



Escalating Trade Disputes May Threaten Energy Transition

Tariffs are necessary to create a level playing field with China but could reduce the availability of transition minerals and raise the cost of going green

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Geopolitical tensions and trade protectionism are intensifying, raising questions about the viability of China's export-led growth strategy as many key trading partners look to "reshore" strategic industries. Deepening trade tensions could disrupt supplies of transition minerals (TMs)¹ and clean-energy technologies, sectors which China dominates and are crucial for efforts to reach net zero.

This brief looks at the impact of tariffs introduced by the US and EU on Chinese clean-energy products. It covers China's possible responses along with the implications for trade flows and the broader decarbonization efforts. The more moderate tariffs chosen by the EU may prove a more effective route to decarbonization than the prohibitive approach adopted by the US, which could increase prices for clean-energy products in favor of national interests. Please contact Orlando Bowie (orlando.bowie@asktmp.com) for more information.

SUMMARY

1. Diversifying supply chains away from China is a strategic necessity, but managing this security threat needs to be balanced with the equally urgent goal of decarbonization.
2. Tariffs are part of the solution but must be combined with more aggressive efforts to expand mineral supply chains and improve manufacturing competitiveness if the US and EU are to meet transition targets and avert wider economic instability.
3. US tariffs on Chinese clean-energy products will further contribute to bifurcation of global trade and duplication of supply chains. The duties could raise production costs, curb electric vehicle (EV) adoption, and ultimately delay the energy transition.
4. The EU took a more moderate, cooperative approach when it voted on October 4th, 2024, to impose tariffs on Chinese new-energy vehicles (NEVs). This may offer a more effective route to reshoring through incentives like technology transfers, licensing agreements and joint ventures (JVs).
5. China is likely to respond with tighter export controls on transition minerals (TMs) by expanding and tightening its use of export licenses, particularly for dual-use products² such as tungsten and key battery inputs like graphite and manganese. This could make it more difficult to loosen China's grip on upstream supply chains.
6. Beijing is also likely to respond to EU tariffs with punitive duties on the block's major exports, like pork, dairy, brandy and large-engine vehicles. China has less leverage over the US, though tit-for-tat measures are likely to increase under a second Trump presidency.



“NEW PRODUCTIVE FORCES” AND RESHORING FUEL TARIFFS

Trade tensions have continued to rise in recent months as China's export-led growth strategy driven by “new productive forces” (新质生产力)³ conflicts with efforts by its trade partners to reshore supply chains for strategic industries. Persistently weak domestic demand coupled with Beijing's unwavering commitment to an export-led growth strategy have sparked accusations that China is flooding the global market with cheap products. Softer demand for EVs amid backpedaling on climate commitments in the Global North⁴ is exacerbating the trade disparities.

Trade partners allege that state support from Beijing is creating industrial overcapacity that depresses prices and gives an unfair advantage to domestic firms.⁵ This competitive advantage is hampering efforts to reshore strategic industries amid concerns over the concentration of supply chains in China. An escalating series of tit-for-tat trade measures could disrupt supplies of transition minerals and other products vital for the energy transition.⁶

■ Opaque state support

Long a bone of contention between China and the West, state support for Chinese companies has become increasingly focused on EV-related industries in recent years. Battery maker CATL became the largest recipient of state subsidies among mainland-listed companies for the first time in 2023, and automakers featured prominently in the ranking, which had previously been dominated by state-owned oil companies.⁷ Local governments also offer additional forms of support to attract business to their area.⁸

China's opaque industrial policy spending has exacerbated overcapacity issues, particularly in strategic industries that are key to the energy

transition such as EVs, batteries and solar panels, known in China as “the new three” (新三). Some traditional industries such as steel and aluminum have also been affected.

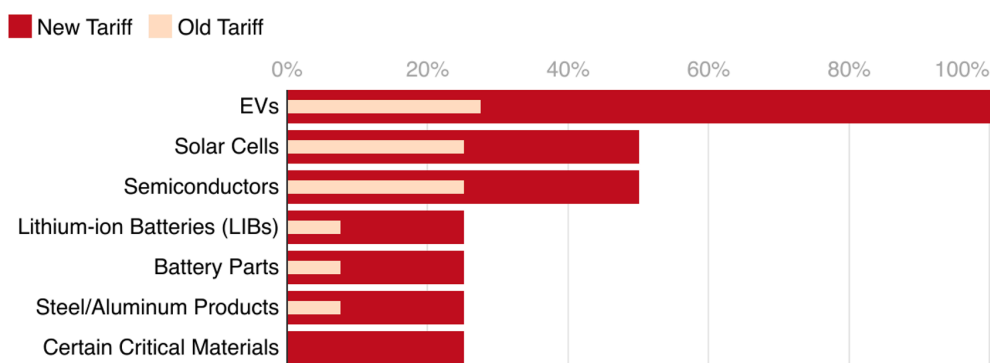
China has placed “the new three” at the center of its growth strategy, exacerbating trade tensions at a time when Western countries are looking to reshore the same supply chains. Softer EV demand in the Global North⁹ is further contributing to overcapacity and broader headwinds in the automotive sector,¹⁰ giving further political impetus for protective tariffs in the West.

■ Tariffs spring up

The US in May 2024 hiked tariffs on a range of Chinese clean-energy products,¹¹ with new-energy vehicles particularly hard-hit (see graphics for details). This was followed in July by new tariffs on Southeast Asian solar imports designed to close a loophole that allowed Chinese companies to avoid duties by routing their products through the region.¹²

The US has also been working hard with Japan and the Netherlands to limit China's access to chip-making equipment.¹³ And a ban on Chinese EV software is reportedly in the works, which could make it more difficult for Chinese firms to bypass tariffs via manufacturing in Mexico.

