

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

written by Tracy Weslosky | April 5, 2024

Welcome to the latest issue of the **Technology Metals Report** (TMR), brought to you by the [Critical Minerals Institute](#) (CMI). In this edition, we compile the most impactful stories shared by our CMI Directors over the past week, reflecting the dynamic and evolving nature of the critical minerals and technology metals industry. Among the key stories featured in this report are Ford Motor's strategic [decision](#) to delay its all-electric SUV and truck productions in favor of expanding its hybrid offerings, signaling a broader trend in the automotive sector towards hybrid technologies. The [resurgence](#) of the uranium market, with prices doubling due to the growing demand for clean energy, underlines the critical role of uranium in achieving 2050 climate targets. Moreover, the DRC's [decision to suspend](#) nine subcontractors at ERG mines due to non-compliance issues highlights the persistent challenges and evolving regulatory landscape in the cobalt industry. This action reflects a commendable direction by the Congo government towards enhancing industry standards and governance. The entry of Aclara Resources Inc. into the U.S. [rare earth processing](#) market was both newsworthy and offered Jack Lifton an opportunity to update readers on the advancements of REE processes in North America today.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Investor.News Critical Minerals Media

Coverage:

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

Investor.News Critical Minerals Videos:

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

Critical Minerals IN8.Pro Member News Releases:

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

- April 03, 2024 – Zentek Announces U.S. Distribution Agreement for ZenGUARD™-Enhanced Surgical Masks with Medwell Solutions <https://bit.ly/4cKM4U3>
 - April 03, 2024 – Defense Metals Appoints Guy de Selliers de Moranville to the Board of Directors <https://bit.ly/3vzlxsj>
 - April 03, 2024 – Panther Metals PLC – Fulcrum Metals Announce Potential Disposal of Uranium Projects <https://bit.ly/44012BX>
 - April 02, 2024 – First Phosphate Drills a 2 m Vein of Massive Apatite at Its Begin-Lamarche Project in Saguenay-Lac-St-Jean, Quebec, Canada <https://bit.ly/3VIAGCb>
 - April 02, 2024 – Fathom Continues to Expand the Historic Gochager Lake Deposit to Depth with Intersections of Semi-Massive to Massive Sulphide Mineralization <https://bit.ly/3TKm07I>
 - April 02, 2024 – CBLT Announces Program at Past Producer Falcon Gold and Revisits Historical High Gold Values <https://bit.ly/49jcVnl>
 - April 02, 2024 – Panther Metals PLC – Obonga Graphite: Awkward East Exploration Permit Application <https://bit.ly/4atD3gm>
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Technology Metals Report (03.28.2024): China Challenges

US EV Plans and the DoE Invests \$6B to Decarbonize Economy

written by Tracy Weslosky | April 5, 2024

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This week's TMR Report also highlights U.S. Critical Materials' efforts to publicize its Bitterroot gallium deposits, significant for semiconductors and defense technologies; the Department of Energy's largest-ever investment to decarbonize industry; Brazilian Rare Earths Limited's new rare earth discovery in the Pele Project; challenges in America's lithium laws slowing down the pace of domestic production; and collaborative efforts between Australia's Pilbara Minerals and China's Ganfeng to study a new lithium chemical plant. Additionally, we explore CATL's discussions with Tesla and other automakers for U.S. licensing of its battery technology, aiming to navigate the tightening U.S. regulations on the battery

sector. Through these stories, the TMR provides a comprehensive overview of the latest developments affecting the critical minerals sector, highlighting the challenges and opportunities ahead. To become a CMI member and stay informed on these and other topics, [click here](#)

Chile needs to finalize more lithium plan details to spur investment, miners say: (March 27, 2024, [Source](#)) – Chile's attempt to draw private investment into its lithium sector is met with apprehension due to unresolved details and potential regulatory hurdles. The government plans to open 26 salt flats for private mining, excluding some reserved for state control, as part of President Gabriel Boric's strategy to double lithium production by decade's end. However, concerns over how contracts will be allocated, opposition from Indigenous communities, and environmental considerations could deter investors. Industry voices also caution against possible legal conflicts over mining rights and the negative impact of heavy state involvement on Chile's investment appeal. With lithium prices and electric vehicle sales currently in a slump, the attractiveness of new projects is further challenged, making neighboring countries more appealing for lithium investment.

Chile opens lithium salt flats for investment, saves two for state control: (March 27, 2024, [Source](#)) – Chile has inaugurated a significant move to open more than two dozen lithium salt flats to private investment, while strategically keeping the prolific Atacama and Maricunga deposits under state majority control. This decision is part of President Gabriel Boric's vision to increase state involvement in the nation's lithium sector, which is the second-largest globally. The initiative could potentially double Chile's lithium output within ten years, crucial for electric vehicle batteries, according to Finance Minister Mario Marcel. The tender process for 26 salt flats will start in April, aiming for completion in July. State-

run enterprises are initiating projects in five other flats, seeking partners. Currently, only Sociedad Química y Minera de Chile S.A. (“SQM”) (NYSE: SQM) and U.S.-based Albemarle Corporation (NYSE: ALB) operate in Chile, specifically in the lithium-rich Atacama salt flat. The government, signaling further interest in lithium ventures beyond Atacama and Maricunga, is also contemplating the establishment of a national lithium company and emphasizes environmental protection and indigenous community involvement in new projects.

