

# Technology Metals Report (04.12.2024): Gina Rinehart Steps into the Critical Minerals Ring, while Copper Prepares for a Bull Ride

written by Tracy Weslosky | April 12, 2024

Welcome to the latest issue of the Technology Metals Report (TMR), brought to you by the [Critical Minerals Institute](#) (CMI). In this edition, we compile the most impactful stories shared by our CMI Directors over the past week, reflecting the dynamic and evolving nature of the critical minerals and technology metals industry. Among the key stories featured in this report are the surging [success](#) of [Vulcan Energy Resources Ltd.](#) (ASX: VUL), backed by Gina Rinehart, in lithium production, signaling a significant advancement in battery technology. Additionally, we explore the implications of [copper's](#) climb to a 2024 high, heralded by Citi analysts as the start of the metal's second bull market this century, amidst concerns about sustainability and market dynamics. We also delve into the [ramifications](#) of Chinese car manufacturing in Italy on Stellantis and the [challenges](#) faced by Volkswagen amidst a resurgence in petrol car demand in Europe, among other crucial developments shaping the industry landscape.

This week's TMR Report also highlights the strategic moves of influential figures like Gina Rinehart, whose [investments](#) in the U.S. rare earths sector and Brazil hint at potential industry mergers and reshaping of the global rare earths supply chain. Furthermore, we discuss the imperative for the United States to

strengthen its commercial ties with African nations to secure key minerals, aiming to reduce dependency on China. Amidst fluctuating rare earths prices in China and U.S. efforts to bolster domestic mining projects, we explore the intersection of environmental concerns with mining practices, exemplified by Australian billionaire Andrew Forrest's call for [greener nickel](#) production. Lastly, we examine Canada's risk of losing its position as a major mining capital due to government opacity surrounding Chinese investments in the critical minerals sector, highlighting the broader implications of uncertain investment policies on the industry's strategic positioning.

To become a CMI member and stay informed on these and other topics, [click here](#)

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

**Copper prices climb to 2024 high as Citi calls the start of the**

**metal's second bull market this century:** (April 10, 2024, [Source](#)) – Copper prices have surged to their highest levels since June 2022, with May delivery trading at \$4.323 per pound in New York and three-month prices on the London Metal Exchange rising to \$9,477 per metric ton. This increase reflects growing demand for copper, seen as an indicator of economic health and a vital component of the energy transition, including electric vehicles, power grids, and wind turbines. Citi analysts herald the start of copper's second secular bull market of the century, predicting prices could average \$10,000 per metric ton by year's end and potentially rise to \$15,000 in a bullish scenario. However, concerns exist about the sustainability of these price levels, with some analysts warning that high prices could dampen demand through substitution or demand destruction, emphasizing the self-regulating nature of commodity markets.

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

**Volkswagen electric car sales plunge as Europe returns to**

**petrol:** (April 10, 2024, [Source](#)) – Volkswagen's electric vehicle (EV) sales in Europe plummeted by nearly a quarter in the first quarter of the year, amid a resurgence in petrol car demand, driven by high inflation and rising energy costs. This decline contrasts with a modest 3% global dip in all-electric sales and a 4% rise in combustion engine vehicle sales. The shift comes as governments reevaluate EV subsidies and emissions targets, with the UK delaying its ban on new petrol and diesel sales from 2030 to 2035, and the EU considering allowances for synthetic fuels. This backdrop of diminishing government support and increased competition from more affordably priced Chinese EVs, such as those from BYD, has pressured Volkswagen's sales. Despite these challenges, Volkswagen experienced a significant 91% surge in EV sales in China, underscoring the regional disparities in EV adoption trends. Other manufacturers like BMW and Tesla also report varying EV sales performance, highlighting the evolving and competitive landscape of the global electric vehicle market.

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

minerals for the green transition, affecting companies like Tianqi, whose profitability and market position are under pressure from changing regulations, market dynamics, and operational challenges, both in Chile and globally.

**Rinehart's MP Buy Could Trigger Rare Earths Mining Mega Merger:** (April 9, 2024, [Source](#)) – Gina Rinehart, Australia's wealthiest person and iron ore magnate, has made a significant move into the U.S. rare earths sector by acquiring a 5.3% stake in MP Materials Corp. (NYSE: MP), which owns the Mountain Pass mine in California. This purchase has led to a 20% increase in MP's share price within five days. Rinehart's investment extends beyond MP to a 10% stake in [Arafura Rare Earths Limited](#) (ASX: ARU), an Australian rare earth producer, and 5.8% in a Brazilian company. Amidst growing competition with China and threats to "weaponize" its dominance in rare earths essential for modern technologies, Rinehart's actions hint at potential for a major merger, particularly between MP and Australia's Lynas Rare Earths Ltd. (ASX: LYC), aiming to create a significant non-Chinese rare earth supply. This development could signal strategic shifts in global rare earths production, with potential large-scale industry consolidation on the horizon.

**China's EV export boom fuels surge in demand for new car-carrying ships:** (April 9, 2024, [Source](#)) – Amidst a burgeoning demand for electric vehicles (EVs), Chinese automakers and shippers are investing heavily in a fleet expansion, ordering a record number of car-carrying ships. This surge places China on a trajectory to possess the world's fourth-largest car-carrying fleet by 2028, ascending from its current eighth position. Major corporations like SAIC Motor, Chery Automobile, and EV titan BYD, along with shippers such as COSCO and China Merchants, are spearheading this initiative, accounting for a quarter of global orders. This influx primarily benefits Chinese shipyards, capturing 82% of the global orders. The expansion into foreign

markets, buoyed by a cost-efficient supply chain, has been crucial for Chinese automakers facing domestic challenges like price competition and a slow economy. Notably, China has surpassed Japan as the premier auto exporter, with significant contributions from companies like BYD. However, this export growth has raised concerns in the U.S. and EU about market oversaturation with low-priced goods, though China rebuts, highlighting innovation and downplaying state support's role.

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

**Rare earths prices in China hit 7-week high on post-holiday restocking:** (April 9, 2024, [Source](#)) – Rare earths prices in China, the world's leading producer, reached a seven-week peak on April 8 due to increased post-holiday restocking, before slightly declining the following day. With China dominating 70% of mining and 90% of the refined rare earths market, notable

increases were observed in praseodymium oxide and terbium oxide prices, highlighting the country's significant influence on the market. The demand surge, particularly after the QingMing Festival, led to a depletion of in-plant stocks among magnetic materials producers, who then turned to the spot market for replenishment. Additionally, the use of ore cargoes as collateral by some to alleviate financial pressures contributed to the price hike. The start of the rainy season in Myanmar, a major supplier, is expected to reduce ore availability, potentially increasing market volatility as companies rely more on spot market purchases, impacting long-term contract stability. Consequently, shares in China Northern Rare Earth (Group) High-Tech saw a 4.3% increase.

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

**Mining billionaire Forrest urges China to demand greener nickel:** (April 7, 2024, [Source](#)) – Australian mining billionaire Andrew Forrest has publicly called for China to implement and enforce higher environmental standards within its global supply chains,



especially focusing on nickel processing in Indonesia, citing severe environmental damage. In a Financial Times interview, Forrest, who is the chair and largest shareholder of Fortescue Ltd. (ASX: FMG), criticized the extraction of Indonesian nickel for its extensive environmental degradation and urged electric vehicle manufacturers to be cautious when sourcing nickel from Indonesia. Forrest highlighted that China's increasing control over Indonesia's nickel production, vital for electric car batteries and steelmaking, comes with significant environmental concerns, including deforestation, mining waste pollution, and high carbon emissions from coal power. Despite shutting down his nickel mines in Western Australia due to price drops influenced by Indonesian nickel, Forrest remains vocal about the need for a "green premium" for sustainably produced nickel and criticizes the lack of differentiation in the market. The call comes amid rising environmental scrutiny and the potential for market-driven adjustments to reflect the environmental cost of production.

**Canada risks losing mining capital because of government opacity around Chinese investment in critical minerals sector:** (April 5, 2024, [Source](#)) – The opacity of the Canadian government regarding Chinese investment in the critical minerals sector is leading to investor uncertainty and risking Canada's position as a major capital source for mining. Despite Ottawa's late 2022 announcement allowing Chinese investments only under "exceptional circumstances" without defining them, transactions continue, confusing the market. For instance, Shenghe Resources acquired a 10% stake in Vital Metals Ltd. (ASX: VML), owner of Canada's only operating rare earths mine, even purchasing a significant stockpile of rare earths mined in Canada. Critics, including those from the Macdonald-Laurier Institute, find it problematic, especially given China's dominance in the rare earths market. The unclear stance and handling of investments,



such as the blocked financing deal for SRG Mining Inc. (TSXV: SRG)., reflect a broader uncertainty and potential discouragement of future critical minerals companies from basing in Canada, fearing the government's unpredictable investment policies. This situation may drive new companies to other countries, impacting Canada's mining capital and strategic positioning in critical minerals.

