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Nuclear Energy and Uranium

Key Takeaway

Nuclear momentum hit a new milestone in April, as two SMR developers broke ground on the first commercial nuclear-reactor projects to grace the U.S. in a decade. Regulatory shifts favoring nuclear power continue to pick up pace in the U.S. and abroad.

• TerraPower and Kairos Power both broke ground on separate nuclear projects in Wyoming and Tennessee, respectively, kicking off the first commercial nuclear-power projects to begin construction within the United States in a decade.[1] Both firms are building small modular reactors (SMR) intended to cut down on costs and construction delays that have historically plagued large reactor projects. These projects represent major milestones for the U.S. nuclear industry and represent the next step in the industry's shift from experimental test reactors to grid-scale systems designed for commercial use. TerraPower's 345 MWe plant will deliver power to the PacifiCorp multistate utility system, while the Kairos Plant is expected to supply up to 50 MWe to the Tennessee Valley Authority in Oak Ridge, Tennessee.[2]

• In a congressional hearing on April 16th, U.S. Secretary of Energy, Chris Wright, announced that the first 5-10 newly planned U.S. nuclear reactors are "almost certainly" expected to receive federal loan support.[3] While plans to build new large reactors have yet to be approved, the announcement signals potential federal commitment to support 10 new large nuclear reactors proposed by federal officials last year. These reactors are tied to an October 2025 deal between Cameco and the U.S. government to build at least $80 billion in reactors and it follows a separate announcement of nearly $290 billion in loan financing from the Office of Energy Dominance Financing.[4]

PRICE ACTION

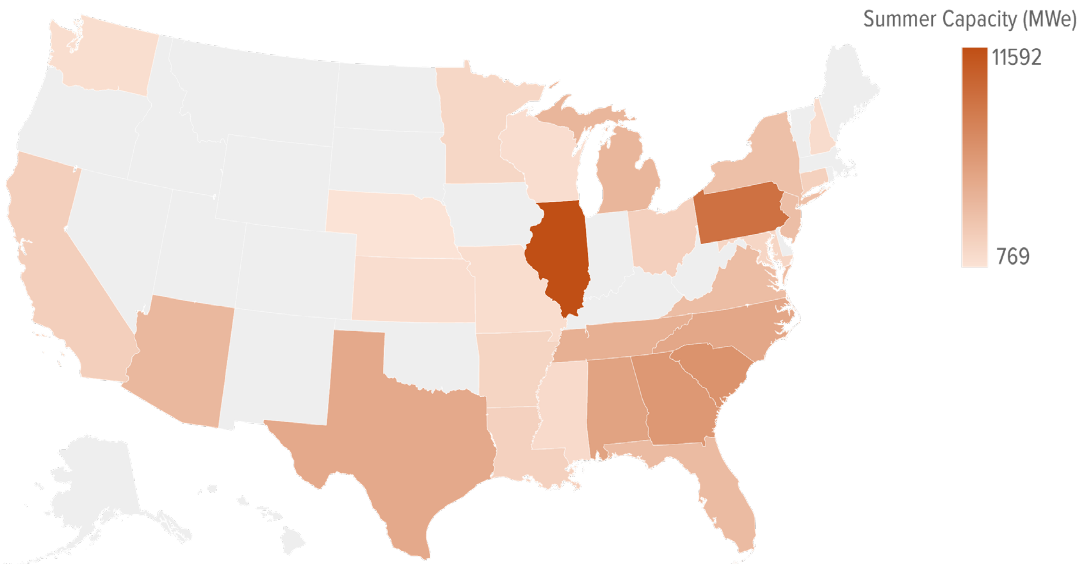
Following a muted 1st quarter punctuated by volatility, uranium spot prices recovered to $86.85/lb on April 23rd.[5] UxC, LLC reports that multiple spot deals were concluded during the week of April 20th following the conclusion of the World Nuclear Fuel Cycle conference, which fueled bullish sentiment and buyer liquidity. A pickup in equity market activity in April further drove Sprott Physical Uranium Trust (SPUT) to acquire another 300,000 lbs in uranium, while pent-up demand from utilities further drove spot activity.[6]

OUTLOOK

The closure of the Strait of Hormuz continued into its 2nd month, disrupting trade and raising input costs. The aftershocks of the yet unresolved conflict continue to affect consumers, particularly in energy-starved Asia-Pacific.[7] The revival of energy shortages is already pushing nations across Asia and Africa to accelerate plans for building atomic energy plans, even as they scramble for short-term supplies. Over the past 2-months, South Korea has directed its power authorities to expedite the restart of as many as 6 nuclear reactors currently undergoing maintenance cycles, while Taiwan and Japan continue to reverse policies that shuttered nuclear facilities following the 2011 Fukushima incident.[8,9] We believe such trends illustrate an accelerating wave of public support for nuclear energy, as policymakers grapple with the realities of energy insecurity.