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

France’s Orano studying plan to build U.S. uranium enrichment plant: (March 27, 2024, [Source](#)) – French nuclear fuel company Orano, previously known as Areva, is exploring the possibility of constructing a uranium enrichment plant in the United States, as part of efforts to decrease U.S. dependency on Russian uranium imports. The plan, which had been shelved following the Fukushima disaster due to a surplus in enrichment capacity, is

being revisited amidst growing demand and geopolitical tensions. Orano, which is state-owned, aims to support the U.S., the world's largest nuclear power producer, in bolstering its domestic fuel production capabilities. This initiative aligns with recent U.S. legislative moves, including President Biden's approval of significant funding for domestic uranium production. Orano also plans to expand its existing uranium enrichment capacity in France to meet U.S. demand and reduce reliance on Russian supplies.

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

Electric cars will decide the outcome of the American election: (March 26, 2024, [Source](#)) – President Biden's aggressive promotion of electric vehicles (EVs) may jeopardize his political standing, particularly in critical Midwestern

swing states. His administration's focus on EVs, marked by substantial price differences and practicality issues compared to traditional vehicles, risks alienating a significant voter base. This strategy, characterized by stringent mileage requirements and incentives for EV adoption, could undermine the traditional auto industry, a cornerstone of states like Michigan and Wisconsin. Furthermore, the policy may inadvertently bolster China's position in the global EV market, while threatening job losses across America's automotive sector, including sales, maintenance, and after-market services.

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

Mining company touts Bitterroot gallium deposits: (March 26, 2024, [Source](#)) – U.S. Critical Materials is stepping up its public outreach concerning its mining claims in the Bitterroot's headwaters, with a focus on valuable gallium deposits over 6,700 acres, essential for semiconductors, 5G, smartphones, satellite systems, and defense technologies. The U.S. government, recognizing the strategic importance of gallium—especially amidst a Chinese export embargo—is heavily involved in funding and driving the production of REE and other critical minerals, with significant contributions from federal agencies.

Preliminary exploration at Sheep Creek has seen support from the DOD and collaboration with academic and geological institutions, utilizing advanced survey techniques. Amidst concerns over national security due to dependency on imported gallium, U.S. Critical Materials boasts high-grade gallium deposits and is exploring environmentally sustainable separation processes. The company's partnership with Idaho National Laboratories aims to develop new processing methods to establish a domestic supply chain, a crucial step given the current lack of processing facilities in North America and the environmental and commercial challenges of existing separation technologies.

Department of Energy announces largest-ever investment to decarbonize industry: (March 25, 2024, [Source](#)) – The Department of Energy has announced a substantial \$6 billion funding for 33 projects across the U.S. to reduce emissions in energy-intensive industries. This effort, part of the largest-ever investment to decarbonize industry, leverages the Bipartisan Infrastructure Law and Inflation Reduction Act, aiming for a combined investment of \$20 billion including company contributions. Targeting major sectors like steel, aluminum, cement, and food production, the initiative is expected to cut down 14 million metric tons of CO₂ annually, equivalent to removing 3 million gas-powered cars from the roads. Highlighted projects include Constellium's zero-carbon aluminum plant in West Virginia, with potential federal funding up to \$75 million, and Kraft Heinz's \$170.9 million investment to electrify and decarbonize food production at 10 facilities. Additionally, nearly 80% of the projects are located in disadvantaged communities, emphasizing the investment's broader social and environmental benefits.

Brazilian Rare Earths Limited (ASX:BRE) Announces New Rare Earth Discovery – the Pele Project: (March 25, 2024, [Source](#)) – Brazilian Rare Earths Limited (ASX:BRE) has unveiled the Pele Project, a significant new rare earth discovery in Bahia,

Brazil, positioned 60km southwest of their Monte Alto Project. This district-scale endeavor is set to explore ultra-high grade REE-Nb-Sc mineralization across a target area vastly exceeding that of Monte Alto. Key findings include extensive geophysical anomalies, the largest known hard rock monazite outcrop extending over 30m, and promising high-grade monazite sand intercepts. Initial results suggest a substantial rare earth mineralization potential, mirroring the successful exploration techniques employed at Monte Alto. With comprehensive surveys and an imminent diamond drilling program, CEO Bernardo da Veiga anticipates accelerating exploration to uncover this area's full potential, marking another stride in expanding their rare earth province footprint.

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

Pilbara Minerals and China's Ganfeng agree to study for lithium chemical plant: (March 24, 2024, [Source](#)) – Australia's Pilbara Minerals and China's Ganfeng Lithium have agreed to study the

feasibility of building a lithium chemical plant capable of producing 32,000 metric tons of lithium carbonate or hydroxide annually, at an undecided location. The study, set to complete by March 2025, explores potential sites, including Australia, aiming for greater supply chain diversification. Pilbara Minerals, which has partnerships in other lithium projects, seeks to reduce transportation volumes and carbon footprint through midstream lithium chemicals production. Preliminary discussions have shown strong international interest in the venture, with incentives such as economic benefits and support for permitting. The venture would be a 50:50 partnership, with Ganfeng considering a stake sale based on U.S. Inflation Reduction Act benefits. Pilbara is increasing spodumene production to 1 million tons annually and may expand further, committing 300,000 tons annually to this project if it proceeds.