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

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

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

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

---

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

written by Tracy Weslosky | April 12, 2024

Welcome to the latest Technology Metals Report (TMR) where we highlight the top news stories that members of the [Critical Minerals Institute](#) (CMI) have forwarded to us in the last week. Key highlights in this Technology Metals Report include the announcement of Australia and Vietnam upgrading their relations to begin talks on critical minerals, focusing on diversifying supply chains away from China. This significant move aims to enhance cooperation in several sectors, particularly in the energy and resources sector, emphasizing the critical minerals supply chain. Both countries, known for their substantial roles in the production and reserves of critical minerals, are looking to strengthen their global supply chain positions amid rising geopolitical tensions and efforts to reduce dependency on China. Additionally, this edition features updates on Chinese investments in Asia, notably in Indonesia, which have surged by 37% in 2023 despite global economic challenges. This growth, largely concentrated in Belt and Road Initiative (BRI) countries, underscores China's strategic shift towards green energy and mining investments, especially in Southeast Asia.

Moreover, this edition of the TMR delves into several crucial

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

**Australia and Vietnam upgrade relations, to begin talks on critical minerals (March 7, 2024, [Source](#))** – Australia and Vietnam have elevated their relations to a comprehensive strategic partnership, announced by Australian Prime Minister Anthony Albanese. This upgrade includes an annual dialogue on minerals, focusing on diversifying supply chains away from China. The partnership aims to enhance cooperation on climate, environment and energy, defense and security, and economic engagement and education. Additionally, it will foster collaboration in the energy and resources sectors, especially in critical minerals supply chains. Both countries, significant in the production and reserves of critical minerals, seek to strengthen their positions in global supply chains amid rising

tensions and efforts to reduce dependency on China. This move also signifies Vietnam's success in "bamboo diplomacy," enhancing its relations with major global powers. The partnership reflects a deep mutual political trust and commits to expanded cooperation across various sectors, marking a milestone in the bilateral relationship between Australia and Vietnam.

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

**Under Secretary Jose Fernandez Discusses U.S. Critical Minerals Strategy for Clean Energy Transition (March 6, 2024, [Source](#))** – Under Secretary Jose W. Fernandez discussed the U.S.'s strategy for securing and diversifying the supply chain of critical minerals crucial for the clean energy transition in a conversation with InvestorNews' Tracy Weslosky. Highlighting

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

**EU set to allow possible retroactive tariffs for Chinese EVs (March 6, 2024, [Source](#))** – The European Commission will start registering Chinese electric vehicle (EV) imports for potential retroactive tariffs, in response to an anti-subsidy investigation. This investigation aims to determine if Chinese EVs benefit from unfair subsidies, potentially harming EU producers. If found guilty, tariffs could be imposed, with provisional duties possible by July and a final decision expected by November. The Commission has found preliminary evidence of subsidy and a significant 14% year-on-year increase in imports since the investigation began in October, suggesting potential harm to EU producers. The China Chamber of Commerce expressed disappointment, attributing the import surge to growing European demand for EVs.

**Kazakhstan positions itself for lithium windfall (March 6, 2024, [Source](#))** – Kazakhstan is emerging as a significant potential supplier of lithium, crucial for power-storage technology, with reserves estimated at around 75,600 tons. Research by the Korea Institute of Geoscience and Mineral Resources highlighted substantial reserves in eastern Kazakhstan, potentially worth up to \$15.7 billion. This discovery, along with European interest

in Kazakhstan's critical raw materials, underscores the country's growing importance in the global lithium market. The European Commission and European Bank for Reconstruction and Development have allocated funds for lithium exploration, highlighting the strategic value of Kazakhstan's resources amidst increasing global demand. With investments from various countries, including China and potentially European entities, Kazakhstan is set to play a crucial role in the lithium supply chain, essential for green and digital technologies.

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

**Canada and Australia boost collaboration on critical minerals (March 4, 2024, [Source](#))** – Canada and Australia have committed to enhancing their cooperation on critical minerals, vital for battery production and clean energy transition, according to a

joint statement released on the margins of the PDAC conference in Toronto. Both countries, rich in these essential minerals, aim to bolster their partnership through R&D collaboration, trade, and investment in the mining sector based on a non-legally binding agreement. This collaboration seeks to ensure supply chain transparency and promote high Environmental, Social, and Governance (ESG) standards globally. The initiative will be spearheaded by Canada's Natural Resources Ministry and Australia's Critical Minerals Office, focusing on policy and investment coordination to support the burgeoning demand for these minerals in the upcoming decades.

**Albemarle (ALB) Accelerates Lithium Growth With \$1.75B Offering (March 4, 2024, [Source](#))** – Albemarle Corporation (NYSE: ALB) announced a \$1.75 billion offering in depositary shares, each representing a 1/20th interest in Series A Mandatory Convertible Preferred Stock, with a potential additional offering of \$262.5 million under certain conditions. The proceeds are intended for general corporate uses, notably to fund growth capital expenditures for expanding lithium operations in Australia and China, as well as repaying outstanding commercial paper. The depositary shares will carry rights and preferences similar to the Preferred Stock, including conversion into common stock on or around March 1, 2027. Despite a 52.1% decrease in Albemarle's share price over the past year, the company forecasts a 10-20% increase in Energy Storage volumes for 2024, with expected net sales in its Specialties and Ketjen segments ranging from \$1.3 to \$1.5 billion and \$1 to \$1.2 billion, respectively.

**Posco to source 60,000 tons of graphite from Africa in pull away from China (March 3, 2024, [Source](#))** – Posco Future M, a subsidiary of Posco Group, is shifting its supply chain for natural graphite, a crucial battery material, away from China towards Africa. This move is highlighted by a new deal with Australian mining firm Syrah Resources Limited (ASX: SYR), which



will provide Posco Future M with up to 60,000 tons of natural graphite annually for six years from its Mozambique Balama operation, starting no later than 2025. This supply is expected to cover 40% of Posco Future M's anode production, translating to about 30,000 tons of anodes. The agreement comes amid concerns over China's control over graphite exports, potentially as leverage against international policies such as the U.S.'s Inflation Reduction Act. Posco's decision reflects a broader strategy to diversify supply sources and reduce dependency on China, amid rising geopolitical tensions and supply chain vulnerabilities.

**Total EV Adoption Is Not The Way Forward, Says Toyota Chairman (March 3, 2024, [Source](#))** – Akio Toyoda, Toyota's Chairman, expresses skepticism towards full adoption of battery electric vehicles (BEVs), arguing they will not dominate the market beyond a 30% share despite other markets already exceeding this percentage. In a presentation in Tokyo, he emphasized a multi-pathway approach to combating CO2 emissions, suggesting that consumer choice should drive the future of automotive powertrains rather than regulations. Toyota plans to focus on a diverse range of technologies including internal combustion engines, hybrids, and hydrogen vehicles, alongside BEVs. Despite the global push towards electric vehicles, with countries like Norway showing an 80% market share for EVs, Toyoda's stance reflects a broader strategy to embrace multiple solutions for emission reduction. This perspective aligns with Toyota's goal to comply with future regulations and its commitment to sell 1.5 million EVs by 2026, while also investing in alternative technologies like e-fuels.

**Kazakhstan plans to export aluminum, gallium and scandium to the US (March 1, 2024, [Source](#))** – Kazakhstan is aiming to strengthen its trade ties with the United States by proposing to export aluminum, gallium, and scandium. This initiative was unveiled

during Minister of Industry and Construction Kanat Sharlapayev's official visit to the U.S., focusing on promoting Kazakhstani interests globally and expanding cooperation in critical materials. In addition to these exports, Kazakhstan is offering tolling services and exploring the production of other precious minerals like wolfram, cobalt, lithium, and titan, aiming to discuss long-term contracts and investment support. The country, which processes 17 of the 50 minerals critical to the U.S. economy, already exports several strategic minerals to American companies. Sharlapayev's visit also involved meetings with leading American companies to discuss opportunities in industrial production and geological exploration. The talks highlighted the potential for joint projects in various sectors, including infrastructure development and technology, with the U.S. International Development Finance Corporation expressing interest in deepening cooperation with Kazakhstan.

**Chinese money still chasing Canadian critical mining deals despite Ottawa's scrutiny (February 27, 2024, [Source](#))** – A year after Canada tightened its foreign investment rules for the critical minerals sector to enhance national security, Chinese investments continue to flow into Toronto-listed mining companies, as per research by the University of Alberta. Despite Canada forcing three Chinese investors to divest their stakes in 2022 and increasing scrutiny on foreign deals, especially in critical minerals, investments from China and Hong Kong surged to C\$2.2 billion in 2023, a significant leap from C\$62 million in 2022. This influx is buoyed by the perception that Canada remains open to Chinese investments, with junior miners finding it easier to secure funding. The critical minerals sector, vital for Canada's national security, has seen Chinese entities actively investing, notably in copper assets. For instance, MMG Africa Ventures acquired a copper mine for C\$1.7 billion, and Jiangxi Copper Co increased its stake in First Quantum Minerals

Ltd. (TSX: FM). Some Canadian miners are lobbying for more Chinese investments due to difficulties in raising capital elsewhere, despite the government's stringent stance on safeguarding critical resources.