The U.S. Operates the World's Largest Fleet of Nuclear Plants[10]

U.S. Nuclear Power Generation by State: February 2026



Source: Global X ETFs with information provided by the U.S. Energy Information Administration (EIA), (2026, April 23). "Monthly Nuclear Utility Generation (MWh) by State and Reactor, 2026 February."

As of February 2026, the United States had 95 operational nuclear reactors across 28 states, collectively generating nearly 98 GWe in nuclear power output.

Copper

Key Takeaway

Despite an uncertain environment, Chinese smelter demand for copper concentrates remains relatively strong. Shortages of sulfuric acid, a key input for specific mining methods, may impact output later in the year.

• The post-Lunar New Year bump in activity continued, with Chinese smelters operating at a higher scale following January's buyer's strike. Satellite imagery data showed that the percent of inactive global smelting capacity fell to 11.7% from 14.3% in January, reflecting an increase in activity as Chinese smelters raised their purchases of copper concentrate following a decline from record prices early in the first quarter.[11]

• Copper production out of Chile and the Democratic Republic of the Congo (DRC) is facing pressure from tightening sulfuric acid supplies, as continued disruptions to the Strait of Hormuz permeate across global trade. Sulfuric acid is a key input in solvent-electrowinning (SX-EW) production, a method that was used to produce 17.2% of the world's refined copper in 2025.[12] China is also set to tighten markets in May, by banning sulfuric acid exports amidst a potential shortage. Since Chile and the DRC are particularly reliant on acid for copper mining, extended disruptions may begin to weigh on global copper output.[13]

PRICE ACTION

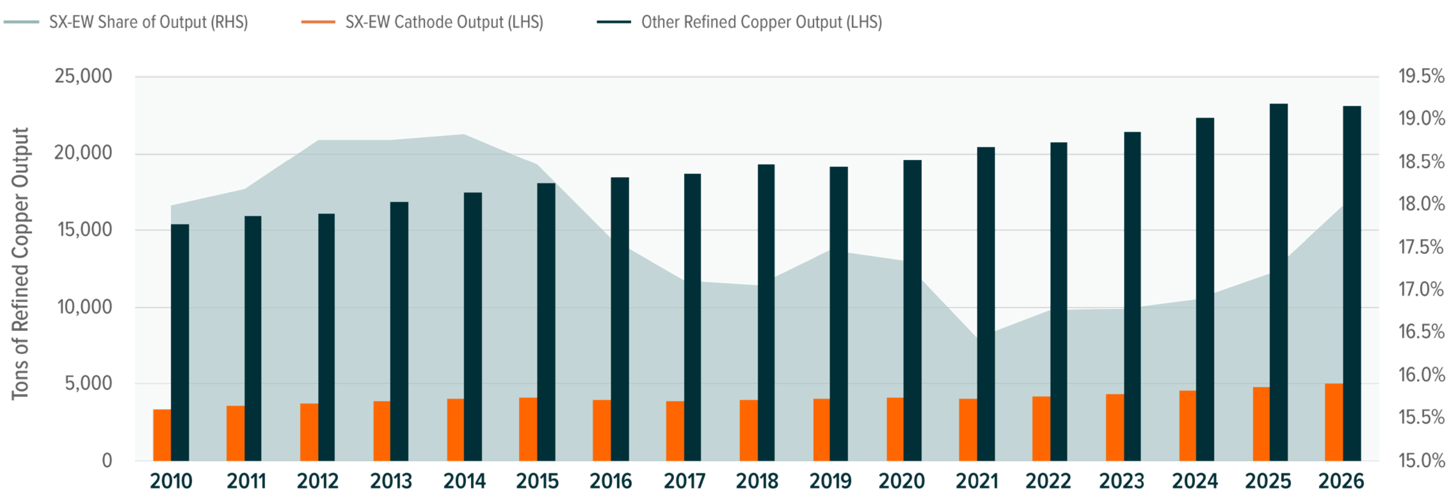
Copper recuperated its losses from March and then some, rising to as much as $13,198 per tonne by April 23, 2026 (its highest level since the Iran War broke out in late February).[14] Prices rose to 7-week highs after the U.S. extended its temporary ceasefire with Iran, lifting sentiment as markets reassessed geopolitical risks.

