the EV sector. However, these measures have compelled carmakers to navigate a difficult transition, risking the affordability and competitiveness of EVs. As Tesla, GM, Ford, and others strive to adapt to these evolving standards and develop alternative supply chains, they face the daunting task of balancing economic, environmental, and strategic objectives in a rapidly changing global market dominated by geopolitical tensions and the strategic distribution of critical minerals.

Goldman, hedge funds step up activity in physical uranium as prices spike (February 20, 2024, [Source](#)) – Investment banks Goldman Sachs and Macquarie, along with some hedge funds, are increasingly engaging in the uranium market, driven by a spike in uranium prices to 16-year highs. While many banks remain cautious, these institutions are actively trading physical uranium and, in Goldman's case, its options. This shift is fueled by utilities' need for new supplies amid shortages. The interest in uranium is also growing among hedge funds and financial institutions, a notable change after the sector's stagnation post-Fukushima disaster. Uranium prices have doubled over the past year, reaching \$102 a pound, prompted by production cuts from top producers and a renewed interest in nuclear energy as a means to reduce carbon emissions. Goldman Sachs has also introduced options on physical uranium for hedge funds, marking a significant development in the market. This increased activity reflects a broader appeal of uranium to financial investors, with notable investments in physical uranium as well as equities related to the sector.

Gecamines plans overhaul of mining JVs in world's top cobalt supplier (February 20, 2024, [Source](#)) – Gecamines, the state miner of the Democratic Republic of Congo, is seeking to renegotiate terms of its copper and cobalt joint ventures to

increase its stakes and gain more control. Aiming to leverage global demand for minerals essential for the green energy transition, Gecamines plans to secure better off-take contracts and ensure local representation on venture boards for improved asset management. The strategy addresses past oversights, focusing on rectifying prolonged indebtedness and insufficient investment by some partners. Recent deals, like the one with China's CMOC Group, exemplify Gecamines' efforts towards securing equitable terms, demonstrating a push for enhanced returns, community benefits, and transparency in the world's top cobalt supplier and a leading copper producer.

Industry Leaders Lifton and Karayannopoulos China's Influence on Rare Earth Prices and Markets Today (February 19, 2024, [Source](#))

– In an insightful interview, Jack Lifton and Constantine Karayannopoulos delve into the complexities of the rare earths market. Karayannopoulos, wary of current market trends, notes a decline in prices for key elements like neodymium and praseodymium and maintains a cautious outlook due to the industry's cyclical nature. Lifton points out the impact of China's economic struggles on low rare earth prices, advocating for strategic investments in mining and processing at this juncture. Both experts discuss the discrepancy between market expectations and reality, particularly in the context of China's economic growth and the slower-than-anticipated expansion of its magnet industry, vital for electric vehicle production. They emphasize the significance of investing in raw materials and processing to navigate and leverage China's market dominance effectively, offering a comprehensive view on economic trends, geopolitical strategies, and investment opportunities in the rare earths sector.

BHP says Australian support for nickel miners 'may not be enough' to save industry (February 19, 2024, [Source](#)) – BHP Group (ASX: BHP | NYSE: BHP) warned that Australian government

efforts to support the nickel industry might not suffice amid challenges, as a write-off in its nickel operations led to a nearly 90% drop in first-half net profit. The crisis in Australia's nickel industry is due to a price collapse from a supply glut in Indonesia. Despite government measures like production tax credits and royalty relief, BHP's CEO, Mike Henry, suggested these might be inadequate due to structural market changes. BHP, facing a \$3.5 billion pre-tax impairment charge on its Nickel West operation, is contemplating suspending its activities there, despite healthy nickel demand from the electric vehicle sector. However, Henry highlighted copper, potash, and iron ore as stronger growth areas for BHP. The company announced a higher-than-expected interim dividend, reflecting robust copper and iron ore performance, and anticipates stability in commodity demand from China and India.

US Bid to Loosen China's Grip on Key Metals for EVs Is Stalling (February 19, 2024, [Source](#)) – The U.S. is striving to diminish its reliance on China for crucial metals like gallium and germanium, vital for electric vehicles and military technology. Efforts have been hampered by the diminished efficacy of the U.S. National Defense Stockpile and budget cuts, revealing vulnerabilities to supply shocks. Despite the Biden administration's initiatives to diversify metal sources through international deals and domestic projects, China's control over the global metal supply remains strong. Recent legislative reforms aim to enhance strategic stockpiling and procurement flexibility, but challenges in establishing a coherent strategy and securing stable mineral supplies continue. The situation underscores the complex dynamics of global supply chains and the critical nature of these metals for technological and defense applications.

JPMorgan, State Street quit climate group, BlackRock steps back (February 15, 2024, [Source](#)) – JPMorgan Chase and State Street's

investment arms exited the Climate Action 100+ coalition, a global investor group advocating for reduced emissions, withdrawing nearly \$14 trillion in assets from climate change initiatives. BlackRock scaled back its participation by shifting its membership to its international arm. These moves follow the coalition's request for members to intensify actions against companies lagging in emission reductions. Despite political pressure from Republican politicians accusing financial firms of antitrust and fiduciary duty breaches, none cited politics as a reason for their departure. State Street cited conflicts with the coalition's new priorities, which include engaging policymakers and public emission reduction commitments, as misaligned with its independent approach. BlackRock aims to maintain independence while prioritizing climate goals for its clients.

Investor.News Critical Minerals Media Coverage:

- February 22, 2024 – Stalling the American EV Industry: The Unintended Consequences of the Inflation Reduction Act's Attempt to Bypass China for Critical Minerals <https://bit.ly/3T8IpYE>
- February 22, 2024 – Revolutionizing Energy Storage with NEO Battery Materials' Strategic Advances in Silicon Anode Technology <https://bit.ly/3T5r080>

Investor.News Critical Minerals Videos:

- Industry Leaders Lifton and Karayannopoulos China's

Influence on Rare Earth Prices and Markets Today
<https://bit.ly/3SNSuZk>

Critical Minerals IN8.Pro Member News Releases:

- February 22, 2024 – American Rare Earths Announces A\$13.5m Placement to advance Halleck Creek Project
<https://bit.ly/3wuU1fB>
- February 22, 2024 – First Phosphate Project Receives Letter of Support from Mario Simard, Canadian Parliamentary Deputy for the Riding of Jonquière, Québec
<https://bit.ly/3S0AP3i>
- February 21, 2024 – Nano One Adds 4 More Lithium Battery Manufacturing Patents in Asia – Boosts Total to 40
<https://bit.ly/3I6EmFL>
- February 21, 2024 – Power Nickel Expands on High Grade Cu-Pd-Pt-Au-Ag Zone 5km northeast of its Main Nisk Deposit
<https://bit.ly/433eJj3>
- February 20, 2024 – American Clean Resources Group Acquires SWIS Community, LLC, an Environmental Water Technology Company <https://bit.ly/3T6iSis>
- February 20, 2024 – First Phosphate Provides Update on Plans for a Purified Phosphoric Acid Plant at Port Saguenay, Quebec <https://bit.ly/4bINVs4>
- February 20, 2024 – Western Uranium & Vanadium Receives over \$4.6M from Warrant Exercises <https://bit.ly/3UI3DxH>
- February 20, 2024 – Appia Unveils Significant REE, Cobalt and Scandium Assay Results From 47 RC Drill Holes at the Buriti Target Within Its PCH IAC REE Project, Brazil
<https://bit.ly/3ST4GIG>
- February 20, 2024 – Fathom Nickel Announces the Closing of

Its Second and Final Tranche of Private Placement
<https://bit.ly/3wjSSr7>

- February 20, 2024 – Canadian GoldCamps to Earn 50% of Murphy Lake for \$10M Exploration Spend
<https://bit.ly/4bBbtz0>

To become a Critical Minerals Institute (CMI) member, [click here](#)

Technology Metals Report (02.16.2024): Australia makes Nickel a 'Critical', Hastings Rare Earth Deal with Baotou, and Uranium Market Continues to Rise

written by Tracy Weslosky | February 26, 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 the Australian government's decision to classify nickel as a 'critical' mineral, entitling it to support from a significant stimulus fund, and the emerging competitive landscape in Africa as Western countries endeavor to reduce China's dominance in the

critical minerals sector, particularly in cobalt production.

This week's report also highlights various strategic collaborations and developments, including Hastings Technology Metals Ltd.'s (ASX: HAS) offtake agreement with Baotou Sky Rock for the Yangibana Project, and the U.S. Department of Energy's funding allocation for projects aimed at extracting rare earth elements and critical minerals from coal-based resources. Furthermore, we cover the notable surge in uranium prices to a 17-year high and the strategic expansion plans by Energy Fuels Inc., alongside LG Energy Solution's efforts to secure lithium supply through a second agreement with WesCEF. Lastly, we touch on the advancements in battery technology, such as the pilot production of battery-grade purified phosphoric acid by First Phosphate Corp. and the formation of the China All-Solid-State Battery Collaborative Innovation Platform (CASIP) by leading Chinese battery and automobile manufacturers, including CATL and BYD, aiming to propel the development of all-solid-state batteries.