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

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

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

- March 8, 2024 – F3 and Traction Begin Drilling to Locate Source of Radioactive Boulders <https://bit.ly/436k09t>
- March 7, 2024 – American Clean Resources Group Commits to Transfer Federal Tax Credits to Investors to Accelerate the Development of Its Renewable Energy Assets <https://bit.ly/3wCIjzu>
- March 6, 2024 – Halleck Creek Project Update <https://bit.ly/3InYYJV>
- March 6, 2024 – Karbon-X Announces Appointment of Brett Hull and Justin Bourque to its Board of Directors

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

- March 5, 2024 – Panther Metals PLC – Australia: Coggia Nickel-Cobalt Mineral Resource Exceeds 100Mt <https://bit.ly/3IptcMI>
- March 5, 2024 – Panther Metals PLC – Obonga: Extension of Purchase Agreement <https://bit.ly/3TmYLge>
- March 4, 2024 – Ucore Progresses Through Heavy Rare Earth Processing as It Completes Second Milestone of Strategic US DoD Contract <https://bit.ly/3uSunkx>
- March 4, 2024 – First Phosphate Corp. Receives Mining Research and Innovation Grant from Quebec Ministry of Natural Resources <https://bit.ly/3Iny84z>
- March 4, 2024 – Voyageur Pharmaceuticals and API Forge Alliance for Carbon-Based Imaging Drug Advancement <https://bit.ly/3wBuem6>
- March 4, 2024 – Defense Metals Ships Mixed Rare Earth Carbonate Samples to two major REE companies <https://bit.ly/43iwmlT>
- March 4, 2024 – Power Nickel Defines Initial Volume on its High-Grade Cu-Pt-Pd-Au-Ag Zone 5km Northeast of its Main Nisk Deposit <https://bit.ly/3TiZNde>

---

## **Technology Metals Report (03.01.2024): Biden Calls Chinese EVs a Security Threat**

# and the Greenest Car in America May Surprise You?

written by InvestorNews | April 12, 2024

Welcome to the latest issue of the Technology Metals Report (TMR), brought to you by the [Critical Minerals Institute](#) (CMI). In this edition, we compile the most impactful stories shared by our members over the past week, reflecting the dynamic and evolving nature of the critical minerals and technology metals industry. Among the key stories featured in this report are President Joe Biden's initiatives to restrict Chinese electric vehicles (EVs) citing national security concerns, the American Council for an Energy Efficient Economy's report naming the Toyota Prius Prime SE as the greenest car in America, and insights into the lithium market with investors remaining keen despite a price plunge. We also delve into the broader context of these developments, including the potential solution to the rare earth crisis through tetrataenite, BYD's exploration for a factory location in Mexico, and the ongoing challenges and opportunities facing the global electric vehicle and critical minerals markets.

This week's report also highlights various strategic collaborations and developments, including the significant challenge posed by China's EV industry to Detroit's Big Three automakers and Australia's navigation of a critical minerals market meltdown amidst declining prices for key exports such as iron ore, nickel, and lithium. Furthermore, we cover Lynas Rare Earths Ltd.'s (ASX: LYC) call for government vigilance in the volatile nickel market, China's lithium-ion battery industry facing excess inventory and production capacity issues, Energy Fuels Inc.'s (NYSE American: UUUU | TSX: EFR) record net income and uranium production ramp-up, and Mercedes-Benz's adjustment

of its electrification goal. These stories underscore the rapidly changing landscape of the technology metals and critical minerals industry, spotlighting strategic collaborations, market dynamics, and the critical role of innovation and policy in shaping the future of sustainable technology and energy.

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

**The 'greenest' car in America might surprise you (February 29, 2024, [Source](#))** – A new report from the American Council for an Energy Efficient Economy challenges the common perception that electric vehicles (EVs) are the greenest cars in America by naming the Toyota Prius Prime SE, a plug-in hybrid, as the top environmentally friendly vehicle. The Prius Prime SE can travel 44 miles on electricity before switching to hybrid mode, combining electric and gasoline power. The report assesses over 1,200 vehicles on their road and manufacturing emissions, including pollutants beyond carbon dioxide. Despite the growing

market for EVs, the report emphasizes that a car's green credentials depend on factors like weight, battery size, and overall efficiency, not just its electric capabilities. Plug-in hybrids like the Prius Prime offer a balance for drivers by allowing short electric commutes and longer gas-powered trips, presenting a practical alternative amidst America's evolving charging infrastructure. Critics argue that fully electric vehicles remain the best option for environmental benefits, especially as renewable energy sources increase. However, the report suggests the importance of offering consumers a range of environmentally friendly choices to suit different needs.

**Lithium Investors Are Looking Beyond Price Plunge, Chile Minister Says (February 28, 2024, [Source](#))** – Despite a recent downturn in lithium prices, investors remain keen on new lithium projects in Chile, as confirmed by the country's Mining Minister, Aurora Williams. This interest is fueled by the long-term prospects associated with the global shift towards renewable energy and electric vehicles, rather than short-term price fluctuations. Chile, home to the world's largest lithium reserves, has seen prices drop significantly since the introduction of a new public-private partnership model aimed at attracting investment while ensuring major deposits remain under state control. Despite this, major international companies like Rio Tinto Group and Tsingshan Holding Group have continued discussions with Chilean authorities, demonstrating a sustained interest in the sector. Chile plans to offer exploration rights in certain salt flats, with the possibility of private investors gaining either minority or majority stakes depending on the strategic importance of the area. This initiative is part of a broader effort to maintain Chile's status as a key player in the global lithium market, amidst growing competition and as the country also seeks to bolster its position in the copper industry.



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

**Tetrataenite as a solution to the rare earth crisis (February 28, 2024, [Source](#))** – The rare earth crisis, pivotal for modern technologies such as electric motors and wind turbines, stems from the scarcity and environmental impact of mining rare earth elements like yttrium and neodymium. As demand for these materials grows due to their importance in reducing fossil fuel reliance and combating climate change, shortages are anticipated. A potential breakthrough in 2023 by an international research team suggests tetrataenite, a meteorite mineral with similar magnetic properties to rare earths, as a solution. Unlike its natural slow formation in space, the team discovered a method to synthesize tetrataenite on Earth rapidly using common materials like iron, nickel, and phosphorous, potentially offering an alternative to address the rare earth crisis.

**Chinese automaker BYD looking for Mexico plant location,**

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

**China's Electric Vehicles Are Going to Hit Detroit Like a Wrecking Ball (February 27, 2024, [Source](#))** – China's electric vehicle (EV) industry, led by automakers like BYD, poses a significant challenge to Detroit's Big Three (Ford, General Motors, and Stellantis). Despite recent profits and optimistic forecasts for 2024, these American giants are struggling with their EV sales goals amidst the rapid emergence of affordable and efficient Chinese EVs. BYD, in particular, has sold millions of electrified vehicles, expanding its global manufacturing footprint to meet increasing demand. The competitive pricing and technological efficiency of Chinese EVs underscore China's evolving industrial capabilities, transitioning from basic manufacturing to complex, high-tech production including cars and batteries. This shift represents a broader challenge to

American automakers, who must navigate a changing market landscape while addressing structural vulnerabilities in their business models, heavily reliant on sales of trucks and SUVs to a niche market. The U.S. government faces a delicate balance of supporting domestic industries through subsidies and trade restrictions while fostering a competitive environment that encourages innovation and adaptation to the global shift towards electrification.

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

**Rare earths leader Lynas warns govt on nickel fallout (February 26, 2024, [Source](#))** – Lynas Rare Earths Ltd. (ASX: LYC), a leading

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

**China's lithium-ion battery industry faces excess inventory, production capacity as EV market downshifts: industry analysts (February 25, 2024, [Source](#))** – China's lithium-ion battery industry, pivotal in the global EV market, is navigating through a phase of excess inventory and production capacity due to decreased demand for electric vehicles. Analysts predict a challenging year ahead, with companies facing losses amidst a price war triggered by overcapacity. The situation has led to significant price drops in lithium carbonate and battery cells, exacerbated by reduced subsidies for EVs. With production far exceeding installation into products, further price declines are expected. The market is undergoing a clearing phase, with expectations of breaking even next year. Investment in new capacity is likely to decelerate. Despite a forecasted slowdown in domestic EV sales growth, the global lithium market faces a

ballooning excess supply, raising concerns over the long-term growth prospects for lithium. Top battery and lithium mining firms may only see profitability by 2025, as the industry grapples with these challenges.

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

**Mercedes-Benz delays electrification goal, beefs up combustion engine line-up (February 22, 2024, [Source](#))** – Mercedes-Benz announced a postponement of its electrification target by five years, aiming for electrified vehicles to comprise up to 50% of its sales by 2030, a shift from the initial 2025 goal focused mainly on all-electric cars. This adjustment reflects a broader trend among automakers recognizing the slower-than-anticipated adoption of electric vehicles (EVs), as investments in EV technology and capacity have surpassed current demand. CEO Ola Källenius highlighted that even in Europe, a complete switch to

electric vehicles by 2030 is unlikely, noting that EVs currently represent a small fraction of total sales. Mercedes-Benz reassured investors and customers of its commitment to refining its combustion engine vehicles alongside its EV ambitions, with plans for a significant lineup refresh by 2027. The announcement, coupled with a €3 billion share buyback program, positively impacted the company's stock, which saw a 5.9% increase. However, challenges such as economic slowdowns, supply chain issues, and geopolitical tensions have led the automaker to anticipate lower sales and reduced profitability for 2024.