OUTLOOK

While copper prices have recovered meaningfully from mid-March, material advances beyond current levels have been capped by persistent uncertainties from the War in Iran. The impact of trade disruptions on inflation and industrial consumption has so far been limited, with China continuing to buy amidst its industrial restocking season and rising earnings from the sale of smelting by-products. On the supply-side, sulfuric acid shortages have begun to feed through global supply chains as a side-effect of trade disruptions, and China's expected curtailment of exports may begin to weigh on mined output in the coming months.

Sulfuric Acid Shortages Could Impact as much as 17% of Global Refined Copper Production

Global refined copper production from 2010-2026



Source: Global X ETFs with data derived from Benchmark Mineral Intelligence (2026, April 14). "SX-EW production represented 17.2% of total refined copper in 2025."

Trade disruptions linked to the Strait of Hormuz have affected the market for sulfur reagents, impacting miners that rely on sulfuric acid to produce refined copper with SX-EW production methods. From 2010-2026, between 16-19% of global refined copper was produced using SX-EW, illustrating the potential impact of sulfuric acid shortages on global production.

Precious Metals

Key Takeaway

Gold and silver retraced some of their March declines in early April, as buyers in China and India stepped up purchases of physical metals. Both metals remain subject to currency induced volatility.

- March was the weakest month for gold since June 2013, driven by deleveraging and liquidity raises. Outflows from ETFs, an unwind among emerging markets, and a corresponding reversal in the value of the U.S. dollar weighed heavily on gold's performance. Global gold ETFs shed as much as $12 billion in March, with North America driving most of the liquidation activity. Dip-buying in physical metals from Asian buyers helped stem the sell off to the tune of $1.9 billion in inflows.[15]

- Chinese imports of silver surged to all-time highs in March, driven by a massive influx of demand from the nation's solar industry and rising retail purchases of the physical metal. China imported 836 tons of silver last month, over 2.5 times the 10-year seasonal average of ~306 tones. The global solar industry consumes approximately 1/5th of annual silver supply and its constituents are overwhelmingly concentrated in China. The near-term spike in Chinese demand sent local silver prices above international benchmarks, prompting traders to reroute supplies from elsewhere around the world.[16]

PRICE ACTION

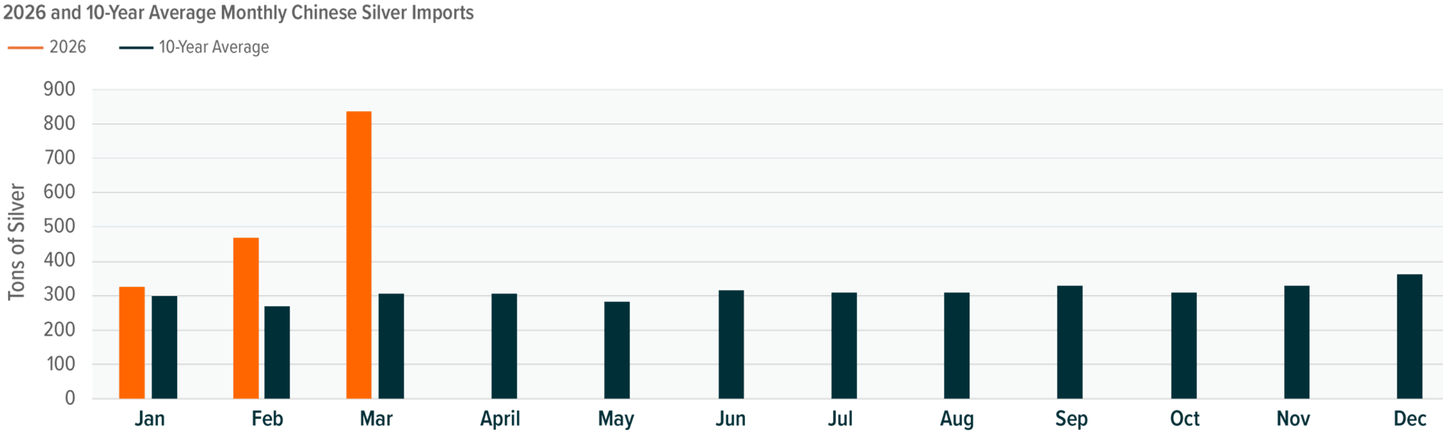
Gold prices traded near $4,700 as of April 24, 2026, with renewed physical demand among Asian buyers arresting the decline in precious metals inflicted by March volatility. Buying interest picked up in China, while gold premiums in India climbed to their highest level in over 2.5 months, reflecting tight local supplies and import limitations.[17] Although gold prices have recovered slightly from their lows in late-March, they remain significantly below their late-January highs.