Australia classifies nickel as a 'critical' mineral to protect ailing industry (February 16, 2024, [Source](#)) – The Australian government has recognized nickel as a critical mineral, making it eligible for support from a A\$6 billion stimulus fund due to concerns over the nickel industry's decline, exacerbated by a supply glut from Indonesia and falling EV demand. This move aims to protect thousands of jobs and key producers like IGO Limited (ASX: IGO) and BHP Group (ASX: BHP | NYSE: BHP) from the impacts of falling nickel prices, which have dropped 43% in the past year. BHP has announced a significant impairment charge on its Nickel West division, highlighting the industry's dire situation. The government's intervention, including potential low-interest loans and grants, is a response to the challenges posed by cheaper Indonesian nickel, driven by Chinese investment and a ban on nickel ore exports from Indonesia. This situation

has led to reduced investment and operational suspensions in Australia's nickel sector, threatening its survival and the country's ambition to develop alternative supply chains to China.

West challenges China's critical minerals hold on Africa (February 16, 2024, [Source](#)) – In a significant development in the global minerals market, China's CMOC Group has surpassed Glencore PLC (LSE: GLEN) to become the leading producer of cobalt, primarily through its operations at the Kisanfu mine in the Democratic Republic of Congo. This surge in production has created one of the largest cobalt surpluses in recent years, despite a drastic fall in cobalt prices. Western countries, recognizing the strategic importance of cobalt and other critical minerals for clean energy and military applications, are challenging China's dominance in Africa. They are particularly focused on the rich copper and cobalt reserves in the Copperbelt region, which spans Zambia and the Congo. Western entities, including companies backed by prominent investors like Bill Gates and Jeff Bezos, are venturing into this region, despite political and infrastructural challenges. The U.S. and other Western nations are supporting infrastructure and energy projects to facilitate mining and reduce logistical costs. Efforts to de-risk mining in the Copperbelt include upgrading rail lines and developing solar power projects. Meanwhile, the Congolese government is asserting more control over its mineral resources, revising deals with Chinese companies and aiming to formalize artisanal mining to secure a fairer share of the revenue from its mineral wealth. This marks a pivotal shift in the geopolitics of critical minerals, highlighting the strategic competition between the West and China over Africa's mineral resources.

Hastings And Baotou Sky Rock Sign Binding Term Sheet For Integrated Tolling And Offtake Arrangement (February 16, 2024,

[Source](#)) – Hastings Technology Metals Ltd. (ASX: HAS) has entered into a binding term sheet with Baotou Sky Rock Rare Earth New Material Co., Ltd for an integrated tolling and offtake arrangement concerning the Yangibana Project's rare earth concentrate. This arrangement allows Hastings to toll treat its concentrate in China, transforming it into separated rare earth oxides, and sell them, improving Hastings' revenue and cash flows beyond previous models. The agreement, lasting seven years with a possible five-year extension, guarantees a minimum of 10,000tpa of concentrate processing. This deal complements Hastings' existing contract with thyssenkrupp and is part of negotiations with other potential customers for further offtake agreements. The updated financial model reflecting this integrated approach will support the project's funding, showcasing significantly enhanced project economics, including a notable increase in post-tax NPV, IRR, and life of mine free cashflow, while reducing the capital payback period.

The Up and Coming Uranium Boom (February 15, 2024, [Source](#)) – In an interview with Hallgarten + Company's Christopher Ecclestone and the [Critical Minerals Institute](#)'s (CMI) Tracy Weslosky, the discussion centered around the uranium market's burgeoning prospects. Ecclestone expressed skepticism regarding the effectiveness of a US ban on Russian uranium, suggesting that Russian uranium could be rerouted through Kazakhstan. He highlighted the challenges Western countries might face in replacing Russian uranium sources. Ecclestone described the uranium market as vibrant, contrasting it with the stagnation in battery metals, and emphasized uranium's unique investment appeal. He advised investors to focus on proven assets from previous booms, cautioning against investing in new, unproven fields. Ecclestone also critiqued the hype around thorium and small modular nuclear reactors, advocating for their potential but also indicating a need for realism. Lastly, he mentioned

Argentina and the Athabasca region as key areas for uranium investment, highlighting the importance of geographic and asset-based considerations in the uranium industry.

DOE Awards \$17M To Conduct FEED Studies for Production of Rare Earth Elements, Critical Minerals (February 15, 2024, [Source](#)) – The U.S. Department of Energy (DOE) is allocating over \$17 million to three projects for extracting rare earth elements and critical minerals from coal-based resources. Funded by the Bipartisan Infrastructure Law, this initiative aligns with President Biden's Investing in America agenda to diminish reliance on foreign critical minerals vital for clean energy technologies, including solar panels and electric vehicles. Leveraging America's substantial coal reserves and waste, the projects aim to foster a self-reliant supply chain, enhance national security, support environmental sustainability, and create quality jobs. This strategic move towards utilizing domestic resources for critical mineral production underscores a significant push towards energy independence, aligning economic revitalization with clean energy advancements.

India to Capitalise on Coveted 'Critical Minerals Club' to Acquire Overseas Assets (February 15, 2024, [Source](#)) – India is strategically enhancing its position in the global critical minerals market by focusing on acquiring overseas assets through collaborations with Western countries and leveraging partnerships within the US-led Minerals Security Partnership (MSP). This international coalition aims to ensure reliable critical mineral supply chains amidst global disruptions. India, which joined the MSP in 2023, is encouraging public sector undertakings (PSUs) like Coal India Limited, NLC India Ltd., and NTPC Ltd. to secure strategic assets in lithium, cobalt, and graphite to bolster its green energy transition and manufacturing capabilities in electronics, including electric vehicles and semiconductors. Deals have been made, notably with

Australia and countries in South America and Africa, to secure these essential materials. The initiative reflects India's ambition to become self-reliant in critical minerals crucial for the technology-driven world economy, particularly as it aims to accelerate its green energy transition and indigenous manufacturing.

Uranium Prices at a 17-Year High, Energy Fuels Rapidly Increases Uranium Production in 2024 (February 14, 2024, [Source](#)) – Uranium prices have surged to a 17-year high at \$106/lb, driven by reduced supply and increased demand, with [Energy Fuels Inc.](#) (NYSE American: UUUU | TSX: EFR) poised to benefit significantly. The uranium market's optimism is further bolstered by a commitment from over 20 countries at COP28 to triple nuclear energy capacity by 2050, highlighting a significant shift towards nuclear energy to meet clean energy goals. Additionally, 118 governments have pledged to triple renewable energy capacity by 2030. Energy Fuels, the leading uranium producer in the USA, has initiated production at three mines, targeting a significant increase in uranium output to over 2 million lbs by 2025, alongside exploring additional production avenues. With uranium's strategic importance in the clean energy transition underscored, Energy Fuels is leveraging favorable market conditions and long-term growth prospects, underlined by its ambitious expansion and production plans.

LG Energy signs 2nd agreement with WesCEF to expand lithium supply (February 13, 2024, [Source](#)) – LG Energy Solution from South Korea and Wesfarmers Chemicals, Energy, and Fertilisers (WesCEF) from Australia have signed their second agreement to expand LG's lithium supply chain. WesCEF will supply LG with 85,000 tons of lithium concentrate, expected to yield about 11,000 tons of lithium hydroxide, sourced from the Mt. Holland project in Western Australia, set to start in early 2025. This agreement builds on a previous deal for 50,000 tons of lithium

hydroxide in 2022. Additionally, LG Energy is focusing on expanding its presence in India's electric vehicle market, already leading in supplying battery cells to e-scooter makers. In 2023, LG secured a deal with Chile's SQM for 100,000 tons of lithium for seven years, highlighting its efforts to bolster its supply chain amidst increasing lithium demand for rechargeable batteries.

First Phosphate Corp. Completes Pilot Production of LFP Battery-Grade Purified Phosphoric Acid (February 13, 2024, [Source](#)) – [First Phosphate Corp.](#) (CSE: PHOS) announced the successful completion of a pilot project that converts high purity phosphate concentrate into battery-grade purified phosphoric acid (PPA) for the lithium iron phosphate (LFP) battery industry. In collaboration with Prayon Technologies SA, the company has transformed phosphate concentrate into merchant grade phosphoric acid and then into PPA, conforming to food and battery-grade specifications. This achievement enables the production of LFP cathode active material and battery cells from a North American source of battery-grade PPA. First Phosphate aims to integrate its mining operations in Quebec, Canada, into the supply chains of LFP battery producers, emphasizing high purity, responsible production, and a low carbon footprint.