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

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

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

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

# Critical Minerals IN8.Pro Member News Releases:

- March 1, 2024 – Voyageur Pharmaceuticals Ltd. Announces Closing of Private Placement <https://bit.ly/432eRzi>
  - February 29, 2024 – Ucore Rare Metals to Present at the 2024 PDAC Conference <https://bit.ly/3TglcUa>
  - February 28, 2024 – First Phosphate and Craier Sign MOU for the Development of Global Logistical Competencies to and from the Saguenay-Lac-St-Jean region of Quebec, Canada <https://bit.ly/49xD5DI>
  - February 27, 2024 – American Rare Earths to present at two leading industry conferences in March PDAC and International Battery Seminar <https://bit.ly/49uaFuu>
  - February 27, 2024 – Nano One Commences Feasibility Study for First Commercial LFP Plant and “Design-Once-Build-Many” Growth Strategy <https://bit.ly/3TaFtum>
  - February 27, 2024 – Media Advisory – Neo Performance Materials Inc. Fourth Quarter 2023 Earnings Release & Conference Call <https://bit.ly/3uSkeUQ>
  - February 26, 2024 – Appia Reports High-Grade Total Rare Earth Oxide Results up to 22,339 ppm or 2.23% on Diamond Drill Hole #1 Within Target IV at PCH IAC Project, Brazil <https://bit.ly/48DKQHe>
  - February 26, 2024 – Kraken Energy Commences Drilling at Harts Point & Provides Corporate Update <https://bit.ly/49r02bS>
-



# Industry Leaders Lifton and Karayannopoulos China's Influence on Rare Earth Prices and Markets Today

written by InvestorNews | April 12, 2024

In a thought-provoking InvestorNews interview hosted by the [Critical Minerals Institute](#) founder [Tracy Weslosky](#), [Jack Lifton](#) and [Constantine Karayannopoulos](#), two renowned figures in the rare earths market, share their insights on the sector's current trends and future prospects. Constantine Karayannopoulos, reflecting on the state of the market, observes, "There is never a dull moment in the rare earths industry," highlighting the ongoing slide in prices for critical rare earth elements like neodymium and praseodymium. He expresses a cautious outlook, noting, "I'm a little pessimistic about the near term... it's a cyclical industry."

[Critical Minerals Institute](#) (CMI) Co-Chair Jack Lifton adds: "The low prices may be here for a while because the principal producer in the world is China, and China's having a very bad time economically right now." He emphasizes the opportunities presented by the current market conditions for strategic investments, advising, "This is the ideal time for real mining and real processing companies to get into the game."

Karayannopoulos also touches on the disconnection between market interest and actual market trends, suggesting, "There's always a disconnect between reality versus expectation." He elaborates on the nuanced dynamics within China, mentioning, "The Chinese consumer has not stopped buying, China grew at 5% last year.. However, the main consumer of rare earths today, the magnet

industry that feeds the electric vehicle production in China, it's not growing as fast as people thought it was going to grow."

Lifton further discusses the broader implications of supply and demand, cautioning, "As long as the supply is in excess, the prices are not going to go up." He also highlights the strategic importance of investments in raw material sources and processing capabilities, particularly in light of China's dominance in the market.

Through their conversation, Lifton and Karayannopoulos provide a nuanced analysis of the rare earths market, blending perspectives on economic trends, geopolitical strategies, and investment opportunities. To access the complete interview, [click here](#)

---

# Technology Metals Report (01.05.24): The Intensifying Competition of BYD Surprises Tesla

written by Tracy Weslosky | April 12, 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.

Key highlights in this **Technology Metals Report** includes Tesla's

impressive Q4 delivery record, overshadowed by BYD's surge as the top EV maker, underscoring the intensifying competition in the electric vehicle market. Energy Fuels Inc. has made significant strides, first by entering into an MOU with Astron Corporation to bolster the U.S. rare earths supply, and then by expanding its uranium production in response to favorable market conditions. Nio Inc. has made a technological leap with its innovative EV battery, boasting a 1,000km range, while global trends in the critical minerals and EV market show shifts influenced by economic and political developments. Notably, Codelco and SQM's new lithium venture in Chile represents a strategic move in the lithium market. The impact of China's rare earths export ban stands as a significant moment, compelling the U.S. to foster technological self-reliance. The landmark merger between Allkem and Livent to form Arcadium Lithium marks a major consolidation in the lithium industry. Atomionics' innovative use of AI and gravity in mining exploration showcases a technological breakthrough. The EU's ambitious goals for critical minerals, despite challenges, indicate a strong commitment to securing essential resources for its green transition. Lastly, KoBold Metals' ambitious global lithium exploration, backed by industry giants, highlights the growing importance of lithium in the clean energy sector.

The 10-stories selected for this edition of the TMR with source links to source stories for this fast-paced sector are listed chronologically for your ease and review.

**Tesla delivers record Q4 cars, but China's BYD steals top EV spot (January 3, 2024, [Source](#))** – In the fiercely competitive electric vehicle (EV) market, Tesla Inc. (NASDAQ: TSLA) achieved a significant milestone by delivering a record 484,507 vehicles in the fourth quarter of 2023, surpassing market expectations and fulfilling its annual target. Despite this success, Tesla was eclipsed by China's BYD in terms of sales volume, losing its

position as the leading EV manufacturer. BYD, backed by Warren Buffett, delivered 526,409 vehicles, primarily in China, indicating a consumer preference for more affordable models in an economy burdened by high interest rates. Although Tesla's aggressive sales strategies led to a notable 11% growth over the previous quarter and a total production of 1.85 million units in 2023, it fell short of CEO Elon Musk's ambitious target of 2 million. The company's stock remained stable amidst a generally declining market. Meanwhile, BYD's strategy of price cuts appears to be paying off, gaining market share despite potential impacts on profit margins. Tesla, in a bid to boost sales, offered discounts and incentives, such as six months of free fast charging for deliveries made by the end of December. This strategy was partly in response to some models of its Model 3 sedan losing U.S. federal tax credits in 2024. Tesla's delivery performance stands out in comparison to domestic U.S. car companies, but it is also facing challenges like regulatory scrutiny over its self-driving technology and the need to adapt to changing tax credit policies.

**Energy Fuels' Strategic MOU with Astron: Shaping the Future of the U.S. Rare Earths Supply Chain (December 30, 2023, [Source](#))** – [Energy Fuels Inc.](#) (NYSE American: UUUU | TSX: EFR) has recently entered into a significant Memorandum of Understanding (MOU) with Astron Corporation Ltd. to jointly develop the Donald Rare Earth and Mineral Sands Project in Victoria, Australia. This collaboration, [announced](#) on December 27, 2023, marks a crucial step in establishing a U.S.-focused rare earths supply chain, vital for meeting future national needs. The project will provide Energy Fuels with 7,000 to 14,000 metric tons of rare earth concentrate annually from the Donald deposit, processed at their White Mesa Mill in Utah. This arrangement not only utilizes the mill's capacity to manage radioactive elements but also supports the production of critical minerals like uranium.

The project is set to initially produce 800 – 1,000 metric tons of Neodymium-Praseodymium (NdPr) oxide by Q1 2024, with prospects for expansion. This development is strategically important in light of the U.S. government's impending policy to restrict critical minerals sourced from Foreign Entities of Concern, effective from 2025. By fostering a sustainable, competitive, and independent supply chain, Energy Fuels' initiative is poised to significantly impact the electric vehicle and clean energy sectors in the U.S., reducing dependency on foreign sources, especially China, and bolstering national security and technological advancement.

**A Chinese EV company developed a battery with a 1,000km range – and its CEO tested it out on a 14-hour livestream (December 29, 2023, [Source](#))** – Chinese electric vehicle (EV) company Nio Inc., often compared to Tesla, recently showcased a groundbreaking development in EV technology by introducing a battery with an impressive 1,000km range. The company's CEO, William Li, widely regarded as China's answer to Elon Musk, embarked on a 14-hour live-streamed journey covering 1,044km from Shanghai to Xiamen to demonstrate the battery's capabilities. Despite challenging weather conditions, Li's Nio ET7, powered by the company's new 150 kWh battery with the highest energy density for a mass-produced EV battery, completed the trip with 3% charge remaining. Scheduled for mass production in April 2024, these batteries, though costly at around \$42,100, represent a significant advancement in EV technology. Nio's unique business model allows customers to buy cars without a battery, offering a subscription for battery swaps at over 2,000 stations across China. Despite financial challenges and each car resulting in a \$12,000 loss for Nio, this strategy has elevated Li's stature, drawing parallels with Tesla's Elon Musk. Li further showcased Nio's technological prowess at the annual "Nio Day," revealing the new ET9 flagship to thousands of Nio enthusiasts.

**The Critical Minerals Institute Report (12.27.2023): Politics Driving Marketable Commodities into 2024 (December 27, 2023, [Source](#))** – The December 2023 [Critical Minerals Institute](#) report highlights key global economic and political developments influencing the critical minerals and electric vehicle (EV) markets. U.S. inflation decreases and potential interest rate cuts in 2024 have positively impacted equity markets, while China's anticipated economic recovery bodes well for commodity sectors. The EV market is experiencing significant growth, particularly in China, despite challenges from U.S. and EU policies aiming to reduce dependency on foreign entities. The U.S. Department of Energy's proposed FE0C guidelines and the EU's Critical Raw Materials Act reflect a strategic shift towards stabilizing and localizing critical minerals supply chains. The report also notes significant fluctuations in the lithium market, with expectations of a bottom forming soon, and discusses the broader market dynamics of other critical minerals like cobalt, graphite, nickel, and manganese, in the context of a global economic slowdown. The performance of uranium in 2023 and the potential impact of lower interest rates in 2024 on the global economy and critical minerals demand are key areas of focus.

