

# ASSESSING THE IMPACT OF TRUMP'S 2025 TARIFF STRATEGY ON GLOBAL CRITICAL MINERAL SUPPLY CHAIN AND THE U.S. ENERGY TRANSITION





### Introduction

President Trump has introduced a 20% tariff on all Chinese imports, retained the Biden administration's decision to increase tariffs on lithium batteries from China from 7.5% to 25% from January 2026 and imposed a 25% tariff on all steel and aluminium imports and all imports from Mexico and Canada.

The global race to transition towards clean energy hinges not only on technological innovation, but also on the availability of critical minerals—such as lithium, cobalt, nickel, and rare earth elements—essential for electric vehicle batteries, solar panels, and wind turbines.

The U.S Geological Survey classifies 50 minerals as critical. Cobalt, lithium, manganese and nickel are used in energy storage systems and electric vehicles, while copper is used in solar panels and electrical connections, silicon in PV panels, and graphite in lithium-ion batteries.

While the move made by Trump is framed as an effort to bolster American industry and reduce reliance on strategic rivals, it has introduced considerable turbulence into global mineral supply chains.

This research critically analyzes the implications of Trump's tariff policy, especially its disruptive effects on global supply dynamics and its potential to derail the U.S. clean energy transition.

### The Strategic Role of Critical Minerals and the Global Tariff Shift

Critical minerals are foundational to clean energy technologies. The International Energy Agency estimates that demand for these materials will quadruple by 2040, if countries meet their net-zero pledges. The United States, despite its industrial capabilities, remains significantly dependent on foreign sources especially China; for both raw extraction and refining.

China controls approximately 60% of global critical mineral production and over 85% of refining. While U.S. policymakers have long expressed concern over this imbalance, the Trump administration's 2025 tariff escalation marked a sharp policy shift.

Under the new regime, tariffs on Chinese critical mineral imports surged to 125%, part of a broader economic confrontation aimed at reducing strategic dependency. However, this unilateral approach implemented without securing alternative sources or supply chain protections has introduced new risks that threaten to stall clean energy momentum.

The Trump administration is seeking to secure more critical mineral assets in DR Congo and has touted plans to expand its control of critical minerals in countries and territories like Greenland in the Kingdom of Denmark and Ukraine. It also plans to streamline the regulatory process for new U.S. mines and processing sites, but its wider policies on energy threaten to hamper supply chain plans.

### Impact of the 2025 Tariffs on Critical Mineral Supply Chains

#### 1. Increased Input Costs for Clean Energy Manufacturers

Tariffs on Chinese critical minerals have substantially raised the cost of inputs for U.S. clean energy firms. With few domestic alternatives for refined materials, manufacturers of solar panels, wind turbines, and batteries face higher procurement expenses. These cost pressures are passed along the value chain, leading to more expensive renewable energy products and slower adoption rates.

#### 2. Supply Chain Uncertainty and Market Volatility

The tariffs have injected significant instability into mineral supply chains. Developers and suppliers now face uncertainty regarding material availability, contract pricing, and project timelines. This has disrupted investment planning, discouraged long-term procurement commitments, and introduced broader volatility into clean energy markets.

#### 3. Limited Availability of Viable Alternative Suppliers

Although the U.S. has increased efforts to secure alternative mineral sources, most current producers lack the scale or infrastructure to replace Chinese supply. Countries like Australia and Canada offer potential, but building refining capacity and establishing trade logistics is a long-term endeavour. In the short term, the U.S. remains exposed to bottlenecks and shortages.

#### 4. Delays in Clean Energy Project Deployment

Supply constraints are already contributing to delays in U.S. clean energy infrastructure rollout. Renewable energy projects, battery storage systems, and EV



production timelines are all affected by mineral scarcities. This undermines national targets for emissions reduction, renewable capacity expansion, and climate leadership.

#### 5. Heightened Strategic and Geopolitical Risks

In seeking to bypass Chinese imports, the U.S. may increasingly turn to politically unstable or ethically controversial regions for supply—introducing new security vulnerabilities. Reliance on countries with poor labor or environmental standards could also draw scrutiny from ESG-conscious investors and consumers.

#### 6. Erosion of Multilateral Resource Cooperation

Trump's preference for bilateral trade deals over multilateral collaboration has undercut broader efforts to stabilize mineral supply chains. Initiatives like the Minerals Security Partnership—which promote shared investment, regulatory alignment, and collective resilience—have lost momentum. This isolationist approach may leave the U.S. more vulnerable to future shocks.

### Policy Recommendations: Recalibrating the U.S. Approach

Although the U.S. lags decades behind in mineral production critical to clean energy, there are several strategic steps the government can take to get back on its clean energy transition. Highlights of policy actions the administration should consider includee:

#### 1. Remove blanket tariffs

Imposing broad tariffs has strained relationships with allied partners, making it harder to build resilient, international supply chains for mining and processing. The U.S. cannot meet clean energy demands alone; it must invest in strong global partnerships to secure critical minerals.

## 2. Maintain long-term government investments in critical minerals and clean energy

Developing domestic mines takes an average of 16 years. In the meantime, sustained incentives like the subsidies introduced under the Biden administration are essential to keep consumers and companies committed to clean energy solutions.

#### 3. Manage price volatility

To compete with China's artificially low mineral prices and buffer the impact of a volatile market, the U.S. should consider tools like floor pricing or contracts-fordifference. These mechanisms can help stabilize domestic production and investment.



#### 4. Prioritize investment in mineral processing and recycling

While the U.S. has increased mining efforts and possesses substantial mineral reserves, it still lacks sufficient refining and processing infrastructure to turn raw materials into usable components. The more strategic move is however to focus tariffs on products that the country is very confident will scale domestically. This should be paired with deeper investment in processing and recycling capacity.

### CONCLUSION

Trump's 2025 tariff strategy, although aimed at reducing reliance on Chinese critical minerals, presents a range of unintended consequences that threaten to destabilize the supply chains needed for the U.S. energy transition. Increased costs, delayed deployment of renewable projects, and the weakening of international cooperation; all pose serious risks to the nation's clean energy future. To mitigate these challenges, U.S. policymakers must reconsider the current approach. A more balanced strategy; one that combines targeted protectionism with strategic international partnerships, investment in domestic refining, and support for ethical global sourcing is essential to secure a resilient, competitive, and sustainable energy economy.

### DISCLAIMER

This document of the referenced country is not expected to form the basis of, or be construed as standard legal advice; nor should any of its contents and representations be strictly relied upon for any activities. Electricity Lawyer (EL) will not be liable for decisions whatsoever that are made based on the contents of the document.