CATL, BYD, others unite in China for solid-state battery breakthrough (February 12, 2024, [Source](#)) – In a bold move to spearhead the electric vehicle (EV) revolution, China's leading battery and automobile manufacturers, including CATL and BYD, have joined forces under the government-led China All-Solid-State Battery Collaborative Innovation Platform (CASIP). Established in January, CASIP aims to commercialize all-solid-state batteries by 2030, enhancing EV performance with greater energy density and safety. This initiative, uniting industry rivals and leveraging AI technology, seeks to position China at the forefront of the next-generation battery technology,

challenging current leaders like Japan and Western countries. With the participation of major companies and state support, China is poised to transform the EV market and maintain its global leadership in automotive battery innovation.

Investor.News Critical Minerals Media Coverage:

- February 15, 2024 – The Up and Coming Uranium Boom <https://bit.ly/3uAUdcv>
- February 14, 2024 – Uranium Prices at a 17-Year High, Energy Fuels Rapidly Increases Uranium Production in 2024 <https://bit.ly/48wVY8N>

Investor.News Critical Minerals Videos:

- February 13, 2024 – Tom Drivas on the 3 world-renowned rare earths experts on Appia's Critical Minerals Advisory Committee <https://bit.ly/49bVMNj>

Critical Minerals IN8.Pro Member News Releases:

- February 15, 2024 – First Phosphate and Integrals Power sign Joint Development Agreement to Produce Environmentally Compliant Battery Grade Iron III Phosphate Precursor for the LFP Battery Industry <https://bit.ly/3uDdslR>
- February 14, 2024 – Imperial Mining Announces Effective Date of New Trading Symbols after TSXV Approves of Name Change to Scandium Canada Ltd. <https://bit.ly/48hRyl0>
- February 13, 2024 – Western Uranium & Vanadium Mining Operations Update <https://bit.ly/4bvDKHr>
- February 13, 2024 – Donald Swartz, CEO American Rare Earths, to speak at “The Future Panel”

<https://bit.ly/3UF2M05>

- February 13, 2024 – First Phosphate Corp. Completes Pilot Production of LFP Battery-Grade Purified Phosphoric Acid <https://bit.ly/3P51pF5>
- February 13, 2024 – Defense Metals Updates Metallurgical Test Work and Preliminary Feasibility Study Progress for its Wicheeda Rare Earth Elements Project <https://bit.ly/3HYiV9R>
- February 13, 2024 – Power Nickel extends resource mineralization at Nisk Main <https://bit.ly/49aJCE9>
- February 12, 2024 – F3 Hits 66.8% U3O8 over 0.5m within 42.4% over 2.0m at JR <https://bit.ly/3HUa60a>

The Up and Coming Uranium Boom

written by Tracy Weslosky | February 26, 2024

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[Uranium](#)

Tracy Weslosky:

Christopher let's start with the headlines please.... will the US ban on Russian uranium boost western industry?

Christopher Ecclestone:

You know the uranium industry in Russia, you can't put a cigarette paper between it and the industry in Kazakhstan. So really, I would see Russian product going out through Kazakhstan disguised as Kazakh output, not surprised whatsoever. And I

don't know who the West is trying to punish here – because we are getting back to that same issue again, which is the source of our uranium supply. It would be rather hard for some of the western users in the EU to replace the Russian uranium source. The source is the challenge.

Tracy Weslosky:

You said to me earlier this week about how hot the uranium market and how it's really “the only game in town”. Can you explain to our audience what you mean by that?

Christopher Ecclestone:

It is. Well, I'm purely from the primordial point of view. The wheels have fallen off the battery metal complex at the moment – and whether they can be put back on again is another matter...but at the moment – that car ain't going anywhere. It's just sort of like on blocks, like the neighborhood thugs have stolen the wheels. So, battery metals are dead in the water for a while. And so, the only game in town is uranium. The other metals are all in holding patterns. You know, gold's just hanging in there. Uranium's the only sexy thing around. And as per usual, you know, uranium has its day in the sun every 20-years and that day is now.

Tracy Weslosky:

Would you give investors some advice on how to select uranium companies because they're popping up everywhere? We can barely keep [track](#) of them.

Christopher Ecclestone:

Yeah, I think you've got to go back to the assets that they have. There are a lot of good assets were found during the last uranium boom. They're not necessarily in the same companies that

they were in there because many of those companies went bust. So got to look at the assets, you got to look at their durability. So, they're in really, really isolated locations, you know. Like off Broadway, being off Athabasca is not as good as being on Broadway on Athabasca – just being in the general vicinity, but only 500 kilometres away is not good enough. You know, they have to be accessible. They have to be doable. You know, the boom is now. We're not talking in 10 years. I think that we're in a good position for a long run boom, but we really want to see assets that have been proven up before. Or not. Now anyone who's doing Greenfield never been drilled before uranium. Why bother? There were so many assets that were discovered pre-Fukushima. They're just sort of sat in the cupboard, you know, sitting there waiting for something to happen that we don't need to find new things. We do not need to reinvent the wheel if it's got an old resource – let's go with that, not try and find something new.

Tracy Weslosky:

Is there a question about uranium you wish people would ask you that no one does? And what would that question be?

Christopher Ecclestone:

Oh, that's a tough one. I think it's got to do with the people involved in it. You know, just being uranium is not good enough. I think that there are a lot of old uranium hands out there, and have been in hiding. People who've done it for decades and who've really been sitting – sitting on their behinds for the last 15 years that are now coming out of the woodwork, they're the people to follow. I mean, there was nothing that they could do about the situation. Now they can any just purely move forward, not the promotorial types where you look at them and say 'oh, where was he before he was doing graphite? And then before that, he was doing lithium and before that he was doing

Rare Earths' – carpetbaggers – not good enough. We know who they are. Avoid them. We do not need promotorial types in the uranium space. We need serious people.

Tracy Weslosky:

What is your position on modular nuclear reactors we are all hearing about, are they the future of uranium as we are being told?

Christopher Ecclestone:

Oh, absolutely. I am absolutely convinced that big uranium, big nuclear formats, they're like brontosauruses. We can see this particularly in the UK where they've got a number of projects underway that were, you know, supposed to be two billion pounds And, then you know, 5 billion. And even now the Chinese who are building them, saying we can't finish this without loads more billions just goes to show that the bigger the plant the harder they fall and small modular reactors are the way to go. It's just makes sense and the CapEx is lower. they're easier to build, they're faster to build. I mean bigger is not better.

Tracy Weslosky:

What about thorium? There's a lot of confusion out there.

Christopher Ecclestone:

Yeah, well, there's a lot of confusion. This is there's some craziness in the US running around thorium, not good. I'm in. I'm a believer in thorium. Thorium is really good with Pebble bed reactors and small format reactors. It's, you know, it's got potentially its day in the sun. There are lots of thorium stockpiles lying around too, so you don't even need to mine this. And it's just sitting there, being waiting for its for its moment. And you know, there's something to the nuclear

establishment that they don't want to see thorium having any, any progress...plays into the hands of the conspiracy theorists and the nuts, but Thorium should be getting more attention, particularly with these really small format reactors.

Tracy Weslosky:

So, what your saying is that the nuclear and the uranium industry should not feel compromised by the competitor of thorium, correct?

Christopher Ecclestone:

Yeah, not exactly. Exactly. We've seen many uranium positive story as well. I mean you could pick and choose what you what you. What you extract and you don't get more value, frankly.

Tracy Weslosky:

Is there a uranium producer that you love or that you follow? And can you comment on who this is?

Christopher Ecclestone:

Probably and no. The mere fact that they're a producer is good, whoever they might be. If they're producing, yes, please.

Tracy Weslosky:

Is there a small cap or a new uranium company that's your watching? Or is there a company that you know about that you find unique or interesting?

Christopher Ecclestone:

Well, I'm down in Argentina at the moment and Argentina is going to be one of the big playing fields in the up-and-coming uranium boom. I won't drop the names now, but it's place to watch.

Tracy Weslosky:

And that was going to be my next question, is there an area of the world that investors should be more excited about hearing about when looking for uranium companies to invest in? Where should an investor find more comfort when they hear the word uranium?

Christopher Ecclestone:

Well, Athabasca (Alberta, Canada), obviously SW Africa...whether it's Namibia or countries around there. Argentina, I've mentioned. Australia, it's easy. This said, they've got uranium, but with the states there flipping from being pro uranium to anti uranium they have done itself a lot of damage over recent years. I mean and it's been really like two bald men fighting over a comb. Because there's been no need for uranium from Australia – state governments there banning it and then unbanning it. I think Canada is, for once, the most virtuous regime for uranium in the world.