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

Tesla.

CATL Working With Tesla on Fast-Charging Cells, Supplying Nevada: (March 25, 2024, [Source](#)) – CATL is enhancing fast-charging batteries for Tesla, targeting an electric car under \$25,000. Emphasizing cost-efficiency and longevity, CATL's collaboration extends to supplying Tesla's Nevada factory and innovating in battery technology. Despite global EV market challenges, CATL sustains growth through a diversified clientele including BMW and Mercedes-Benz, and is adapting to U.S. market restrictions by licensing its technology, notably to Ford. With geopolitical tensions affecting trade, CATL values client trust and plans to expand production in Europe and Southeast Asia. The company's strong financial standing allows it to delay further funding rounds, focusing instead on technological advancement and strategic partnerships to navigate the evolving electric vehicle landscape.

Investor.News Critical Minerals Videos:

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

Critical Minerals IN8.Pro Member News Releases:

- March 28, 2024 – American Clean Resources Group Establishes Environmental Sustainability Board <https://bit.ly/43JkN0o>

- March 28, 2024 – Scandium Canada Forms a Strategic Advisory Committee and Confirms its Initial 3 Members <https://bit.ly/3ISuHTM>
 - March 28, 2024 – Nano One Reports Q4 2023 Results and Provides Progress Update <https://bit.ly/3IXI2Km>
 - March 26, 2024 – Voyageur Pharmaceuticals Files Audited Annual Financial Statements and Grants Stock Options <https://bit.ly/4a0gTFV>
 - March 26, 2024 – First Phosphate Reports Published Research Studies for its Lac à l'Original, Mirepoix and Bégin-Lamarche Properties in the Saguenay-Lac-St-Jean region of Quebec, Canada <https://bit.ly/3T0TEWq>
 - March 26, 2024 – Kraken Energy Confirms Elevated Radioactivity in Both Initial Drill Holes at Harts Point Property, Utah <https://bit.ly/3VskYem>
 - March 25, 2024 – Bechtel contract to support ASM with engineering at the Dubbo Project <https://bit.ly/3Vsx8E3>
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Technology Metals Report (02.16.2024): Australia makes Nickel a 'Critical', Hastings Rare Earth Deal with Baotou, and Uranium Market

Continues to Rise

written by Tracy Weslosky | April 5, 2024

Welcome to the latest issue of the Technology Metals Report (TMR), brought to you by the [Critical Minerals Institute](#) (CMI). In this edition, we compile the most impactful stories shared by our members over the past week, reflecting the dynamic and evolving nature of the critical minerals and technology metals industry. Among the key stories featured in this report are the Australian government's decision to classify nickel as a 'critical' mineral, entitling it to support from a significant stimulus fund, and the emerging competitive landscape in Africa as Western countries endeavor to reduce China's dominance in the critical minerals sector, particularly in cobalt production.

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

Australia classifies nickel as a 'critical' mineral to protect

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

West challenges China's critical minerals hold on Africa (February 16, 2024, [Source](#)) – In a significant development in the global minerals market, China's CMOC Group has surpassed Glencore PLC (LSE: GLEN) to become the leading producer of cobalt, primarily through its operations at the Kisanfu mine in the Democratic Republic of Congo. This surge in production has created one of the largest cobalt surpluses in recent years, despite a drastic fall in cobalt prices. Western countries, recognizing the strategic importance of cobalt and other critical minerals for clean energy and military applications, are challenging China's dominance in Africa. They are particularly focused on the rich copper and cobalt reserves in the Copperbelt region, which spans Zambia and the Congo. Western entities, including companies backed by prominent investors like Bill Gates and Jeff Bezos, are venturing into this region,

despite political and infrastructural challenges. The U.S. and other Western nations are supporting infrastructure and energy projects to facilitate mining and reduce logistical costs. Efforts to de-risk mining in the Copperbelt include upgrading rail lines and developing solar power projects. Meanwhile, the Congolese government is asserting more control over its mineral resources, revising deals with Chinese companies and aiming to formalize artisanal mining to secure a fairer share of the revenue from its mineral wealth. This marks a pivotal shift in the geopolitics of critical minerals, highlighting the strategic competition between the West and China over Africa's mineral resources.

Hastings And Baotou Sky Rock Sign Binding Term Sheet For Integrated Tolling And Offtake Arrangement (February 16, 2024, [Source](#)) – Hastings Technology Metals Ltd. (ASX: HAS) has entered into a binding term sheet with Baotou Sky Rock Rare Earth New Material Co., Ltd for an integrated tolling and offtake arrangement concerning the Yangibana Project's rare earth concentrate. This arrangement allows Hastings to toll treat its concentrate in China, transforming it into separated rare earth oxides, and sell them, improving Hastings' revenue and cash flows beyond previous models. The agreement, lasting seven years with a possible five-year extension, guarantees a minimum of 10,000tpa of concentrate processing. This deal complements Hastings' existing contract with thyssenkrupp and is part of negotiations with other potential customers for further offtake agreements. The updated financial model reflecting this integrated approach will support the project's funding, showcasing significantly enhanced project economics, including a notable increase in post-tax NPV, IRR, and life of mine free cashflow, while reducing the capital payback period.