**Chile's Codelco to control new lithium venture with miner SQM (December 27, 2023, [Source](#))** – Chile's state-owned copper miner, Codelco, has entered into a significant partnership with mining company Sociedad Química y Minera de Chile S.A. ("SQM") (NYSE: SQM), gaining majority control in a new lithium venture. This move aligns with President Gabriel Boric's directive for greater government involvement in lithium production. Chile, holding the title of the world's second-largest lithium producer, aims to revitalize its market share, which is at risk of declining due to aging mining projects and increasing global competition. The deal, marking a pivotal step in Boric's national lithium

strategy, mandates public-private partnerships for all lithium projects. Set to start in January 2025, Codelco will take over SQM's existing contracts and collaborate on increasing lithium production in the Atacama Desert. This partnership is not only a strategic move to stabilize SQM's market position but also sets a precedent for future lithium contracts in Chile, potentially reshaping the country's role in the global lithium market.

**Global Rare Earths Market Heats Up as China Implements Export Ban (December 21, 2023, [Source](#))** – The recent [ban by China](#) on the export of rare earth processing technology represents a pivotal moment in the global rare earths market, particularly impacting the strategic metals sector. This ban, covering technology for extracting, separating, and producing rare earth metals and alloys, along with some magnet production technologies, has significant implications for industries like electronics, clean energy, and defense. Experts from the [Critical Minerals Institute](#), including Melissa Sanderson and Peyton Jackson, highlight the necessity for the United States to proactively respond by investing in both green technologies, such as bio-extraction, and traditional processing methods. They emphasize the risks of over-dependence on other nations and the importance of developing technological self-reliance. The U.S. government's funding of Lynas Rare Earths Ltd. (ASX: LYC) and Energy Fuels Inc.'s (NYSE American: UUUU | TSX: EFR) advanced solvent extraction system exemplifies a shift towards addressing these challenges through domestic initiatives. This strategic move is not only a reaction to China's export ban but also a step towards ensuring a more sustainable and secure future in the critical minerals sector.

**Allkem shareholders approve \$10.6 billion Livent lithium merger (December 19, 2023, [Source](#))** – Australian lithium producer Allkem Limited (ASX: AKE | TSX: AKE) and U.S. company Livent Corporation (NYSE: LTHM) have agreed on a significant [\\$10.6](#)



[billion merger](#), marking a major move in the lithium industry. This decision, approved by 72% of Allkem's voting shareholders, will result in the formation of Arcadian Lithium PLC (NYSE: ALTM | ASX: LTM), a formidable entity in the global lithium market. The merger, which has received all necessary regulatory approvals, positions Arcadium Lithium as one of the world's largest lithium companies, with operations spanning Australia, Argentina, and Canada. The new company will be integral in supplying lithium, a critical component for electric vehicle batteries, to various battery manufacturers. Under the terms of the deal, Allkem shareholders will exchange their shares on a one-for-one basis for shares in Arcadium Lithium, owning 56% of the new company, while Livent shareholders will receive 2.406 shares in Arcadium for each of their shares. Livent CEO Paul Graves is set to lead the new company, which will be the world's third-largest lithium producer. The merger comes amidst a surge in dealmaking activity in the lithium sector and is recommended by independent financial advisors and proxy firms. Additionally, Livent plans to expand its operations in Western Australia's prominent lithium districts.

**Singapore's Atomionics taps gravity, AI in hunt for critical minerals (December 19, 2023, [Source](#))** – Singapore-based startup Atomionics is transforming the mineral exploration industry with its innovative technology, Gravio, which combines gravity detection and artificial intelligence. This "virtual drill" technique offers a more precise and efficient method for locating ore bodies of critical minerals like copper, nickel, and zinc. Atomionics has already engaged with three major mining companies and is implementing its technology in Australia and the U.S. The technology's real-time data processing significantly accelerates the task of defining ore bodies, offering a cost-effective alternative to traditional exploration methods. The ability to build an accurate virtual picture of

mineral deposits before physical drilling can greatly reduce costs, as exploratory drilling is expensive and often misses the target. Atomionics aims to decrease these unsuccessful attempts by at least half. This innovative approach holds the potential to be a game-changer in the mineral exploration sector, presenting a low-cost alternative to traditional methods and contributing to the energy transition.

**EU sets critical mineral goals, but faces struggle to hit them (December 18, 2023, [Source](#))** – The European Union (EU) has ambitious targets for securing critical minerals essential for its green transition, as outlined in the Critical Raw Materials Act (CRMA), which aims to mine, recycle, and process significant portions of its annual needs for key materials like lithium and cobalt by 2030. These efforts are crucial for manufacturing clean technology products and reducing dependence on China, the dominant player in global mineral processing. However, the EU faces considerable challenges, including funding shortages, high energy costs, local opposition, and the need to expedite project permits. Additionally, the EU's efforts are comparatively underfunded compared to massive investments in green subsidies by countries like the U.S. The situation is further complicated by higher EU energy costs leading to reduced metal production and delays in mining projects in Portugal and Serbia. Despite these hurdles, there are positive signs, such as potential projects meeting EU supply needs and innovations to minimize material use. The EU also seeks to diversify imports and forge global partnerships, aiming to position itself as a clean tech leader by focusing on high-value manufacturing and relying on reliable allies for mineral sourcing.

**Billionaire-backed KoBold Metals widens lithium hunt across four continents (December 14, 2023, [Source](#))** – KoBold Metals, a California-based startup financially backed by prominent billionaires including Bill Gates and Jeff Bezos, is broadening

its search for lithium, a crucial component in the clean energy and electric vehicle sectors, across four continents. Utilizing advanced artificial intelligence technology, CEO Kurt House announced plans to explore for lithium in regions such as South Korea, Quebec, the United States, Australia, and Africa, with specific emphasis on Namibia and the Democratic Republic of Congo. Previously focused on nickel and copper, with successful ventures in Quebec and Zambia, KoBold is now transitioning to include lithium in its mining portfolio. This strategic move aligns with their long-term goal to become the leading supplier of critical metals within 10 to 15 years. The startup, supported by Breakthrough Energy Ventures, collaborates with major players like BHP Group and Rio Tinto on projects in Australia and Canada. This expansion reflects KoBold's ambition to fill the exploration void left by larger mining firms, which have recently prioritized operational efficiency and shareholder returns over new mineral discoveries.

#### **InvestorNews Critical Minerals Media Coverage:**

- January 3, 2024 – Rare earths company stock price has had a ‘meteoric’ rise of over 21x the past 15 months <https://bit.ly/3vo6Xn3>
- December 29, 2023 – Energy Fuels announces an MOU for a \$122M investment in Astron that will supply a “new U.S.-based supply chain for decades” <https://bit.ly/3tzBfm9>
- December 29, 2023 – Hallgarten Initiates Coverage of Edison Lithium: Pivoting to Sodium-Ion Battery Technology <https://bit.ly/3tG08wq>
- December 27, 2023 – The Critical Minerals Institute Report (12.27.2023): Politics Driving Marketable Commodities into 2024 <https://bit.ly/48sqnVU>
- December 21, 2023 – Global Rare Earths Market Heats Up as China Implements Export Ban <https://bit.ly/3TAClsv>

- December 21, 2023 – Setback for U.S. Rare Earth Industry: China Tightens Export Laws on Key Technologies, Impeding American Efforts to Gain Independence Despite Financial Incentives <https://bit.ly/4aGvQdQ>
- December 20, 2023 – An update on the graphite sector and what to expect in 2024 and beyond <https://bit.ly/3v8xLHG>
- December 19, 2023 – Australia updates their Critical Minerals List and Adds a second, introducing the Australian Strategic Materials List <https://bit.ly/3RQx7aG>

### **InvestorNews Critical Minerals Videos:**

- December 30, 2023 – Jack Lifton with Mark Chalmers on Energy Fuels Rare Earth Deal and Increasing US Uranium Production <https://bit.ly/3TM5wsK>
- December 30, 2023 – Mark Chalmers of Energy Fuels Discusses Increasing Uranium Production in the United States <https://bit.ly/3TDPH7k>
- December 30, 2023 – Energy Fuels' Strategic MOU with Astron: Shaping the Future of the U.S. Rare Earths Supply Chain <https://bit.ly/41PPujp>
- December 18, 2023 – Ucore's Strategic Leap: Pat Ryan Discusses the First Mover Advantage in Rare Earths Processing at Louisiana's Strategic Metals Complex <https://bit.ly/3GKa2jL>

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

- January 4, 2024 – Ucore Acquires Alexandria, Louisiana, Facility for Rare Earth Element Processing Plant <https://bit.ly/3RJC00s>
- January 2, 2024 – Panther Metals PLC Corporate Summary: Positioned to Succeed <https://bit.ly/3tDKSQI>