OUTLOOK

Gold's recent weakness may have been driven by its use as a source of liquidity during times of market stress, particularly during the initial months of a crisis as investors seek to deleverage and foreign central banks raise reserves to defend their currencies amidst a strengthening U.S. Dollar. While these risks may persist in the short term, we note that the impacts of volatility shocks tend to decline over time, reverting toward long-term norms based on historic gold trading data. The selloff in gold and silver has already generated interest from new buyers for physical supplies, particularly as China steps up its purchases of silver in response to surging solar panel demand and Asian households spur their buying of physical gold.[18]

Chinese Silver Imports Hit a Record in March Driven by Industrial and Investment Demand

2026 and 10-Year Average Monthly Chinese Silver Imports



Source: Global X ETFs with information provided by Bloomberg LP (2026, April 20). "China Imports Most Silver Ever in March."

Even when factoring in seasonal trends over the past 10-years, Chinese silver imports rose to their highest level ever in March of 2026. The spike in demand was sparked by a combination of retail demand for silver bars and solar manufacturers front-loading production ahead of export tax rebates that expired on April 1st.[19]

Critical Minerals, Battery Tech & Lithium

Key Takeaway

Deal-making momentum across both lithium and rare earths persisted in March, despite heightened volatility perpetuated by the war in Iran. The conflict did not seem to deter governments from diversifying their supply chains and it could potentially exacerbate focus on supply chain resilience in the months to come.

• Chinese battery exports surged to a record in in March, lifting Q1 2026 shipments by 48%, YoY. Total exports reached nearly $24 billion, with a single-month high of 36 GWh installed. The spike appears partly driven by a pull-forward in demand ahead of an April 1 policy change that reduces export rebates from 9% to 6%. Several countries sharply increased purchases in March, with exports to Oman and Australia rising 5,000% and 241%, respectively.[20]

• USA Rare Earths announced the acquisition of Brazilian miner Serra Verde, expanding their heavy rare earth supply chain. The deal reflects a broader global push to establish an integrated ex-China supply chain, with the company set to receive a price floor for four heavy rare earths as part of a 15-year supply deal with the U.S. government. This marks the third such price floor arranged between the U.S. government and industry participants, following separate announcements from MP Materials and Lynas Rare Earths. Serra Verde is currently one of the only large-scale producers of critical heavy rare earth elements outside China.[21]

PRICE ACTION

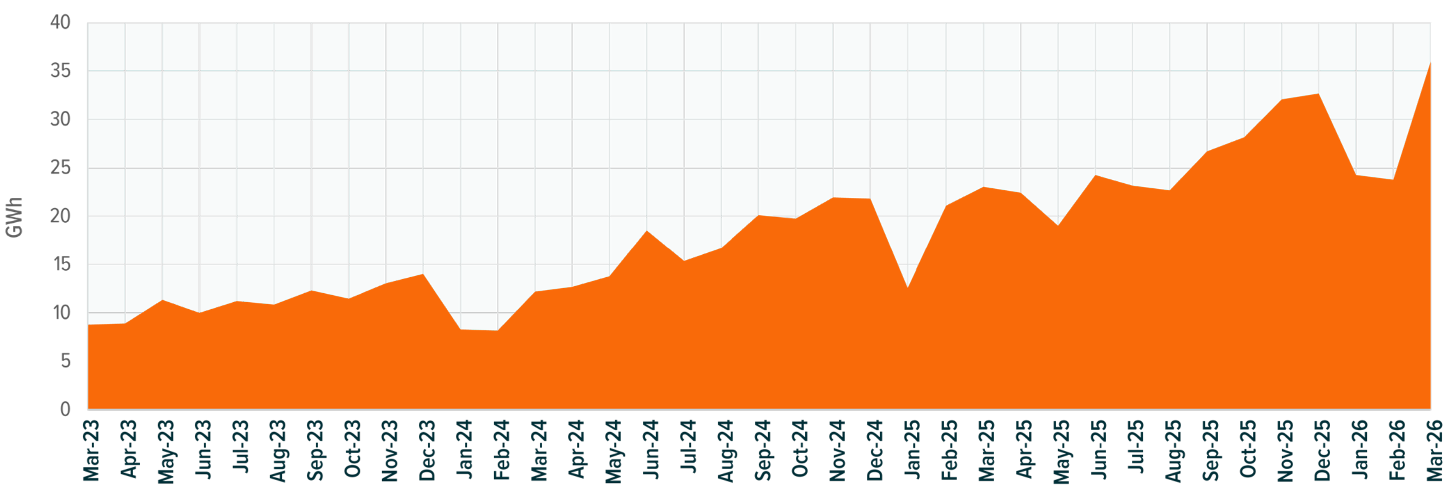
Chinese lithium carbonate prices rose to $25,000 on April 22nd, bringing YTD growth to 42% as rising conversion costs, export demand, and persistent mine disruptions pushed quotes back toward their yearly highs.[22] On the rare earths side, prices softened in March and April, unwinding some of their February advance. Praseodymium and Neodymium (PrNd) prices corrected in late March as magnet makers adopted a more cautious stance amidst uncertain global markets.[23]