**Technology Metals Report
(02.11.2024): Constantine
Karayannopoulos Resurfaces,
Landmark \$18.8 Billion Cathode**

Supply Deal in Tennessee, and Canada Invests in Ucore

written by Tracy Weslosky | February 26, 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 significant developments such as Appia Rare Earths & Uranium Corp. enriching its advisory committee with the appointment of industry veteran Constantine Karayannopoulos, a move poised to strengthen its strategic capabilities in the critical minerals sector. Additionally, stories highlighted last week include Ford Motor Company's substantial \$4.7 billion loss in its electric vehicle (EV) segment for 2023, a figure that underscores the economic challenges facing companies transitioning to electric mobility.

Moreover, this edition of the TMR delves into Bora Mining Services' strategic acquisition in the Steenkampskraal Monazite Mine and the landmark \$18.8 billion cathode supply deal between General Motors and LG Chem, both of which underscore the strategic efforts to secure critical materials for the burgeoning EV market. The report also examines Hitachi Construction Machinery's innovations with its all-electric dump truck prototype, signaling a push towards sustainability in mining operations. Commentary on the EV market by industry expert Jack Lifton highlights the sector's challenges and misalignments with consumer preferences. Furthermore, Canada's advancement over China in the BloombergNEF Global Lithium-Ion Battery Supply Chain Ranking and the discontinuation of merger talks between Lynas Rare Earths and MP Materials are highlighted, reflecting the dynamic nature and strategic

maneuvers within the global critical minerals and electric vehicle sectors.

Appia Appoints Constantine Karayannopoulos as New Member to Its Critical Minerals Advisory Committee (February 9, 2024, [Source](#))

– [Appia Rare Earths & Uranium Corp.](#) (CSE: API | OTCQX: APAAF) announced the appointment of Constantine Karayannopoulos to its Advisory Committee, alongside rare earths experts Jack Lifton and Don Hains. Karayannopoulos, with a 30-year career in the rare earth and critical minerals sectors, including as President and CEO of [Neo Performance Materials Inc.](#) (TSX: NEO), brings significant expertise to Appia. His background includes pivotal roles in the industry, such as leading the first foreign company in China's Rare Earth industry and co-founding Neo Lithium Corp. His appointment, starting February 1, 2024, is set to enhance Appia's strategic capabilities in the critical minerals sector, supported by his consulting company, Kloni Inc. Appia has granted 300,000 options to Kloni Inc. as part of this agreement.

Rare Earths Discovery Near Wheatland So Big It Could Be World Leader (February 7, 2024, [Source](#))

– American Rare Earths Limited (ASX: ARR | OTCQB: ARRNF) has made a groundbreaking discovery near Wheatland, Wyoming, revealing 2.34 billion metric tons of rare earth minerals, significantly surpassing initial estimates and other local discoveries. This positions Wyoming as a key player in reducing reliance on China's rare earth market, vital for green energy technologies. With only 25% of their land explored, the potential for further discoveries is immense. The company, part of an Australian enterprise, plans scalable mining operations to meet the high global demand. This development, along with other explorations in Wyoming, could transform the U.S. into a major source of rare earth minerals, essential for a range of advanced technologies. Further economic and development projections are anticipated, underlining Wyoming's emerging significance in the global rare earth industry.

Ford Lost \$4.7B On EVs Last Year, Or About \$64,731 For Every EV It Sold (February 7, 2024, [Source](#)) – Ford Motor Company's venture into electric vehicles (EVs) in 2023 resulted in a significant financial loss, overshadowing its overall profits for the year. The company experienced an operating loss of \$4.7 billion from its EV business, termed as "Model e," despite achieving a net income of \$4.3 billion on \$176 billion revenue. This loss equates to approximately \$64,731 for each of the 72,608 EVs sold last year, demonstrating the financial challenge of transitioning to electric mobility. The loss was attributed to competitive pricing, strategic investments in new EV development, and exceeded Ford's initial projections. The automotive giant's commitment to EVs, which includes a \$50 billion investment plan, has been questioned in light of these results. Additionally, Ford's EV production adjustments and the broader automotive industry's challenges with EV demand and profitability highlight the difficulties in achieving widespread EV adoption. This situation reflects broader market trends and concerns over the viability and appeal of EVs, particularly in markets dominated by conventional vehicles and specific demographic niches.

Bora Mining Acquires Share in Steenkampskraal Monazite Mine (February 7, 2024, [Source](#)) – Bora Mining Services (BMS) has acquired a share in Steenkampskraal Monazite Mine (SMM), a high-grade rare earths and thorium mine, to commence operations in early 2024. With a significant investment, including a R1 billion infrastructure, BMS aims to refurbish and develop the mine, leveraging its expertise in mining operations. The mine boasts an impressive 14.5% average grade of total rare earth oxides, with potential for resource expansion. The partnership focuses on producing monazite concentrate initially, with plans to extend production to mixed rare earth carbonate and thorium. The project has received positive feedback from regulatory

bodies and has a dynamic growth strategy across three phases, eventually aiming to produce individual rare earth oxides. The initiative is expected to cater to global rare earth demands, with thorium also highlighted for its safety and potential in cancer therapy.

South Korea's LG Chem signs \$19 bln cathode supply deal with General Motors (February 7, 2024, [Source](#)) – General Motors (GM) and South Korea's LG Chem have signed a \$18.8 billion deal for cathode material supply, enhancing GM's electric vehicle (EV) production chain from 2026 to 2035. This partnership aims to support the production of 5 million high-performance EVs, with LG Chem's Tennessee plant serving as a cornerstone for a localized supply chain. The agreement, building on a prior commitment for over 950,000 tons of Cathode Active Material, signifies a major step towards sustainable EV production. The Tennessee facility, set to be America's largest cathode plant, will primarily supply Ultium Cells LLC, a GM and LG Energy Solutions joint venture, potentially extending to other GM EV projects. This move aligns with U.S. Inflation Reduction Act criteria, emphasizing local supply chain benefits.

Hitachi launches final tests of its electric dump truck (February 6, 2024, [Source](#)) – Hitachi Construction Machinery has introduced a prototype of its all-electric dump truck, which is now undergoing final testing at a copper-gold mine in Zambia. Based on the EH4000AC-3 model with a 221-tonne payload, this electric version includes ABB's battery technology and converters. Unlike its diesel counterpart, it operates on internal batteries on level ground and external trolley power uphill, while regenerative braking recharges the battery downhill. Performance details are pending, but the combustion engine model's specs offer insight. This initiative, started in 2021 by Hitachi and ABB, aims to meet electric dump truck demand in mining and reduce emissions, highlighting a shift towards

electrification in heavy machinery and contributing to environmental sustainability.

Riding the EV Revolution Rollercoaster Amid the West's Electric Car Climbdown (February 5, 2024, [Source](#)) – Jack Lifton's critique on the electric vehicle (EV) industry highlights the clash between government strategies and market dynamics, alongside the competitive pressure from Chinese manufacturers. He points out major manufacturers like Renault and Volvo retreating from ambitious EV projects due to mismatches in market demand and production costs. Jack also observes a consumer shift back to petrol models, suggesting a misalignment between EV production and consumer preferences. Advocating for hybrids, he emphasizes the need for adaptability, innovation, and market responsiveness. His insights stress the importance of aligning visionary goals with practical market demands and competitive challenges, underlining the complexity of navigating the evolving EV landscape with agility and foresight.

South African platinum industry could shed up to 7,000 jobs to cut costs (February 5, 2024, [Source](#)) – The South African platinum industry, responsible for about 70% of the world's mined platinum, may cut 4,000 to 7,000 jobs due to restructuring amid high costs and declining prices. The Minerals Council highlighted this at the Investing in African Mining Indaba conference in Cape Town, noting the impact of the shift towards electric vehicles and the falling demand for platinum group metals (PGMs) used in traditional combustion engines. High electricity and labor costs, along with a 40% and 15% drop in palladium and platinum prices respectively, have pressured miners. Major companies like Anglo American Platinum and Sibanye Stillwater are considering operation restructuring and job cuts to reduce expenses, facing challenges from lower ore grades and rising input costs.

China Drops to Second in BloombergNEF's Global Lithium-Ion Battery Supply Chain Ranking as Canada Comes Out on Top (February 5, 2024, [Source](#)) – Canada has taken the top spot in BloombergNEF's Global Lithium-Ion Battery Supply Chain Ranking, outpacing China due to its ample raw materials, policy support, and strong ties with the US auto industry. This represents a significant shift, emphasizing the increasing importance of sustainability and ESG practices in the sector. North America shines in the rankings, with policy initiatives like the US Inflation Reduction Act bolstering the region's standing. Mexico notably rose nine spots, benefiting from its industrial base and potential US policy impacts. Global investment in clean energy supply chains hit \$135 billion, highlighting the sector's growth and the evolving dynamics of trade relations. The ranking assesses countries on raw materials, manufacturing, demand, ESG, and innovation, reflecting the global push towards sustainable energy solutions.