The Up and Coming Uranium Boom (February 15, 2024, [Source](#)) – In an interview with Hallgarten + Company's Christopher Ecclestone

and the [Critical Minerals Institute](#)'s (CMI) Tracy Weslosky, the discussion centered around the uranium market's burgeoning prospects. Ecclestone expressed skepticism regarding the effectiveness of a US ban on Russian uranium, suggesting that Russian uranium could be rerouted through Kazakhstan. He highlighted the challenges Western countries might face in replacing Russian uranium sources. Ecclestone described the uranium market as vibrant, contrasting it with the stagnation in battery metals, and emphasized uranium's unique investment appeal. He advised investors to focus on proven assets from previous booms, cautioning against investing in new, unproven fields. Ecclestone also critiqued the hype around thorium and small modular nuclear reactors, advocating for their potential but also indicating a need for realism. Lastly, he mentioned Argentina and the Athabasca region as key areas for uranium investment, highlighting the importance of geographic and asset-based considerations in the uranium industry.

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

India to Capitalise on Coveted 'Critical Minerals Club' to Acquire Overseas Assets (February 15, 2024, [Source](#)) – India is strategically enhancing its position in the global critical minerals market by focusing on acquiring overseas assets through collaborations with Western countries and leveraging partnerships within the US-led Minerals Security Partnership (MSP). This international coalition aims to ensure reliable critical mineral supply chains amidst global disruptions. India, which joined the MSP in 2023, is encouraging public sector undertakings (PSUs) like Coal India Limited, NLC India Ltd., and NTPC Ltd. to secure strategic assets in lithium, cobalt, and graphite to bolster its green energy transition and manufacturing capabilities in electronics, including electric vehicles and semiconductors. Deals have been made, notably with Australia and countries in South America and Africa, to secure these essential materials. The initiative reflects India's ambition to become self-reliant in critical minerals crucial for the technology-driven world economy, particularly as it aims to accelerate its green energy transition and indigenous manufacturing.

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

over 2 million lbs by 2025, alongside exploring additional production avenues. With uranium's strategic importance in the clean energy transition underscored, Energy Fuels is leveraging favorable market conditions and long-term growth prospects, underlined by its ambitious expansion and production plans.

LG Energy signs 2nd agreement with WesCEF to expand lithium supply (February 13, 2024, [Source](#)) – LG Energy Solution from South Korea and Wesfarmers Chemicals, Energy, and Fertilisers (WesCEF) from Australia have signed their second agreement to expand LG's lithium supply chain. WesCEF will supply LG with 85,000 tons of lithium concentrate, expected to yield about 11,000 tons of lithium hydroxide, sourced from the Mt. Holland project in Western Australia, set to start in early 2025. This agreement builds on a previous deal for 50,000 tons of lithium hydroxide in 2022. Additionally, LG Energy is focusing on expanding its presence in India's electric vehicle market, already leading in supplying battery cells to e-scooter makers. In 2023, LG secured a deal with Chile's SQM for 100,000 tons of lithium for seven years, highlighting its efforts to bolster its supply chain amidst increasing lithium demand for rechargeable batteries.

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

aims to integrate its mining operations in Quebec, Canada, into the supply chains of LFP battery producers, emphasizing high purity, responsible production, and a low carbon footprint.

CATL, BYD, others unite in China for solid-state battery breakthrough (February 12, 2024, [Source](#)) – In a bold move to spearhead the electric vehicle (EV) revolution, China's leading battery and automobile manufacturers, including CATL and BYD, have joined forces under the government-led China All-Solid-State Battery Collaborative Innovation Platform (CASIP). Established in January, CASIP aims to commercialize all-solid-state batteries by 2030, enhancing EV performance with greater energy density and safety. This initiative, uniting industry rivals and leveraging AI technology, seeks to position China at the forefront of the next-generation battery technology, challenging current leaders like Japan and Western countries. With the participation of major companies and state support, China is poised to transform the EV market and maintain its global leadership in automotive battery innovation.

Investor.News Critical Minerals Media Coverage:

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

Investor.News Critical Minerals Videos:

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

Critical Minerals IN8.Pro Member News Releases:

- February 15, 2024 – First Phosphate and Integrals Power sign Joint Development Agreement to Produce Environmentally Compliant Battery Grade Iron III Phosphate Precursor for the LFP Battery Industry <https://bit.ly/3uDdslR>
 - February 14, 2024 – Imperial Mining Announces Effective Date of New Trading Symbols after TSXV Approves of Name Change to Scandium Canada Ltd. <https://bit.ly/48hRyl0>
 - February 13, 2024 – Western Uranium & Vanadium Mining Operations Update <https://bit.ly/4bvDKHr>
 - February 13, 2024 – Donald Swartz, CEO American Rare Earths, to speak at “The Future Panel” <https://bit.ly/3UF2M05>
 - February 13, 2024 – First Phosphate Corp. Completes Pilot Production of LFP Battery-Grade Purified Phosphoric Acid <https://bit.ly/3P51pF5>
 - February 13, 2024 – Defense Metals Updates Metallurgical Test Work and Preliminary Feasibility Study Progress for its Wicheeda Rare Earth Elements Project <https://bit.ly/3HYiV9R>
 - February 13, 2024 – Power Nickel extends resource mineralization at Nisk Main <https://bit.ly/49aJCE9>
 - February 12, 2024 – F3 Hits 66.8% U3O8 over 0.5m within 42.4% over 2.0m at JR <https://bit.ly/3HUa60a>
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Biden-Harris Administration's \$3.5 Billion Investment in U.S. Battery Manufacturing and Clean Energy Transition