- January 2, 2024 – First Phosphate Closes Second Tranche of Oversubscribed Private Placement for Total Current Financing of \$7.5 Million <https://bit.ly/48jDCbP>
- December 29, 2023 – Panther Metals PLC: Obonga Project Awkward East Claim Purchase Agreement <https://bit.ly/3NKBeTr>
- December 28, 2023 – Appia Rare Earths & Uranium – A Year in Review <https://bit.ly/48xo3gh>
- December 28, 2023 – Kraken Energy Receives Permit to Resume Phase I Drill Program at Harts Point and Provides Corporate Update <https://bit.ly/48pALxM>
- December 27, 2023 – Energy Fuels Enters into MOU to Secure Near-Term, Large-Scale Australian Source of Rare Earth Minerals to Supply New U.S.-Based Supply Chain for Decades <https://bit.ly/47lDF5v>
- December 27, 2023 – Ucore Comments on China's Ban on the Export of Rare Earth Technology <https://bit.ly/3RYiimD>
- December 27, 2023 – Appia Announces Closing of Non-Brokered Flow-Through Private Placement <https://bit.ly/41EDIbJ>
- December 27, 2023 – Defense Metals Completes Geotechnical Field Data Collection for Wicheeda Rare Earth Element Project Preliminary Feasibility Study <https://bit.ly/3RGLehB>
- December 27, 2023 – F3 to Spend \$16 Million on Drilling at PLN <https://bit.ly/4aCQwDc>
- December 22, 2023 – First Phosphate Announces Closing of Initial Tranche of Private Placement Financing Along with Date of Second Tranche Closing <https://bit.ly/48LgHWR>
- December 22, 2023 – Ucore Announces Extension of Debt <https://bit.ly/3S7KAev>
- December 22, 2023 – Fathom Nickel Announces the Closing of the First Tranche of Private Placement <https://bit.ly/3S6aCyF>

- December 21, 2023 – Imperial Mining Closes \$1M Critical Minerals Flow-Through Private Placement <https://bit.ly/4aEEsSh>
  - December 21, 2023 – Western Uranium & Vanadium Provides Market and Company Updates <https://bit.ly/3tyzFAP>
  - December 21, 2023 – Ucore Completes RapidSX(TM) Demo Plant Commissioning – Begins US Department of Defense Demonstration Program <https://bit.ly/3tjI4Iz>
  - December 21, 2023 – In Response to Surging Prices, Supportive Government Policies, and a Domestic Focus on Security of Supply, Energy Fuels Has Commenced Production at Three of its U.S. Uranium Mines <https://bit.ly/3Ru3Lxv>
  - December 20, 2023 – Panther Metals PLC: Financing Update <https://bit.ly/410C3jB>
  - December 20, 2023 – Critical Metals PLC advances the Molulu Copper-Cobalt Project in DRC <https://bit.ly/3ts5TxH>
  - December 19, 2023 – Auxico Announces Board Decisions on Key Assets and Filing of Technical Reports <https://bit.ly/3TyNxFY>
  - December 19, 2023 – Automotive OEM Validates Nano One LFP and Kicks Off Tonne-Scale Evaluations <https://bit.ly/48g4KZ6>
- 

**Investor.Coffee (12.08.2023):  
Canadian futures point towards**

# a rise in the resource-heavy main stock index

written by Tracy Weslosky | April 12, 2024

In the pre-opening phase, **Canadian futures pointed towards a rise in the resource-heavy main stock index**, while Wall Street futures were subdued as investors awaited the monthly payrolls report for insights into the Federal Reserve's monetary policy stance. European shares showed gains, driven by luxury and energy stocks, following Germany's inflation data. In contrast, Japan's Nikkei experienced its worst weekly decline since mid-September, attributed to speculations about the end of the Bank of Japan's stimulus measures. Concurrently, gold prices remained flat amidst a strengthening U.S. dollar.

In the United States, Apple Inc. (NASDAQ: APPL) is [shifting](#) its iPad product development resources to Vietnam, partnering with China's BYD Co. Ltd. (OTC: BYDDF) for this initiative. This marks the first time Apple has moved such critical (mineral) resources to Vietnam. The company is [also](#) planning to significantly increase iPhone production in India. BlackRock Inc.'s (NYSE: BLK) CEO commented on the firm being targeted in a political debate, highlighting the \$4 billion loss in assets under management in 2022 due to its ESG policies. Blackstone Inc. (NYSE: BX) and Digital Realty Trust Inc. (NYSE: DLR) [announced](#) a joint venture to develop data centers worth \$7 billion. The Boeing Company (NYSE: BA) [communicated](#) a delay in ramping up production of its 737 jets, pushing back its pre-pandemic production goals. FedEx Corp. (NYSE: FDX) faces a [lawsuit](#) alleging illegal business practices, potentially impacting its restructuring plans. Marathon Petroleum Corp. (NYSE: MPC) reported a return to normal operations of a crude distillation unit in its Texas refinery. MarketAxess Holdings



Inc. (NASDAQ: MKTX) and Tradeweb Markets Inc. (NASDAQ: TW) [abandoned](#) plans for a bond prices tape in Britain and the EU, citing complexities. Microsoft Corp. (NASDAQ: MSFT) faces a [review](#) by Britain's antitrust regulator over its partnership with OpenAI. NVIDIA Corporation (NASDAQ: NVDA) is in [talks](#) with Malaysia's YTL for a data center collaboration and plans to discuss semiconductor deals in Vietnam. Spotify Technology (NYSE: SPOT) [announced](#) the departure of its CFO, Paul Vogel, next year. United Parcel Service, Inc. (NYSE: UPS) (UPS) faces labor challenges, with the Teamsters union considering action against the company for firing newly organized workers.

Internationally, China and the European Union discussed a more balanced trade relationship at a summit. In the UK, lawmakers criticized the slow progress in boosting the financial sector post-Brexit. Shell PLC (NYSE: SHEL) [expressed](#) interest in a \$5 billion oil investment in Nigeria and plans to increase natural gas production. The United Auto Workers union reported significant support for unionization at Volkswagen's Tennessee plant. ArcelorMittal SA sold its Kazakh assets to a state-owned fund and a local tycoon. Tata Motors lobbied against reducing import taxes on electric vehicles in India. Indian banks and lenders curtailed small personal loans following regulatory clampdown. India's fuel consumption decreased in November, and the government directed sugar mills to prioritize sugar production over ethanol.

---

## **BYD and Tesla are totally**

# dominating global electric car sales in 2023

written by Matt Bohlsen | April 12, 2024

Many people would probably be surprised to hear how poorly legacy car manufacturers are doing in terms of electric car sales. They would also be shocked how just two companies are totally dominating global plugin electric car sales. Those two companies are BYD Co. Ltd. (OTC: BYDDF) and Tesla Inc. (NASDAQ: TSLA).

---

## Mixed Signals for the Lithium Market as China Spot Prices Decline but M&A Paints a Bullish Picture

written by Matt Bohlsen | April 12, 2024

So far in 2023, the lithium sector is a mix of good news and bad news.

The bad news relates to the China lithium carbonate spot price collapsing, [now down ~65%](#) (see chart below) from its crazy high of CNY 600,000/t (US\$87,272/t) in late 2022. Contract prices remain strong and lithium hydroxide ([~US40,000/t](#)) and spodumene ([US\\$3,810/t](#)) spot prices have been less impacted, but have still fallen about 1/3 to 1/2 from their recent highs.

The good news relates to the fact that the leading lithium companies and [most analysts](#) remain very bullish on lithium in the mid to long term. We saw this very recently with [Albemarle Corporation](#)'s (NYSE: ALB) A\$5.2 billion (US\$3.4 billion) [takeover offer](#), at a 69% premium, for [Liontown Resources Limited](#) (ASX: LTR). Little wonder investors seem confused. Is the lithium boom over, or is it just getting started?