Australia's Lynas Rare Earths quits tie-up talks with MP Materials (February 5, 2024, [Source](#)) – Australia's Lynas Rare Earths and U.S.-based MP Materials terminated merger discussions amid valuation disagreements and strategic considerations. The potential union aimed to bolster supply chain diversification for critical minerals outside China, which commands the rare earth market. The talks' cessation reflects the complexities of consolidating operations within the global rare earths industry, crucial for technology and defense sectors. Despite the strategic intent to reduce reliance on Chinese rare earths, both companies faced hurdles, including technological challenges and anti-trust regulations. Lynas, with significant projects across Australia, Malaysia, and the U.S., and MP Materials, which relies on Chinese refining, concluded that the merger lacked sufficient synergies to proceed, underscoring the intricate dynamics of international rare earths commerce.

Canada Announces Over \$4 million to Support Critical Minerals Value Chains and Create Good Jobs in Ontario (February 5, 2024, [Source](#)) – Canada is investing \$4.2 million in Ucore Rare Metals Inc. through the Critical Minerals Research, Development, and Demonstration (CMRDD) program to enhance the country's capabilities in producing critical minerals essential for the green and digital economy. This investment, announced by Mark Gerretsen, aims to scale up Ucore's rare earth element separation technology, pivotal for electric vehicle motors and renewable energy technologies. It promotes domestic processing, reducing reliance on foreign separation and bolstering Canada's electric vehicle value chain. This initiative will create employment, including for Indigenous communities, and support Canadian technological advancements in sustainable practices. It aligns with Canada's commitment to a cleaner, low-carbon economy by fostering competitive value chains and economic growth.

Germany's dream of 15 million electric vehicles is fading away (February 3, 2024, [Source](#)) – At a Berlin auto industry event, BMW CEO Oliver Zipse and Transport Minister Volker Wissing highlighted the slowdown in electric vehicle (EV) adoption in Germany. Despite previous optimism, challenges such as a saturated high-end market, lack of affordable options, dwindling government incentives, and inadequate charging infrastructure have emerged. With EV sales projected to drop and the ambitious goal of 15 million EVs by 2030 now looking unrealistic, the industry faces a pivotal moment. The need for diversified vehicle power solutions, including combustion, hybrid, and hydrogen vehicles, becomes apparent. Analysts are skeptical about meeting emissions targets without further subsidies, pointing to a broader slowdown that could impact investment and long-term environmental goals.

Special thanks to the [Critical Minerals Institute – Leading the Critical Minerals Sector](#), for more information or to send us a

highlighted industry story you think we need to include in our weekly Technology Metals Report, please send to Raj Shah – my co-editor, at raj@investornews.com. Thank you.

Investor.News Critical Minerals Media Coverage:

- February 6, 2024 – Global Winds: Opening the Door for a New Middle Eastern Hegemon <https://bit.ly/492BPbH>
- February 5, 2024 – Riding the EV Revolution Rollercoaster Amid the West's Electric Car Climbdowndown <https://bit.ly/42oLYNn>
- February 4, 2024 – Empowering Canadian Resource Exploration: The Strategic Role of Flow-Through Shares, and the Power of PDAC <https://bit.ly/3uv4pm0>

Investor.News Critical Minerals Videos:

- February 8, 2024 – Jack Lifton and Panther Metals Darren Hazelwood on the “greenstone belt for VMS deposits” in Canada <https://bit.ly/42zDzqv>
- February 8, 2024 – Fathom's Ian Fraser on Rising Market Interest in Albert Lake and Nickel as a Critical Mineral <https://bit.ly/49uxFcu>
- February 5, 2024 – Tawana Bain and ACRG's Drive for a Sustainable American Supply Chain through Net-Zero Mineral Production <https://bit.ly/4bnBcLg>
- February 5, 2024 – Terry Lynch on Power Nickel's Ambitious 2024 Drilling Program at the Nisk Project in Nemaska <https://bit.ly/49i70Ei>
- February 5, 2024 – Voyageur Pharmaceutical's Brent Willis on Revolutionizing the Medical Imaging Industry, plus SmoothX <https://bit.ly/3Ssrllt>

Critical Minerals IN8.Pro Member News Releases:

- February 9, 2024 – Ucore Announces Closing of Final Tranche of Upsized Debenture Offering <https://bit.ly/49o07Na>
 - February 9, 2024 – Appia Appoints Constantine Karayannopoulos as New Member to Its Critical Minerals Advisory Committee <https://bit.ly/30CnNVL>
 - February 9, 2024 – American Rare Earths Limited: Appointment of Chairman – Richard Hudson <https://bit.ly/3HU47Ji>
 - February 8, 2024 – Auxico Announces Sampling Results From a Geological Report on the Minastyc Property <https://bit.ly/3UAtsj3>
 - February 8, 2024 – Fathom Announces Start of Drilling at Albert Lake Project <https://bit.ly/499VW7K>
 - February 8, 2024 – Appia Announces Outstanding Re-Assayed Diamond Drill Results Including 100 Metres Averaging 3,577 PPM TREO at Its PCH Ionic Clay Project, Brazil <https://bit.ly/48dXQTs>
 - February 7, 2024 – American Rare Earths Resource Estimate Increased by 64% <https://bit.ly/3SuhAfU>
 - February 7, 2024 – Imperial Mining Announces Shareholder Approval of Name Change to Scandium Canada Ltd. and Results of its 2024 Annual and Special Meeting <https://bit.ly/49nElty>
 - February 5, 2024 – Ucore Welcomes Canadian Government Officials to its Kingston Ontario CDF for an NRCan Funding Announcement <https://bit.ly/495cTA3>
 - February 5, 2024 – Nano One Provides Shareholder Update with Key Objectives for 2024 <https://bit.ly/49mNgut>
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Riding the EV Revolution Rollercoaster Amid the West's Electric Car Climbdown

written by Tracy Weslosky | February 26, 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.

Empowering Canadian Resource Exploration: The Strategic Role of Flow-Through Shares, and the Power of PDAC

written by Tracy Weslosky | February 26, 2024

In a recent [interview](#) we did with Jeff Killeen, the Director of Policy and Programs at the [Prospectors & Developers Association of Canada](#) (PDAC), Jeff shed light on the PDAC's role beyond organizing its annual convention. Scheduled for March 3 – 6 in Toronto, the [PDAC 2024 Convention](#) is a significant event. However, PDAC's involvement in the industry goes further. They engage in continuous advocacy, working closely with provincial and federal governments to shape policies and strategies that address the challenges and opportunities within the mineral exploration and mining sector, such as the critical minerals flow-through programs.

In my quest for information, I discovered that the Prospectors & Developers Association of Canada (PDAC) boasts a distinguished history since its founding in 1932. It has emerged as the foremost representative of Canada's mineral exploration and development sector, a sector that employs over 664,000 people and contributed an impressive \$132 billion to Canada's GDP in 2021, according to my online research. PDAC is celebrated for its annual convention and trade show in Toronto, which draws approximately 25,000 participants from over 130 countries. Since its inception, the event has expanded in size, prestige, and impact, establishing itself as the global leading convention for individuals, companies, and organizations involved in mineral exploration.

Curious about continuing education on the benefits of flow-through shares, I delved further into the subject. Here's what my research* revealed.

Flow-Through Shares: Enhancing Canadian Resource Exploration

Flow-Through Shares (FTS) are a pivotal instrument in the Canadian resource sector, designed to stimulate investment in exploration activities across the nation. This innovative financial tool allows public companies to transfer certain exploration expenditures to investors, who can then claim a tax deduction equal to the amount invested. This mechanism not only fosters exploration on Canadian soil but also significantly contributes to the funds raised on Canadian stock exchanges for exploration purposes.

The Essence of Flow-Through Shares

At its core, a flow-through share is a type of common share that offers initial purchasers considerable tax advantages. These advantages are a cornerstone of the flow-through share regime, which has been instrumental in driving exploration activities within Canada. By allowing investors to earn deductions and credits against their taxable income, FTS financing has become a major contributor to exploration funding, accounting for over 65% of the funds raised for this purpose on Canadian stock exchanges from 2011 to 2019. deduct the full amount of their investment against their taxable income, FTS financing has become a major contributor to exploration funding, accounting for over 65% of the funds raised for this purpose on Canadian stock exchanges from 2011 to 2019.