written by InvestorNews | April 5, 2024

On [November 15, 2023](#), the Biden-Harris Administration announced a significant investment of \$3.5 billion to enhance domestic battery manufacturing in the United States. This funding is a part of President Biden's Investing in America agenda and is allocated from the Bipartisan Infrastructure Law. The U.S. Department of Energy (DOE) will oversee this investment, aimed at increasing the production of advanced batteries and related materials across the nation. The initiative is a key element in supporting the clean energy industries of the future, including renewable energy and electric vehicles.

The investment focuses on creating and retrofitting facilities for various components of battery production, such as battery-grade processed critical minerals, precursor materials, battery components, and cell and pack manufacturing. A significant aspect of this funding is its emphasis on job creation, specifically good-paying union jobs, and its contribution to the goal of achieving a net-zero emissions economy by 2050. Additionally, the investment aims to ensure that half of all new light-duty vehicle sales are electric vehicles by 2030 and to establish a robust domestic supply chain.

U.S. Secretary of Energy Jennifer M. Granholm highlighted the importance of this initiative in boosting global competitiveness, creating jobs, and strengthening the clean energy economy. The investment is seen as pivotal in positioning

the United States as a leader in the advanced battery market, which is crucial for a range of applications including grid storage, home and business resilience, and transportation electrification. With the expected significant growth in the lithium battery market driven by the demand for electric vehicles (EVs) and stationary storage, the U.S. aims to accelerate the development of a resilient battery supply chain, including the exploration of non-lithium battery technologies.

This \$3.5 billion funding is the second phase of a total \$6 billion provided by the Bipartisan Infrastructure Law. The first phase saw the DOE awarding projects that catalyzed over \$5.8 billion in combined public and private investment. The second phase continues this momentum by expanding domestic battery manufacturing and supply chains. Key objectives include enhancing the U.S. competitive stance in battery materials processing, advancing battery manufacturing capabilities, reducing dependency on foreign critical minerals and technologies, and supporting underserved communities through the Justice40 Initiative.

The funding opportunity is also set to prioritize next-generation technologies and battery chemistries beyond lithium-based technologies. It includes an emphasis on projects that increase the production of critical materials, expand production facilities for cathode and anode materials, and enhance battery component manufacturing. The DOE plans to update the focus areas of this program every six months to keep pace with market and technology developments, with concept papers due by January 9, 2024, and full applications by March 19, 2024.

Tracy Weslosky, Executive Director of the [Critical Minerals Institute](#), often referred to as the CMI, stated that substantial funding is essential to develop competitive North American critical mineral operations that can match China's pricing.

However, she emphasized that finding professionals with the necessary skills, knowledge, and practical experience is even more crucial than the minerals themselves for establishing sustainable supply chains in North America. Weslosky also expressed eagerness for future updates on leadership and support strategies in this endeavor.

The Executive Director for [Critical Metals PLC](#) (LSE: CRTM) Russell Fryer adds: “The current dynamics of cobalt supply for battery production raise significant questions. Notably, sources such as Idaho and Canada are not major contributors in this realm. This situation underscores the need for a comprehensive understanding of global supply chains and their implications for sustainable and ethical resource procurement.”

The DOE’s Office of Manufacturing and Energy Supply Chains (MESC) is tasked with managing this initiative, aligning it with broader efforts to modernize national energy infrastructure and promote a clean and equitable energy transition.

American Ur-Energy increases production as the Prohibiting Russian Uranium Imports Act places upward pressure on

uranium prices

written by InvestorNews | April 5, 2024

Things are heating up nicely in the US uranium market.

The US government is now buying US-produced uranium at a premium to ensure they can support the local industry and build up a significant US uranium reserve. Furthermore, there is a bill pending to cut off Russian imports of low-enriched uranium. If passed, there are certain waivers if the US has no other uranium source and any ban would not begin [until 2028](#). Additionally, Congress is considering steps to further bolster US nuclear fuel production capacity via the Nuclear Fuel Security Act.

As [announced](#) on June 1, 2023:

“The House Energy and Commerce Committee has advanced a bill to the chamber’s floor that, with certain exceptions, would ban the import of low-enriched uranium from Russia into the United States.....the Prohibiting Russian Uranium Imports Act (H.R. 1042) was approved in a (slightly) bipartisan 29–21 vote on May 24.”

As a result of this uncertainty and limited new supply, the uranium price surged higher in the past few months



Source: [Trading Economics](#)

All of the above is good news for US uranium producers.

Ur-Energy Inc.