## China lithium carbonate spot price collapsing

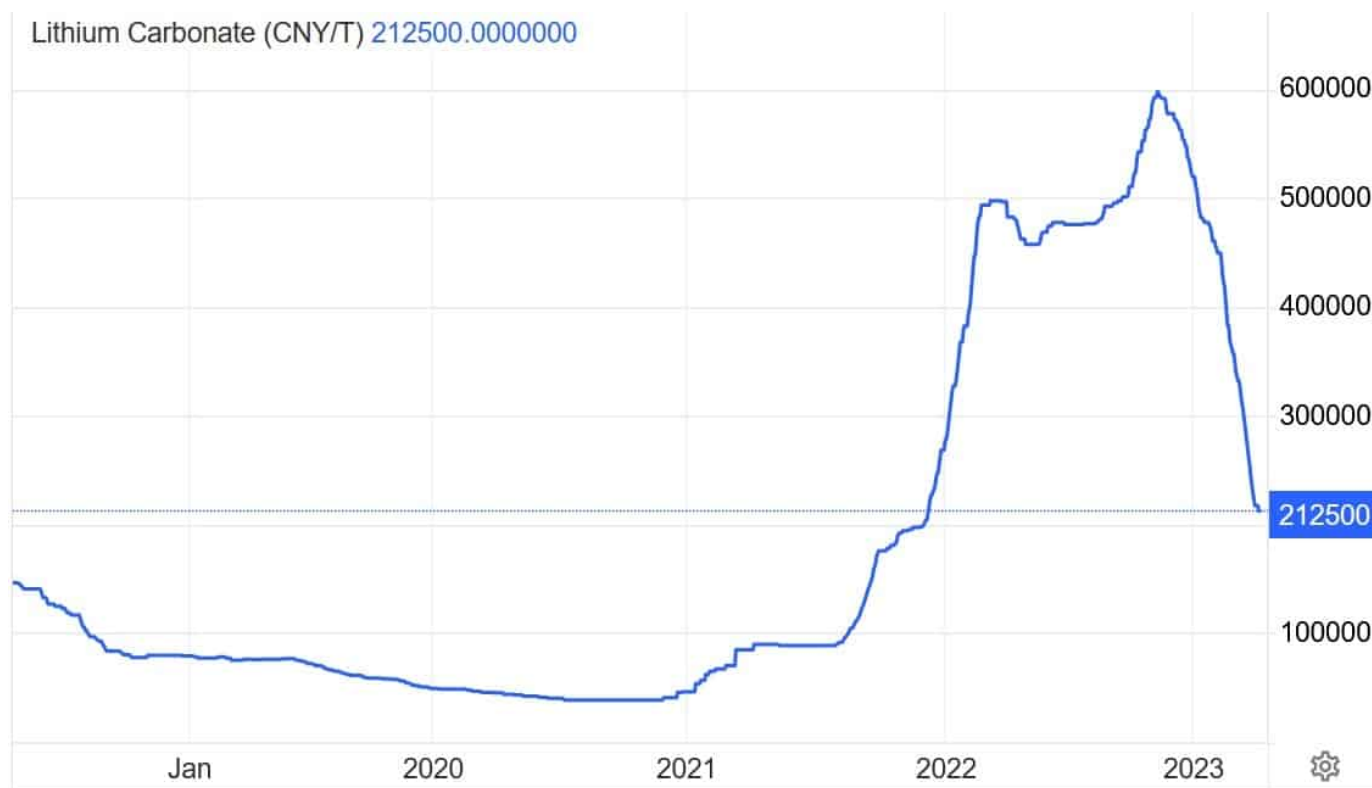
As shown in the chart below, the China lithium carbonate spot price had a meteoric rise in 2022 and is now collapsing in 2023. The main reasons for the downturn in price are a slowdown in China's new energy vehicle ("NEV") sales growth in 2023 and the Chinese cathode and battery suppliers running down inventory thereby delaying lithium purchases in order to get a lower price. Also, liquidity in the China spot market has been rather low in Q1/2023.

China NEV sales in January 2023 saw [an 8% year-over-year \("YoY"\) fall](#), due to the China federal NEV subsidies ending, Covid-19 impacts, and the Chinese New Year falling in January. February saw China NEV sales recover and [rise by 56% YoY](#), and March saw sales [rise by 34.8% YoY](#). As a result, in Q1/2023, China saw NEV sales [rise 26.1% YoY](#) and reach a total of nearly [1.59 million](#) units. The first quarter is always the slowest month for NEV sales in China, so the seasonal slowdown from Q4/2022 to Q1/2023 was also a significant factor.

The Q1/2023 26.1% growth is not bad considering the poor January; however to keep the lithium market in balance between supply and demand, Trend Investing forecasts we need global plugin electric car growth to be at [36% YoY](#). In other words, China's NEV sales growth rate in Q1/2023 of 26.1% is lagging

below the 36% global growth rate needed in 2023.

## China lithium carbonate spot price – 5-year chart



Source: Trading Economics

## Albemarle's A\$5.2 billion (US\$3.4 billion) takeover offer for Lontown Resources

If we are in a lithium bear market, why is the lithium leader, Albemarle, offering to buy Lontown Resources at a [69% premium](#) to its 30-day volume weighted average price ("VWAP")? And willing to outlay A\$5.2 billion (US\$3.4 billion)?

The short answer is that Albemarle sees the longer-term picture, that is lithium demand is set to [grow ~35x from 2020 to 2037](#) according to Trend Investing, or [13-42x](#) from 2020 to 2040 according to the IEA.

Also, the fact that tier 1 lithium assets are rare. Lontown Resources 100% owned Kathleen Valley Project is a tier 1 global

resource, one of the top 5 largest lithium spodumene resources globally. The resource estimate is a massive [156MT @ 1.4% Li2O](#). The project is at the advanced stage with production set to begin in [mid-2024](#) and initially ramp up to about 600,000 tonnes per annum (“tpa”) of spodumene.

Albemarle is playing the long game and understands the lithium market better than most. They want to secure another tier 1 long-life mine in Australia just as they did when they bought Rockwood Holdings Inc. (former owner of the [Greenbushes Mine](#)) for [US\\$6.2 billion](#) in 2014. The reason then was “[to capture the upside potential from the electrification of automobiles](#) that’s likely to occur over the next several years”. The reason to buy Liontown Resources is the same today.

## **Lithium demand should surge in 2024 and 2025 as new EV segments hit the market**

The second half of 2023 should see the Cybertruck from Tesla (Nasdaq: TSLA) finally begin production and a [rapid ramp-up in 2024](#). We will also see in 2024 a strong ramp-up in sales of other pickup trucks in the USA from Ford, GM, Ram (Stellantis), and others. With reportedly [over 1.6 million reservations](#) for Tesla Cybertruck and a battery size twice that of a Model 3 RWD, the Cybertruck alone will cause a bump in lithium demand.

Then in late 2024 or 2025, we should see Tesla potentially start production of their compact car, with plans ‘reportedly’ to produce [4 million per year](#). BYD is already producing great value compact cars (Dolphin, Seagull, etc) in China at very affordable prices [well under US\\$20,000](#). BYD plans to sell “[at least 3 million](#)” plugin electric cars in 2023. It looks like by 2025, Tesla and BYD alone could be selling 10 million electric cars per year combined, which would be almost the same as the entire market in 2022 of [10.522 million](#). That’s how fast things are

changing! Global electric car sales are forecast to almost double in just 2 years from 10.5 million in 2022 to [~20 million](#) in 2024, according to Trend Investing.

The limiting factor for auto OEMs will be securing batteries and their limiting factor is lithium.

**Electric pickup trucks will soon be as popular as Tesla Model 3 in the USA, after that will be millions of compact electric cars potentially in 2025**



Source: [iStock](#)

## Closing remarks

So far in 2023, it has been a year of contradictions in the lithium market. Collapsing China spot lithium carbonate price paints a bearish picture, yet a multi-billion dollar takeover offer at a 69% premium price paints a bullish picture.



The conclusion is rather simple. Short-term lithium price action is a result of a China Q1/2023 NEV slowdown in growth, just as a wave of new lithium supply is hitting the markets. Chinese cathode and battery makers winding down inventory has helped them achieve lower pricing, but cannot go on too much longer. New emissions rules in China come into effect from July 1, 2023 which should boost NEV sales. Combined with strong demand from the USA boosted by the IRA incentives, and Europe embracing EVs, means that H2, 2023 should start to see some strong recovery in global EV sales and hence lithium prices. This assumes we are not in a severe global recession by then.

Looking out to the rest of the decade and it continues to look like lithium supply is the limiting factor for the EV boom, which means quality lithium miners should be the long term winners. But remember as is usual in the mining sector, expect to see large price swings up and down, even in a lithium supercycle.

---

## **Investing in disruptive sectors, NASDAQ listed Ideanomics continues to expand its EV investment portfolio**

written by InvestorNews | April 12, 2024

Investors are increasingly aware that we have an electric vehicle boom unfolding this decade. 2021 electric car sales are on track to increase about [100%](#) from 3.2 million in 2020 to a



forecast 6-6.5 million in 2021. Of course, some electric car companies already have huge market caps such as Tesla (NASDAQ: TSLA) on [US\\$1.019 trillion](#), BYD Co (OTC: BYDDF) [US\\$108 billion](#), Rivian (NASDAQ: RIVN) [US\\$92 billion](#), and Lucid Group (NASDAQ: LCID) [US\\$78 billion](#). The last two are relatively new IPOs with almost no income in 2021.

What if I told you that there was an investment company that held significant positions in 9 different electric mobility related companies and 3 capital/fintech related companies with forecast 2021 revenues of [US\\$120 million](#), forecast to rise to US\$200 million in 2023. Plus its market cap is well under one billion US dollars. Actually its market cap is [US\\$676 million](#), or ~3.4x forecast 2023 revenues.

The company is [Ideanomics Inc.](#) (NASDAQ: IDEX). Ideanomics is a global investment company focused on investing in disruptive companies such as those driving the adoption of electric vehicles and fintech services innovation.

In addition to owning significant percentages in 9 electric **mobility** related companies, Ideanomics also has ownership in 3 **capital** (fintech/financial services) companies. Ideanomics' latest acquisitions include 100% of VIA Motors International and increasing from 20% to 70% of Energica Motor Company.

### **Ideanomics Mobility**

In electric mobility Ideanomics works to assist commercial fleets in vehicle procurement, EV financing, mobility services, charging infrastructure (including wireless charging), and energy management. Ideanomics 9 electric mobility related investments/companies are:

- **Medici Motor Works** aims to develop the North American specialty vehicle and pick-up truck market.