OUTLOOK

We're optimistic on the trajectory for critical minerals and battery technology. While we acknowledge the regulation-driven nature of the recently elevated Chinese exports, we believe the reality of higher energy prices and disruptions inflicted by the Iran war may accelerate the adoption of battery energy storage systems, renewables, and EVs. This could lead to higher demand for lithium and battery products, as well. Regarding rare earths, export restrictions and aggressive procurement from global aerospace firms could continue to support higher prices across several heavy elements, particularly dysprosium, terbium, and yttrium, which all remain subject to Chinese export restrictions. These factors may continue to tighten ex-China supplies for the foreseeable future.

Chinese Battery Exports Hit Record Levels in March of 2026

Chinese Battery Exports in GWh (March 2023 – March 2026)



Source: Global X ETFs with information derived from Benchmark Mineral Intelligence (2026, April 22). Chinese battery exports reach record high in March as export rebate change comes into force.

March battery sales were partially accelerated by an export rebate that was cut to 6% from 9% on April 1st. However, strong growth in markets like Oman and Australia saw the dollar value of exports grow 5,000% and 241%, respectively, during the 1st quarter, illustrating a potential element of structural growth.

FOOTNOTES

1. The Wall Street Journal (2026, April 23). America's First Commercial Nuclear-Power Projects in a Decade Just Broke Ground.
2. Ibid.
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5. UxC, LLC (2026, April 23). Ux U3O8 Price (Daily).
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8. Chosun Biz (2026, March 11). South Korea boosts nuclear restarts, taps coal to brace for energy shock.
9. The New York Times. (2026, April 6). A New Oil Shock Accelerates a Return to Nuclear Power.
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11. Mining.com (2026, April 18). Copper price within sight of all-time high as Chinese smelters hit record activity.
12. Benchmark (2026, April 14). China to potentially ban sulphuric acid exports as Iran war pressures supply.
13. Ibid.
14. International Copper Association Australia (2026, April 24). Copper Weekly Brief – Week Ending 24 April 2026.
15. World Gold Council (2026, April 8). Gold Market Commentary: Anatomy of a fall.
16. Bloomberg (2026, April 20). China's Silver Imports Jump to Record on Retail and Solar Demand.
17. Reuters (2026, April 24). India gold premiums hit over 10-week high on tight supply; China demand rises.
18. Bloomberg (2026, April 20). China's Silver Imports Jump to Record on Retail and Solar Demand.
19. Ibid.
20. Benchmark Mineral Intelligence (2026, April 22). Chinese battery exports reach record highs in March as export rebate change comes into force.
21. Benchmark Mineral Intelligence (2026, April 21). USA Rare Earth acquires Serra Verde.
22. Benchmark Mineral Intelligence (2026, April 22). Lithium Price Assessment Weekly Update.
23. Benchmark Mineral Intelligence (2026, April 15). Tight supply and Chinese policy drive prices: Rare Earths Q1 2026 Price Review.

GLOSSARY

UxC, LLC: A nuclear fuel market research and analysis firm, which provides pricing, forecasting, and consulting services across the nuclear fuel cycle.

Uranium Spot Price: The prevailing market price for physical uranium available for immediate or near-term delivery, typically within 90 days.

Uranium Term Price: The agreed-upon contract price for physical uranium for delivery over 3+ years, often across multiple deliveries.

TRISO-X: Tri-structural isotropic particle fuel developed by X-energy for advanced fourth-generation nuclear reactors. The design is intended to make the fuel highly accident-tolerant.

COMEX Copper Price: The market price of copper futures contracts traded on the U.S.-based CME Group's Commodity Exchange (COMEX).

LME Copper Price: The market price of physical copper traded on the London Metal Exchange (LME).

Dysprosium: A rare earth metal used in advanced materials, best known for its role in high-performance magnets.

EXW China: Ex Works China which reflects pricing located at the selling point in China and where the buyer bears the costs of transportation.