Financial Implications and Tax Benefits

The appeal of FTS lies in the tangible tax benefits it provides to investors. The maximum combined federal and provincial tax

rate can reach up to 53.53%, with the federal rate at 33% and the provincial rate varying up to 20.53%. The Mineral Exploration Tax Credit (METC) further enhances the value of these investments, offering a 15% federal credit and a 5% provincial METC rate. These credits and deductions significantly reduce the net cost of investment, making FTS a highly attractive option for those looking to invest in Canada's exploration sector.

Provincial Incentives: A Closer Look

Different provinces offer varying levels of additional incentives through provincial tax credits, which further reduce the net cost to the investor. Ontario provides a 5% METC rate, while Saskatchewan offers 10%, British Columbia 20%, and Manitoba an impressive 30%. These provincial incentives, combined with federal benefits, underscore the strategic importance of FTS in promoting resource exploration across Canada. The calculation of the net cost of a flow-through share investment illustrates the substantial tax savings available. It's important to note that while federal tax credits can be carried back or forward, creating flexibility in tax planning, the capital gains on these investments are calculated based on a nil purchase price, affecting the taxation of any eventual sale of the shares.

Conclusion: Strategic Investment for Future Exploration

Flow-Through Shares stand as a testament to Canada's innovative approach to financing exploration activities. By providing significant tax incentives, FTS not only make exploration ventures more financially viable for companies but also offer attractive investment opportunities. As Canada continues to explore and develop its natural resources, FTS will undoubtedly play a crucial role in financing these critical activities,

underpinning the country's resource sector and contributing to its economic growth.

(*) The writer utilized sources from the following links, which I encourage you to visit. Also, the writer is neither an investment advisor nor an accountant and is not licensed to offer investment advice. This article was written as an educational piece only.

FTS Information sources include:

[Mining Tax Canada](#)

[How the flow-through share \(FTS\) program works – Canada.ca](#)

[Canada Revenue Agency – Flow-Through Shares](#)

[PDAC – Access to Capital, Flow-Through Shares](#)

[PDAC Brochure on Flow-Through Shares](#)

Technology Metals Report (02.02.2024): Rumors between MP and Lynas, Tesla EV Recall – the Rightsizing of Critical Minerals Begins?

written by Tracy Weslosky | February 26, 2024

Welcome to the latest Technology Metals Report (TMR), where we highlight the Top 10 news stories that members of the [Critical Minerals Institute](#) (CMI) have forwarded to us over the last 2 weeks.

In early 2024, the rare earths sector is witnessing significant strategic movements amidst a backdrop of declining prices and geopolitical tensions. Lynas Rare Earths Ltd. and MP Materials Corp., key players outside China, are rumored to be considering a mega-merger in response to falling rare earth prices and to mitigate the impact of Chinese trade restrictions. This potential consolidation aims to strengthen their production capabilities and align with the Australian and US governments' efforts to reduce reliance on Chinese supplies, particularly for defense applications.

CMI's Jack Lifton comments, "In the swirling rumors of a mega-merger between MP Materials and Lynas Rare Earths, it's clear that the OEM industry's disdain for single sourcing of critical materials is being overlooked. Litinski is eager to deploy his capital before it devalues, while Lacaze eyes a boost in share price ahead of her retirement. This scenario is akin to two veterans of the trade, unadorned and stark, facing the harsh daylight. Both MP and Lynas are in a precarious position, each with a singular customer and seemingly devoid of new strategies to navigate the market's tumultuous waters."

Concurrently, the industry is adjusting to market corrections, as highlighted by the Critical Minerals Institute's [observations](#) on the electric vehicle (EV) materials market, indicating a shift towards efficiency and cost management. Meanwhile, initiatives like Controlled Thermal Resources Holdings Inc.'s funding quest for its lithium brine project and [Appia Rare Earths & Uranium Corp.](#)'s (CSE: API | OTCQX: APAAF) exploration successes underscore the ongoing diversification and expansion within the critical minerals domain. These developments reflect a broader industry trend towards securing resilient supply chains for critical minerals amidst fluctuating market dynamics and geopolitical pressures.

Also breaking news today, Tesla Inc.: The EV maker [is recalling](#) 2.2 million vehicles, or nearly all of its electric vehicles in the United States, due to incorrect font size on warning lights, which increases the risk of a crash, the National Highway Traffic Safety Administration (NHTSA) said. This is more than the 2.03 million vehicles it recalled in the United States two months back, its biggest-ever such move at the time, to install new safeguards in its Autopilot advanced driver-assistance system. The latest recall includes vehicles across Tesla's various models, including the Model S, Model X, 2017-2023 Model 3, Model Y, and 2024 Cybertruck vehicles, the NHTSA said. Separately, U.S. safety regulators said they have upgraded their probe into Tesla vehicles over power steering loss to an engineering analysis – a required step before they could potentially demand a recall.

Lynas linked to rare earths mega-merger as price falls bite (February 2, 2024, [Source](#)) – Amid a sharp decline in rare earths prices and concerns over Chinese trade restrictions, there are speculations that [Lynas Rare Earths Ltd.](#) (ASX: LYC) may be considering a merger with its New York-listed rival, [MP Materials Corp.](#) (NYSE: MP). Industry insiders suggest that the two companies, both leading non-China producers of essential rare earth materials used in defense and various industries, could be in talks to create a mega-merger. The exact details of the deal are unclear, given the current slump in rare earth prices and Western concerns about China's dominant position in the supply chain. However, a potential merger between Lynas, based in Western Australia and Malaysia, and MP, operating in California's Mountain Pass, aligns with efforts by the Australian and US governments to strengthen collaboration between their resource companies for critical minerals extraction and processing, reducing dependency on China. Both Lynas and MP have suffered significant stock price declines, and

a merger could help them bolster production capabilities and meet growing demands, particularly from the US Department of Defense, which aims to reduce reliance on Chinese supplies. Referral, CMI Co-Chairman [Jack Lifton](#)

Critical Minerals “rightsizing” in reaction to governments’ efforts to regulate market (February 1, 2024, [Source](#)) – The critical minerals industry is undergoing significant changes in the electric vehicle (EV) materials market. Jack Lifton, Co-Chairman of the [Critical Minerals Institute](#) (CMI), views recent price declines in key EV component materials as a natural market correction rather than a disaster, emphasizing minimal regulatory intervention. Declining profits for industry leaders, including China Northern Rare Earth, result from overestimated EV demand, economic factors, and falling sales, especially in California. Lifton advises investors to focus on efficient, low-cost producers, particularly in neodymium. The January [2024 CMI Report](#) notes the U.S. government’s plan to ban Pentagon battery purchases from major Chinese companies and hints at potential recovery in lithium prices. Lynas Rare Earths’ revenue drop reflects market trends but also strategic capacity expansion. In summary, the industry faces short-term challenges but underscores the importance of efficiency, cost management, and adaptability for long-term success. Source, [Investor.News](#)

GM, Stellantis-Backed Lithium Startup Seeks More Than \$1 Billion for Brine Project (February 1, 2024, [Source](#)) – Controlled Thermal Resources Holdings Inc., (CTR) a US lithium startup backed by Stellantis N.V. (NYSE: STLA) and General Motors (NYSE: GM), seeks over \$1 billion in funding for its California lithium brine project. This initiative defies the industry’s 80% drop in lithium prices since late 2022. CTR’s unconventional approach focuses on geothermal brine deposits, seen as a potential future lithium supply source once technology challenges are overcome. This aligns with US government efforts to establish a domestic

EV commodity supply chain. The funding plan includes equity and debt financing, with Goldman Sachs as the lead bank. Stellantis and GM have previously invested significantly in CTR to secure lithium for EV production. *Referral, CMI Co-Chairman [Jack Lifton](#)*

Attention set on rare earths in Canada and Brazil, Appia hits 2024 running (January 31, 2024, [Source](#)) – [Appia Rare Earths & Uranium Corp.](#) (CSE: API | OTCQX: APAAF) is focusing on its rare earths projects in Canada and Brazil: the Alces Lake Project and the PCH Ionic Clay Project. The Alces Lake Project in Canada is recognized for its high-grade rare earths and gallium in monazite ore. Recent drill results have shown up to 1.57 wt.% Total Rare Earth Oxides (TREO) with mineralization extending to a depth of < 85 meters. In Brazil, the PCH Project offers a simplified extraction process for rare earths essential for electric motor magnets in most EVs. Hole RC-063 reported a total weighted average of 3.87% TREO. Appia's expansion of mining claims and plans for a Maiden Resource in Q1, 2024, signal their commitment to these projects, with a market cap of C\$27 million suggesting a potentially significant year ahead in 2024. *Source, [Investor.News](#)*