[Ur-Energy Inc.](#) (NYSE American: URG | TSX: URE) is a US uranium producer at their Lost Creek in-situ recovery uranium facility in south-central Wyoming. As [announced](#) on May 30, 2023, the Company has restarted commercial production and completed the Casper Centralized Services Facility for full laboratory and construction services for each of Ur-Energy's mining projects. 2023 looks like potentially a big year for Ur-Energy as they ramp up production at their Lost Creek Facility and look to potentially start construction (subject to the placement of new off-take sales contracts) at their Shirley Basin Project.

The Lost Creek in-situ recovery uranium facility is now in production

Back in February InvestorIntel [reported](#) that Ur-Energy was about to immediately ramp up production at its Lost Creek uranium facility in response to new sales agreements and that

*“Ur-Energy’s total sales quantity under contract is **500,000 pounds** of uranium concentrates per annum, beginning in 2024, plus or minus”.*

That figure has now risen to 600,000 pounds with the Department of Energy agreeing [to buy 100,000 pounds of of domestically produced uranium concentrate](#) from Ur-Energy for the National Uranium Reserve at a sales price of US\$64.47/lb.

Ur-Energy [stated](#) on May 30, 2023:

*“Lost Creek production inventory will be sold into our remaining 2023 contract book of 180,000 pounds U_3O_8 in the second half of the year. Beginning in 2024, the Company’s total sales quantity under contract is **600,000 pounds** U_3O_8 annually, plus or minus a small, optional flex.”*

A positive sign that there is a very strong demand for Ur-Energy’s uranium.

Ur-Energy COO, Steve Hatten, [stated](#):

“This restart of normal operations at Lost Creek marks the first of a series of planned production areas scheduled for 2023 and 2024. We hope our return to commercial production also is the beginning of a resurgence of the uranium mining industry in the United States.”

Shirley Basin Project

Ur-Energy's Shirley Basin Project has all major permits and licenses required to construct and operate a one million pound per year production facility.

Ur-Energy CEO, John Cash, [stated](#) in May, 2023:

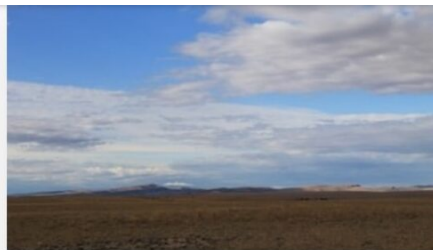
"As the market continues to improve, we are increasingly optimistic that additional profitably priced sales contracts will incentivize a ramp up to full production at Lost Creek and, potentially, the build out of Shirley Basin. 2023 promises to be an exciting year for Ur-Energy and our shareholders."

Ur-Energy – Lost Creek Facility, the ready to construct Shirley Basin Project, and other uranium projects in USA



Lost Creek

Lost Creek, our flagship project, has demonstrated operational excellence for more than nine years of uranium production, recovery and processing, using in



Shirley Basin

What is now our Shirley Basin Project historically produced more than 28 million pounds of uranium, primarily from the 1960s through the 1990s. The Shirley Basin



Other U.S. Projects

Our other U.S. projects include the Lost Soldier project, located near Lost Creek and the Lucky Mc Mine Site, an historic mine in the Gas Hills Mine District in Wyoming. Our

Source: [Ur-Energy website](#)

Q1 2023 Financial results

In Q1, 2023, Ur-Energy delivered 100,000 pounds of U_3O_8 at a sales price of \$64.47/lb for proceeds of \$6.4 million to the U.S. Department of Energy ("DOE") national uranium reserve.

During the Quarter, Ur-Energy generated [\\$2.3 million](#) from operating activities.

On May 1, 2023, Ur-Energy stated in their Q1 2023 Financials [announcement](#):

“Including the Q1 DOE sale, we expect to sell 280,000 pounds U_3O_8 in 2023 for \$17.3 million and, together with the base amount of 600,000 pounds U_3O_8 to be sold annually 2024 – 2028, total anticipated revenues to the Company will be approximately \$205 million.....Sales prices are anticipated to be profitable on a Company-wide, all-in cost basis, and are escalated annually from initial pricing in 2023 and 2024....”

Closing remarks

Ur-Energy is back in business. Prior to the Lost Creek restart, Ur-Energy was essentially on hold awaiting stronger uranium prices. Uranium contracts for several years ahead, potentially bode well for future profitability for the Company. If we continue to see reasonable uranium prices (at or above US\$50/lb) then Ur-Energy will also look to bring on their second project Shirley Basin and thereby expand their production volumes further.

Ur-Energy trades on a market cap of [C\\$280 million](#).

Cash rich Ur-Energy is getting ready for America's day of reckoning to replace Russian uranium

written by InvestorNews | April 5, 2024

Ever expanding sanctions and Western resolve to further restrict cash flowing into Russia to finance Putin's war in Ukraine have made it apparent that domestic supply of just about everything should be racing to the top of the priority list. We've seen numerous steps taken in the U.S. in the last several weeks to shore up the sourcing and supply of uranium for its nuclear industry. Department of Energy (DOE) Secretary Granholm said in public testimony April 28, 2022, that the DOE anticipates initial requests for proposal for the purchase of domestically produced uranium will be issued in June 2022 for the establishment of a national uranium reserve.