- **Wireless Advanced Vehicle Electrification Inc. (WAVE)** develops inductive charging solutions for medium and heavy-duty vehicles in the U.S. Ideanomics [acquired 100% of WAVE](#) in early 2021.
- **Ideanomics China (formerly Mobile Energy Global, “MEG”), (100% owned)** provides group purchasing discounts on commercial electric vehicles, EV batteries and electricity as well as financing and charging solutions in China.
- **Treeletrik** is an approved EV manufacturer and distributor for Malaysia. Treeletrik plans to drive ASEAN commercial EV sales leveraging Chinese & Korean OEM partners for manufacturing. Ideanomics bought [51% of Treeletrik](#) in 2019.
- **Solectrac** develops and sells electric tractors and is based in California, USA. Ideanomics bought a [14.7% investment in Solectrac](#) which was [later increased to 22%](#).
- **Energica Motor Company** is an Italian manufacturer and distributor of high performance 100% battery-powered electric motorcycles. Ideanomics [acquired 20%](#) and more recently agreed to increase this to [70%](#). More details [here](#). Energica recently announced [additional U.S. dealers in their network expansion](#) across the USA. Energica is growing rapidly with [91% sales growth](#) in 2020, and continued growth in 2021. Consumer demand remains high, and dealers already have a backlog of pre-orders.
- **SilkEV** offers Italian engineering and design services.
- **US Hybrid** – [Announced](#) in May 2021, Ideanomics acquired 100% of US Hybrid, a company that has pioneered clean transportation technologies for more than 20 years. US Hybrid offers proven zero-emission powertrain components for electric, hybrid and fuel cell medium and heavy-duty municipality vehicles, commercial trucks, buses, and specialty vehicles throughout the world.
- **VIA Motors International Inc.** – [Announced](#) in August 2021,

a 100% acquisition of VIA Motors by Ideanomics for a base transaction price of US\$450 million via an all-stock transaction. VIA Motors is headquartered in Orem, Utah. VIA designs, manufactures and markets electric commercial vehicles, with superior life-cycle economics, for use across a broad cross-section of the global fleet customer base. VIA utilizes a scalable and flexible electric skateboard platform for Class 2, 3, 4 and 5 vans and trucks, along with a modular body approach that enables a capital-light single design for its platforms, drive systems and vehicle models.

## **Ideanomics Capital**

This division focuses on fintech disruption and financial services. Ideanomics 3 investments are:

- **Timios Holding Corp.** – A leading title and settlement solutions provider based in California USA with operations in [44 U.S states](#). Ideanomics acquired [100% of Timios Holdings Corp.](#) in 2020.
- **Technology Metal Market (TM2)** – A London-based digital commodity issuance and trading platform for technology metals, including those used for EV battery production, energy storage systems, and solar cells.
- **JUSTLY Markets** (formerly Delaware Board of Trade Holdings Inc.) is an equity crowdfunding platform for investors that focuses beyond profit and dividends. It thinks about how the investments made today shape the future of our planet. JUSTLY connects engaged investors and passionate founders who care about ‘social responsibility’ and building thriving businesses. JUSTLY recently [partnered with Invest Green](#) to provide insights and clean technology investment opportunities. More details [here](#).

Ideanomics Q3 2021 results announced in November highlight the

progress the Company is making. Apart from the new acquisition of VIA Motors, and the increased stake to 70% in Energica, the [Q3 result highlights](#) were:

- “Revenues for the quarter ended September 30, 2021, were \$27.0 million and gross profit of \$4.5 million.
- \$256.9 million cash at quarter end providing a deep pool of capital for investment in Ideanomics Mobility & Capital business units.
- Aaron Gillmore (former BYD and Tesla executive) appointed as CEO of WAVE.
- Mani Iyer (former CEO of Mahindra Agriculture Americas) appointed as CEO of Solectrac.
- WAVE received order from AVTA for vehicle-side charging equipment for 28 buses.
- US Hybrid delivered EV power electronics components to several OEMs, including CAT, Pratt & Miller, FEV, and Nova Bus, as well as several powertrain kits for battery electric street sweepers deployed nation-wide.
- Ideanomics China delivered 652 vehicles, with a large order backlog due to supply chain constraints, and entered into agreements to secure first access to thousands of new electric vehicles as they roll off assembly lines.
- WAVE made substantial progress toward final testing of 125kW and 500kW wireless charging systems, which will broaden WAVE’s market reach to additional applications.
- US Hybrid moved to new larger facility to support greater scale of innovation and manufacturing
- Treeletrik moved to a new office and assembly plant to support manufacturing and delivery of its orders.”

Ideanomics CEO, Alf Poor, [commented](#): “This quarter was highlighted by two very important strategic planned acquisitions of VIA Motors and Energica **both scheduled to close in the first quarter...** The integration of these two companies provides

Ideanomics with full OEM capabilities across vehicle types, and positions Ideanomics as one of the only full-service, turnkey, offerings in the market today.”

### **Closing remarks**

Ideanomics really is becoming a powerful force both with their EV related businesses and their capital/financial services businesses.

Certainly, Ideanomics is not an easy company to fully comprehend with just so much going on. Despite this the revenue growth and numbers paint a picture of a growing enterprise. The recent stock price pullback means the stock now trades on only ~3.4x forecast 2023 revenues. That compares to the more flashy EV companies with multiples often over 10x.

It looks like a very good time to take a second look at Ideanomics Inc.

---

# **Ideanomics Charges into 2021 with EV Sales and Acquisitions in Both Divisions**

written by InvestorNews | April 12, 2024

Ideanomics Inc (NASDAQ:IDEX | FRA:0V5) is a company with two operating divisions, Ideanomics Mobility and Ideanomics Capital, that gives investors the opportunity to participate in two of the hottest trends: electric vehicles (“EVs”) and financial technology (“fintech”).

Ideanomics Mobility focuses on the global EV market through its operating companies and investments including Mobile Energy Global (“MEG”), Medici Motor Works (“MMW”), Treeletrik, and Solectrac, and latest acquisition Wireless Advanced Vehicle Electrification, Inc. (“WAVE”).

Ideanomics Capital focuses on fintech solutions through its operating companies and joint ventures dbot, intelligenta, Liquefy, and Technology Metal Market, and most recent acquisition, Timios Holdings Corporation (“Timios”).

Recent announcements show the progression in both divisions as the company grows both organically through sales and inorganically through acquisitions.

### **Ideanomics Mobility**

Ideanomics Mobility’s business model is generating revenue during all stages of the EV sales process, from EV sales (Sales) to financing advisory revenue (Financing) to energy source revenue (Charging), and they refer to it as the “S2F2C” model.

The company focuses on commercial EVs (heavy-duty trucks, urban logistic vehicles, buses, farm equipment, and taxis) that often benefit from government subsidies but often require specialized financing.

Vehicle and battery sales originate from MMW, Treeletrik, and Solectrac.

The MEG division specializes in facilitating the purchase of electric vehicles by commercial fleet operators by providing vehicle procurement, finance and leasing options, and energy management solutions.

### **MEG Operations for December**

On January 15, Ideanomics announced its December deliveries for the MEG division and it delivered 439 vehicles in December with 356 vehicles in the taxi/ride-hailing industry and 83 in the rental-car business.



#### SOURCE:

According to the company, its fourth quarter results did not include any vehicles from the recently announced deal with [Didi Chuxing](#) (“Didi”), a ride-sharing company based in Beijing, and [Build Your Dreams Auto](#) (“BYD”), a Chinese manufacturer of taxi EVs.

In December 2020, Ideanomics helped Didi buy 2,000 EVs for Didi’s ride-hailing service from BYD with deliveries starting in the first half of 2021.

#### **Power Provider – Becoming the Exxon of the EV World**

On January 5, Ideanomics announced that it signed a definitive agreement to acquire 100% of privately held WAVE, a provider of wireless charging systems for Commercial EVs.

“The acquisition of WAVE is a significant one for our EV efforts across the board,” commented Alf Poor, CEO of Ideanomics CEO. “WAVE has become a market leader in inductive charging systems, which are much better suited for commercial EVs than plug-in charging systems.”

WAVE’s system uses charging pads embedded in the roadway for in-route charging when a vehicle is stopped for passenger pick-up or delivery and enables operators to achieve driving ranges that match most fossil-fuel vehicles.

The company believes the WAVE acquisition complements its MMW



and Treeletrik businesses, and its investment in Solectrac.

### **North American Expansion**

Ideanomics continues to prepare to launch its heavy truck and specialty electric vehicle unit, MMW, in North America in 2021.

MMW focuses on commercial fleet operators with Battery Electric (BE) and Hydrogen & Fuel Cells (H2FC) Trucks for heavy-duty transport. BE trucks are better suited for short-distance operations and H2FC trucks are better suited for long-distance hauling.

### **Ideanomics Capital**

Ideanomics Capital is the company's fintech business unit, which focuses on leveraging technology and innovation to improve efficiency and profitability in the financial services industry.

On January 11, Ideanomics announced that it completed the acquisition of Timios, showing that the company is actively investing in both divisions.

California-based Timios is a title and settlement solutions provider in the US real estate market. Timios offers solutions for real estate transactions, including residential and commercial title insurance, and closing and settlement services.

Timios operates 44 states and, from the nine-months ended September 2020, had booked over US\$54 million in revenue, including over US\$8 million in October 2020. Timios employs almost 300 employees.

Ideanomics expects that Timios will become one of the cornerstone operations of Ideanomics Capital.

### **Final Comment**

With the Global EV market expected to grow to US\$360 billion by the end of 2025, at an annual growth rate of over 16%, Ideanomics is well-positioned to benefit from this surging market as it focuses on its broader S2F2C business model in the EV space.

Ideanomics gives investors the opportunity to participate in two of the hottest trends: EVs and fintech.