China EVs: lithium producers Ganfeng, Tianqi issue profit warnings, blame price plunge for battery material as stocks sink (January 31, 2024, [Source](#)) – Chinese lithium producers Ganfeng Lithium and Tianqi Lithium have issued profit warnings, attributing their declining profits to a significant drop in lithium prices. Ganfeng expects its 2023 net profit to plummet by 70-80% to between 4.2 billion yuan and 6.2 billion yuan. After accounting for non-recurring items, net profit will range from 2.3 billion yuan to 3.4 billion yuan, down 83-88.5% from 2022 levels. Tianqi anticipates a net profit decline of 62.9-72.6% to 6.62 billion yuan – 8.95 billion yuan. Both companies attribute their struggles to the cyclical nature of the lithium industry and declining lithium prices. The average

price of China-produced lithium hydroxide exported to South Korea fell by 45% last month. While electric vehicle sales are still growing, the rate has slowed, impacting lithium demand. However, global lithium demand is expected to rise by 27% this year, with a surplus expected before a deficit in 2026. *Referral, CMI Co-Chairman [Jack Lifton](#)*

Mining analyst-turned-Vital Metals CEO eyes much larger Nechalacho reboot (January 29, 2024, [Source](#)) – Geordie Mark, CEO of Vital Metals Limited (ASX: VML), aims to revamp the Nechalacho rare earths project in the Northwest Territories, leveraging 15 years of experience as a mining analyst. Recognizing the growing demand for rare earth elements in the technology and electric vehicle (EV) markets, Mark plans to shift Vital's strategy towards a bulk tonnage operation targeting lighter rare earths like praseodymium and neodymium. This comes after the failure of the company's processing division and a Chinese investment lifeline in 2023. A comprehensive scoping study is crucial for long-term viability, and Mark expects demand for praseodymium and neodymium to rise significantly in the next decade, particularly in China and Europe. Shenghe Resources' investment provides vital capital for Nechalacho's development, positioning it to compete with North America's only rare earths mine, [MP Materials Corp.](#)'s (NYSE: MP) Mountain Pass operation. *Referral, CMI Co-Chairman [Jack Lifton](#)*

The Critical Minerals Institute Report (01.25.2024): U.S. government bans Pentagon battery purchases from major Chinese companies starting October 2027 (January 25, 2024, [Source](#)) – The January 2024 Critical Minerals Institute (CMI) report highlighted key economic and geopolitical developments. U.S. inflation in December 2023 impacted interest rate reduction plans, while the S&P 500 rose by 2.04% year-to-date. China's economy slowed, with falling home prices, and global tensions persisted. In the global electric vehicle (EV) market, December

2023 set a record for plugin electric car sales, led by China. However, the EV sector's growth rate slowed compared to previous years. The U.S. reported a surge in EV sales and enacted Zero Emission Vehicle mandates to boost adoption. In the EV battery sector, the U.S. government announced a ban on Pentagon battery purchases from major Chinese companies, starting October 2027. Challenges in the critical minerals sector included depressed prices due to oversupply and slowing EV market growth. Recovery in lithium prices was anticipated in late Q1 or early Q2 2024. The report emphasized a negative supply response from producers and expected a potential recovery in the second half of 2024, assuming reasonable EV sales growth. *Source, [Investor.News](#)*

Tesla Projects Slower Growth in 2024 as EV Demand Softens (January 24, 2024, [Source](#)) – Tesla Inc. (NASDAQ: TSLA) anticipates slower growth in 2024 amid a challenging landscape for the electric vehicle (EV) industry. CEO Elon Musk desires greater control, aiming for a 25% ownership stake to deter activist shareholders. This follows Musk's ultimatum to shift focus to AI and robotics if control isn't achieved. Tesla faces declining demand, shrinking profit margins, heightened competition, and recent price cuts. Despite doubling fourth-quarter net income to \$7.9 billion, costs for projects like the Cybertruck and AI research impact profitability. Tesla's valuation, historically tied to sales and Musk's vision, faces uncertainty. Challenges include Hertz selling EVs and Chinese automakers [overtaking Tesla](#). EV enthusiasm wanes due to pricing, charging concerns, and range limitations. Tesla plans cost reduction for future vehicles but encounters short-term cost pressures. Despite this, strong Cybertruck demand is expected, with production scaling up gradually. *Referral, CMI Director, [Alastair Neill](#)*

Rare-earths miner Lynas' Q2 revenue halves on falling prices, lower China demand (January 24, 2024, [Source](#)) – Australia's

Lynas Rare Earths reported a significant drop in its second-quarter revenue, falling by 51.7% to A\$112.5 million due to plummeting rare earth prices and reduced demand in China, particularly in the appliance sector amid a construction slowdown. This decline in revenue, which missed analysts' forecasts, led to a 30-month low in its share prices. Despite this downturn, Lynas has continued to expand its operations, including the near-completion of its Kalgoorlie processing plant in Australia, upgrades to its Malaysian facilities, and ongoing work at the Mt Weld mine. The company, a major supplier outside China, has also been working on a new facility in Texas to serve the U.S. Department of Defense. Despite these efforts, Lynas' challenges are compounded by the lower average selling price of its products, which has more than halved compared to last year.
Referral, CMI Director, [Russell Fryer](#)

Investors turn to copper, gold and uranium amid battery metals rout (January 24, 2024, [Source](#)) – In 2024, investors are shifting their focus away from battery metals, such as nickel and lithium, due to significant price declines. Instead, they are turning to commodities like copper, gold, and uranium. Copper prices have rebounded following supply shortages and disruptions in production by key global producers. Gold is experiencing renewed interest, driven by geopolitical crises and a weakening US dollar, with forecasts predicting it to trade above \$2,000 per ounce in the coming year. Uranium has gained substantial momentum, reaching decade-high prices, driven by limited supply and increased demand for nuclear energy in Western countries. Investors are diversifying their portfolios, seeking better prospects in these alternative commodities.
Referral, CMI Director, [Russell Fryer](#)

China, in comic strip, warns of 'overseas' threats to its rare earths (January 22, 2024, [Source](#)) – China's State Security Ministry released a comic strip on social media, depicting

foreign threats to its rare earth resources. The narrative shows security officers uncovering covert operations by foreign-looking characters, suggesting overseas interest in China's strategic minerals. China, the leading producer of rare earths essential for high-tech industries, has imposed [export restrictions](#) on these elements and related technologies, citing national security. The move has heightened tensions, particularly with the United States, amidst accusations of economic coercion. The comic underscores the importance of safeguarding these resources against international competition and espionage. The state-controlled Global Times highlighted the story, reflecting on the global race for rare earths, vital in military, consumer electronics, and renewable energy sectors, as a national security issue. *Referral, CMI Director, [Alastair Neill](#)*

Tanzanian, Canadian firms to search for rare metal (January 22, 2024, [Source](#)) – Tanzanian firm Memnon Project Management Services Company Limited and Canadian company Anibesa Energy Metals Corp. are set to collaborate in prospecting for niobium in Mbozi District, Songwe Region, with an anticipated investment of up to \$50 million. They have obtained regulatory approvals and are finalizing the acquisition of three licenses for niobium minerals, while three more geologists are expected to join the exploration team. Memnon Project Management Services is involved in various projects, including the Kongwa Lithium Project and solar energy initiatives. Niobium, a rare metal, enhances the strength of alloys and is used in various industries, including aerospace and construction. As of 2022, Brazil held the largest niobium reserves globally. The partnership aligns with Tanzania's goal of attracting international companies to boost the mining industry by focusing on valuable critical metals projects. *Referral, CMI Director, [Alastair Neill](#)*

Investor.News Critical Minerals Media Coverage:

- February 01, 2024 – Critical Minerals “rightsizing” in reaction to governments’ efforts to regulate market <https://bit.ly/49f78zC>
- January 31, 2024 – Attention set on rare earths in Canada and Brazil, Appia hits 2024 running <https://bit.ly/3ueaxjq>
- January 25, 2024 – The Critical Minerals Institute Report (01.25.2024): U.S. government bans Pentagon battery purchases from major Chinese companies starting October 2027 <https://bit.ly/4961zU0>
- January 22, 2024 – Unveiling Insights from Ecclestone on the Future of Mining and Investment from Riyadh’s Future Minerals Forum Event <https://bit.ly/491pV0S>

Critical Minerals IN8.Pro Member News Releases:

- February 2, 2024 – Appia Announces Plans for Drilling at the Loranger Uranium-Bearing Property, Saskatchewan, Canada <https://bit.ly/3Uphb0s>
- February 1, 2024 – Obonga: Wishbone Exploration Permit Application <https://bit.ly/3UlnF0j>
- February 1, 2024 – First Phosphate to Provide Project Update to the Federation of Chambers of Commerce of the Saguenay-Lac-Saint-Jean Region of Quebec, Canada <https://bit.ly/42ugvt1>
- January 31, 2024 – Defense Metals Announces Closing of its \$738,836 Non-Brokered Private Placement <https://bit.ly/3umNv9S>
- January 31, 2024 – First Phosphate Announces Launch of 25,000 m Drill Campaign at its Bégin-Lamarche Project <https://bit.ly/3SmPtPD>
- January 30, 2024 – Ucore Announces Closing of Debenture Offering <https://bit.ly/3SHT1xa>
- January 30, 2024 – Western Uranium & Vanadium Bolsters Mining Team to Scale-Up Uranium Production