The [Infrastructure Investment and Jobs Act](#), signed into law in November 2021, contains a number of provisions supporting nuclear energy including a \$6 billion Civil Nuclear Credit Program designed to prevent the premature closure of nuclear power plants. Nuclear power plants utilizing domestically sourced uranium products will be given priority funding under this program. An RFI was issued on February 15, 2022, with the expectation that a request for proposal will follow as early as mid-year 2022.

In April 2022, Senator Manchin (D-W.Va.), introduced a bipartisan bill titled [The International Nuclear Energy Act of 2022](#) with the stated goal of establishing an Executive Office for Nuclear Energy Policy to promote engagement with ally and

friendly partner nations to develop a civil nuclear export strategy and offset China and Russia's growing influence on international nuclear energy development. Additionally, numerous states have passed legislation supporting nuclear power.

To me this is a giant billboard saying investors need to take a closer look at domestic uranium producers. Particularly those who are currently producing uranium or could be within 6 months. Especially given that the U.S. is the largest consumer of uranium in the world, and [according to the EIA](#), in 2020 the U.S. purchased 22% of its uranium from Kazakhstan and 16% from Russia. [20% of U.S. electricity is generated by nuclear power](#) with 2021 uranium requirements in the United States to [power nuclear reactors at 17,600 tonnes](#) (38.7 million pounds). Meanwhile, the EIA reported domestic production of uranium concentrate (U_3O_8) in the [first quarter of 2022 at a paltry 9,946 pounds](#). Maybe a giant billboard isn't enough, perhaps I need to buy a social media company to get the message out there.

All joking aside, at or near the top of the list of domestic uranium companies has to be [Ur-Energy Inc.](#) (NYSE American: URG | TSX: URE), and its uranium mining, recovery and processing operations, as well as the exploration and development of uranium mineral properties all within the friendly confines of the United States of America. The Company boasts a cash position as of April 28, 2022, of \$45.8 million plus roughly 284,000 pounds of finished, U.S. produced U_3O_8 inventory, worth \$16 million at recent spot prices. Ur-Energy operates its flagship Lost Creek in-situ recovery uranium facility in south-central Wyoming, as well as having all major permits and authorizations to begin construction at Shirley Basin, the Company's second in-situ recovery uranium facility in Wyoming.

But what moves Ur-Energy to the top of the list is the work they've been doing to prepare for uranium's day of reckoning.

Guidance from the recently released [Q1 Results](#) states Lost Creek operations can increase to full production rates of an annualized run rate of up to 1.2 million pounds in as little as six months following a “go” decision, simply by continuing the development work within the fully permitted MU2 (mine unit). A production ramp up will include further development work in both of the first two mine units, followed by the ten additional mining areas as defined in the Lost Creek Report. The Lost Creek facility now has the constructed and licensed capacity to process up to 2.2 million pounds of U_3O_8 per year and sufficient mineral resources to feed the processing plant for many years to come.

Ur-Energy is cash rich and optimally situated to take advantage of the “on-shoring” of uranium supply. The Company has adequate funds to maintain and enhance operational readiness at Lost Creek which also allows them to preserve existing U_3O_8 inventory to sell into higher prices. With a market cap of US\$311 million as of yesterday’s close, investors need to decide what the value of 1.2 million to 2.2 million pounds per annum of domestically produced uranium is worth.

Energy Fuels’ Mark Chalmers on production of rare earths from coal-based resources

written by InvestorNews | April 5, 2024

InvestorIntel’s Tracy Weslosky speaks with Mark Chalmers, President, CEO and Director of [Energy Fuels Inc.](#) (NYSE American:

UUUU | TSX: EFR), about Energy Fuels' selection by the U.S. Department of Energy to develop design for the production of rare earths from coal-based resources.

In an InvestorIntel interview that can also be viewed on our [InvestorIntel YouTube channel](#), Tracy and Mark discussed the selection of Energy Fuels, working with a team from Penn State, to develop a conceptual design for the commercial production of mixed rare earth oxides from coal-based resources in an environmentally benign fashion. "White Mesa Mill fits a unique role when it comes to dealing with rare earths feed." Mark said.

In the interview, Mark commented on the announcement of the U.S. Department of Commerce's deal to reduce Russian uranium imports over long-term. He also commented on how U.S. Presidential Election might affect the uranium industry. "Energy Fuels is in an excellent position when it comes to uranium, vanadium and rare earths to straddle whichever direction we need to go based on the changes in the government." Mark added. Energy Fuels recently announced [cash redemption](#) of all outstanding debentures which will make the company debt-free on October 6, 2020. "Being debt free puts us in an outstanding position for any market for long time." Mark said.

To watch the full interview, [click here](#)

To learn more about Energy Fuels Inc., [click here](#)

Disclaimer: *Energy Fuels Inc. is an advertorial member of InvestorIntel Corp.*

The DoE's plan to rebuild the uranium sector and "pull America's nuclear industrial base back from the brink of collapse..."

written by InvestorNews | April 5, 2024

The United States Nuclear Fuel Working Group (NFWG), via the US Department of Energy, released its report yesterday which gave glowing recommendations to rebuild the US uranium and nuclear energy sector. This is great news for the entire US uranium and nuclear sector, and particularly for US uranium miners. The title and contents of the report show the US Government's strong commitment to rebuild the sector and make 'it great again'.