<https://bit.ly/47UTIHZ>

- January 30, 2024 – F3 Hits 2.05m Off Scale >65,535 CPS in First Hole of Winter Program at JR Zone <https://bit.ly/3SCxru9>
- January 29, 2024 – First Phosphate Confirms Two Additional New High-Grade Discoveries at Begin-Lamarche Property and up to 39.45% P2O5 at Larouche <https://bit.ly/30lGWew>
- January 29, 2024 – American Rare Earths Quarterly Activities Report for the Period Ending 31 December 2023 <https://bit.ly/3SBQ0eM>
- January 29, 2024 – Australian Strategic Materials Quarterly Activities Report to 31 December 2023 <https://bit.ly/3UdGXVK>
- January 26, 2024 – Appia Rare Earths & Uranium Corp. Announces New Cooperation Agreement with the Ya'thi Néné Lands and Resources Office <https://bit.ly/30ke4TU>
- January 25, 2024 – First Phosphate, American Battery Factory and Integrals Power Sign MOU to Produce LFP Cathode Active Material and Battery Cells in North America <https://bit.ly/48MnCiU>
- January 23, 2024 – F3 Announces Commencement of Drilling at PLN <https://bit.ly/3Uc6C0o>
- January 23, 2024 – Power Nickel Announces Filing of Amended Technical Report <https://bit.ly/3HvYPUD>
- January 23, 2024 – First Phosphate Corp. Welcomes the Addition of Apatite (Phosphate) to the Critical and Strategic Minerals List of Quebec, Canada <https://bit.ly/48Pv7Wf>
- January 22, 2024 – First Phosphate Announces Closing of the Third and Final Tranche of Oversubscribed Private Placement Financing for Total Gross Proceeds of \$8.2 Million <https://bit.ly/3U5Vl2l>
- January 22, 2024 – Elcora Develops Innovative Process To Extract Vanadium From Its Moroccan Vanadinite Deposit

<https://bit.ly/3Hu8Zon>

- January 22, 2024 – American Rare Earths Announces Breakthrough Metallurgical Results <https://bit.ly/3096trp>
 - January 22, 2024 – F3 Expands PLN Project with Acquisition of PW Property from CanAlaska <https://bit.ly/3vKBMTb>
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Critical Minerals “rightsizing” in reaction to governments’ efforts to regulate market

written by Tracy Weslosky | February 26, 2024

The past week has been pivotal for the critical minerals industry, marked by a notable adjustment in the market for electric vehicle (EV) materials. Jack Lifton, Co-Chairman of the [Critical Minerals Institute](#) (CMI), offers a perspective that contrasts sharply with the more alarmist tones often found in media coverage of this sector. According to Lifton, the recent downturn in prices for key EV component materials, such as those for batteries and magnets, should not be misconstrued as a disaster. Instead, it’s a natural market correction, or “rightsizing,” where supply and demand are finding their equilibrium without the heavy hand of regulatory intervention attempting to influence market outcomes. This view is particularly poignant as it reflects on Western governments’ efforts to regulate the market, which Lifton suggests are largely ineffective in a true market economy driven by supply

and demand dynamics.

Recent financial reports from industry leaders like China Northern Rare Earth have underscored this point, revealing a 60% drop in profits due to declining rare earth element prices. This trend is not indicative of strategic market manipulation but rather a response to an overestimated demand for EVs, as evidenced by falling EV sales in significant markets such as California. This recalibration is further exacerbated by the economic climate in America and Europe, where high interest rates have cooled consumer enthusiasm for major purchases, including EVs.

Despite these challenges, opportunities abound for discerning investors. Lifton advises that only the most efficient, low-cost producers of EV materials are likely to thrive under these conditions. Companies that can maintain profitability despite falling prices, particularly those in the neodymium sector, represent promising investment targets. This approach emphasizes the importance of due diligence, encouraging investors to closely examine the fundamentals of these companies, especially their production costs relative to current market prices.

The January [2024 CMI Report](#) further contextualizes these market dynamics, highlighting the U.S. government's move to ban Pentagon battery purchases from major Chinese companies starting October 2027. This development, alongside global macroeconomic trends and specific updates in the EV sector, paints a picture of a market at a critical juncture. Despite the gloom surrounding EV and battery metals, with depressed prices and surplus inventory, the report suggests a stabilization in lithium prices and potential for recovery in demand and pricing in the coming months.

Recent news from Lynas Rare Earths adds another layer to this

complex scenario. The company reported a significant drop in revenue, attributed to falling prices and reduced demand from China. This situation reflects broader market trends but also highlights Lynas' strategic moves to expand capacity and improve efficiency, suggesting a long-term view towards meeting future demand.

In conclusion, the narrative emerging from Jack Lifton's insights, the CMI report, and the latest developments from companies like Lynas offers a multifaceted view of the critical minerals and EV materials market. While the short-term outlook may appear daunting, with price declines and demand uncertainties, the underlying message is one of resilience and strategic adaptation. For investors and industry stakeholders, the current market dynamics underscore the importance of efficiency, cost management, and the ability to anticipate and respond to evolving demand patterns. As the market continues to adjust, those who remain informed and agile are likely to navigate these shifts successfully, positioning themselves for growth as the sector evolves.

Unveiling Insights from Ecclestone on the Future of Mining and Investment from Riyadh's Future Minerals Forum

Event

written by Tracy Weslosky | February 26, 2024

The recent [Future Minerals Forum](#) (FMF) event in Riyadh has been a groundbreaking affair, especially through the lens of Christopher Ecclestone from [Hallgarten + Company](#), a seasoned speaker at this event for the past three years. Ecclestone's depiction of the event as "epic" captures both its grand scale and the significant shift in its thematic focus towards more sustainable and strategic practices. This year, the event diverged from its traditional path, emphasizing a nuanced approach that Ecclestone described as a movement from quantity to "quality over quantity."

The Financial Landscape: Big Moves and Strategic Investments

A pivotal aspect of the event, as highlighted by Ecclestone, was its financial dynamics. He recalled last year's [significant investment](#) in Ivanhoe Electric Inc. (NYSE American: IE | TSX: IE) and drew attention to this year's major development involving [Surefire Resources NL](#) (ASX: SRN), an Australian vanadium developer. This [announcement](#) is particularly noteworthy, marking Surefire's plan to ship its Victory Bore vanadium-titanium magnetite concentrate to Saudi Arabia for refining. The arrangement with the Saudi-based Ajlan & Bros Mining and Metals Company not only signifies an investment into Victory Bore but also underlines the strategic collaboration aimed at joint development and downstream processing. This deal is a testament to the robust and dynamic investment landscape within the mining sector, indicating a strategic shift towards partnerships that leverage regional advantages and technological advancements.

Saudi Arabia's Cautious Foray into Mining

Ecclestone shed light on Saudi Arabia's growing engagement in the mining sector. The country is cautiously yet strategically approaching large-scale mining ventures. This deliberate and calculated approach is evidenced by the activities of [Ma'aden](#), the largest mining company in Saudi Arabia. Founded in 1997, Ma'aden exemplifies the nation's ambition in harnessing its mineral resources. The company's significant ventures, such as the \$10.8 billion aluminum complex agreement with Alcoa, showcase its expansive capabilities and strategic intent in the global mining arena. Ma'aden's focus, which initially centered on gold mining, has diversified into multiple minerals, reflecting the kingdom's broader vision for its mining sector.

Shifting Focus: Battery Metals and Green Transition

Ecclestone noted a marked shift in the event's focus towards battery metals and the green transition, more pronounced this year than in previous events. However, there was a notable avoidance of geopolitical discussions, suggesting a strategic decision to focus on industry growth and sustainability rather than delve into contentious global politics.

Skepticism and Realism in Valuation

In his assessment of the Saudi mining sector, Ecclestone expressed skepticism regarding the high valuation of unexplored resources. This cautious stance introduces a realistic perspective to the generally optimistic industry outlook.

In Conclusion

The Future Minerals Forum event in Riyadh stands as a harbinger of change in the mining and investment sectors. Christopher Ecclestone's insights paint a picture of an industry at a crossroads, embracing strategic growth and sustainable practices while remaining mindful of the challenges ahead. The event not only reflects the current state of the mining world but also signals the direction of its future development.