US Dept. of Energy – "Restoring America's Competitive Nuclear Energy Advantage"



The report summary [states](#):

"As an initial and important step, the President's Fiscal Year 2021 Budget Request for the Department of Energy includes \$150 million to stand up a domestic Uranium Reserve. It will begin with the purchase of uranium from U.S. mines and of U.S. conversion services."

The [full NFWG report](#) states:

- "First, the U.S. Government will take bold action to revive and strengthen the uranium mining industry, support

uranium conversion services, end reliance on foreign uranium enrichment capabilities, and sustain the current fleet, removing strategic vulnerabilities across the nuclear fuel cycle and restoring a world-class workforce to provide benefits to the U.S. and to compete in the international market.

- Next, the U.S. Government will leverage American technological innovation and advanced nuclear Research, Development, and Demonstration (RD&D) investments to accelerate technical advances and regain American nuclear energy leadership.
- Finally, the U.S. Government will move into markets currently dominated by Russian and Chinese State Owned Enterprises (SOE) and recover our position as the world leader in exporting best-in-class nuclear energy technology, and with it, strong non-proliferation standards. We will restore American nuclear credibility and demonstrate American commitment to competing in contested markets and repositioning America as the responsible nuclear energy partner of choice.”

“It is within our power to pull America’s nuclear industrial base back from the brink of collapse and restore our place as the global leader in nuclear technology – ensuring a strong national security position and buttressing our economic strength for generations.”

The report recommends to “provide immediate action to support US uranium mining”

Quoted from the [full NFWG report](#):

- “The Administration supports actions associated with the timeline that will provide funding for a competitive procurement for U.S. uranium mining, conversion services, in the very near term, as reflected in the Fiscal Year

(FY) 2021 President's Budget, and will also consider enrichment needs after first addressing the existing pressure on the uranium mining sector. The Department of Energy believes that a 10-year timeline reflects a responsible approach to addressing the challenges facing the front-end of the fuel cycle.....

- As included in the President's Fiscal Year 2021 Budget Request, during the first year, it is expected that the reserve would directly support the operation of at least two U.S. uranium mines and the reestablishment of active domestic conversion capabilities.....
- Support Department of Commerce (DOC) efforts to extend the Russian Suspension Agreement (RSA) to protect against future uranium dumping in the U.S. market. Since 1992 DOC has upheld the need for a Suspension Agreement that establishes a maximum cap for imports of Russian uranium to 20% of the U.S. market to reduce the impact of Russia's unfair trade practices. DOC is again reviewing the RSA for possible extension upon the expiration of the current agreement in 2020. The Working Group supports the extension of the RSA beyond 2020 and the consideration of further lowering the cap on Russian imports under future RSA terms.
- Enable Nuclear Regulatory Commission (NRC) to deny imports of nuclear fuel fabricated in Russia or China for national security purposes."

Potential expansion of the currently proposed uranium reserve

The [full NFWG report](#) also states:

"A decision to expand the currently proposed uranium reserve will be made based on a variety of factors, including cost, impact, need, and on-the-ground conditions. The ultimate goal of the Administration's actions is to create an appropriate

safeguard for the United States and our allies against unfair market intervention by foreign states or other disruption and provide a source of unobligated uranium for strategic purposes in a manner that is in the best interest of the taxpayer. Any potential expansion of the currently proposed uranium reserve to include enriched uranium or an expansion of the AAFS (American Assured Fuel Supply) could require the procurement of the equivalent of about 24 additional large light-water reactor reloads of enriched uranium, with the following estimated scale of services to be procured and commencement dates:

- Mined and milled uranium estimated between 17 and 19 million pounds in the form of U3O8, beginning in 2020;
- Domestic conversion services resulting in about 6,000 to 7,500 tons of UF₆, beginning no later than 2022; and
- Domestic enrichment services beginning possibly in the 2023 timeframe, of which 25% would be unobligated. However, no commitment has been made to take action beyond the Uranium Reserve proposed in the FY21 Budget, which addresses the sectors most imminently at risk.”

The US uranium sector is set to rise again



Closing remarks

The NFWG/Department of Energy’s report officially confirms some of what was previously reported, with the title saying it all – “Restoring America’s Competitive Nuclear Energy Advantage.”

For the US uranium miners the US\$150 million US uranium reserve was confirmed to “directly support the operation of at least two U.S. uranium mines and the reestablishment of active domestic conversion capabilities.” The US uranium sector should get a significant boost from this great news.

Looking at the main US uranium miners Energy Fuels Inc. (NYSE: UUUU | TSX: EFR) and [UR-Energy Inc.](#) (NYSE: URG | TSX:URE), they stand to be the major beneficiaries, especially given they started the whole S232 petition back in January 2018. Others in the sector may also do well, include [Western Uranium & Vanadium Corp.](#) (CSE: WUC | OTCQX: WSTRF) and [Fission Uranium Corp.](#) (TSX: FCU | OTCQX: FCUUF).