US Tariffs on Chinese Imports



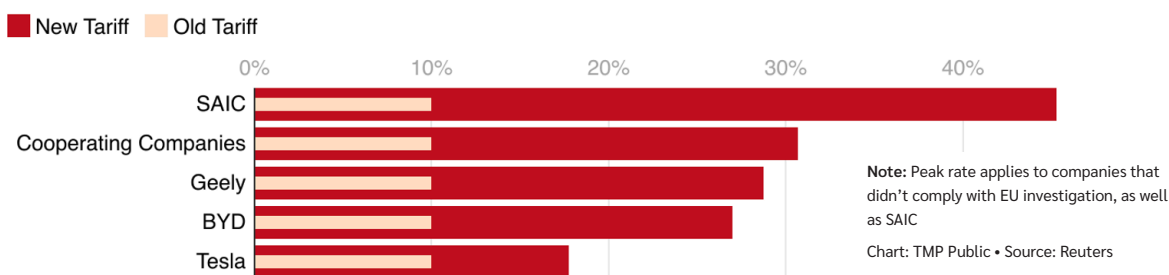
Notes: Tariffs effective from May 2024, apart from semiconductors (January 2025), non-EV LIBs (January 2025), and critical minerals (ores/concentrates of manganese, cobalt, chromium, tungsten; tungsten oxides, tungstates, carbides and powders; unwrought tantalum, chromium and indium including their powders; ferronickel, ferroniobium; and tin alloys, among others from September 27th; natural/synthetic graphite and permanent magnets from January 2026)

Chart: TMP Public • Source: USTR

The EU meanwhile voted in October 2024 to impose more moderate EV tariffs that vary by manufacturer. The duties are effective from November and will last for five years, though negotiations to find an alternative such as price controls are continuing.¹⁴ The

EU also implemented its new Foreign Subsidies Regulation (FSR) for the first time in 2024, scrutinizing bids by two Chinese firms to construct a solar plant in Romania.¹⁵

EU Tariffs on China EV Imports



Various other countries have jumped on the tariff bandwagon. Turkey, which is part of the EU's customs union, in June 2024 imposed a blanket 40% tariff on Chinese EVs.¹⁶ Canada followed in the footsteps of the US in August with a prohibitive 100% tariff,¹⁷ while the UK and Australia have yet to impose any duties.

Besides “the new three” (新三), more traditional industries have also come under scrutiny. Certain

steel and aluminum products have been targeted by several countries, including the US¹⁸ and EU¹⁹ as well as some countries in the Global South hitherto unaligned or even allied to China, like Mexico, Chile, Brazil²⁰ and Thailand.²¹ Tariffs on steel and aluminum could raise costs for automakers and manufacturers of clean-energy products such as wind turbines, for which steel and aluminum are key inputs.

HIGH TARIFFS JEOPARDIZE US EMISSIONS TARGETS

The severity of US tariffs could contribute to the bifurcation of trade and duplication (rather than just diversification) of supply chains, damaging global economic growth and delaying efforts to reach net zero. The US and EU have yet to make significant progress in expanding mineral and clean-technology production while decoupling from China.

Managing the perceived security threat from Beijing should not distract policymakers from the equally urgent common goal of decarbonization. While diversifying supply chains away from China is a strategic necessity, it would be better achieved through closer cooperation.

Instead, the US has limited the scope for cooperation and effectively shut the door on cheap Chinese EV imports, which is ultimately likely to delay EV adoption and make it more difficult to meet emissions targets. With Chinese models out of the picture, a sub-\$25,000 budget EV is unlikely to hit the US market until next year at the earliest.²² EVs remain on average 42% more expensive than internal combustion engine (ICE) vehicles in the US.²³ In China, EVs have already reached price parity, with some as

cheap as \$10,000.²⁴

Higher tariffs on cheap Chinese inputs such as batteries will also make it more expensive for the US to roll out renewable power sources, which require batteries to ensure a consistent energy supply. Global automakers will likewise find it more difficult to accelerate the rollout of EV supply chains and boost EV adoption rates, which will be necessary to hit emissions targets from the US Environmental Protection Agency (EPA).²⁵

Prior to announcing the tariffs, the Biden administration had already slashed its target for EV adoption from 67% by 2032 to as little as 32%.²⁶ Tailpipe carbon dioxide emissions from leading automakers in the US are on track to exceed EPA standards by between 8% and 154% depending on the company, even if they meet their current sales projections for electric vehicles.²⁷

The tariff increases meanwhile will have a negligible impact on Chinese EV exports to the US, which were very small to begin with. Chinese automakers had already scaled back ambitions for the US market amid

uncertainty over access. Better-established players such as Tesla and Chinese-owned legacy brands like Volvo and Polestar are more exposed to the impact of

tariffs on imports of both vehicles and batteries manufactured in China.

■ Battery, solar tariffs leave some wiggle room

Hawks in Washington continue to argue against any form of partnership with China.²⁸ But economists see joint ventures, licensing agreements and other carrots as more effective measures to encourage onshoring than punitive tariffs are.²⁹

Lower US tariffs on batteries and solar products have left some room for such arrangements in these

sectors. Ford is going ahead with plans to license battery production technology from CATL at its Michigan plant, albeit on a smaller scale.³⁰ And Trina Solar is looking to set up a solar cell factory in the US to supply its Texan panel plant.³¹ Such projects however are likely to face further headwinds under a second Trump presidency.

BEIJING FIRES WARNING SHOT WITH EXPORT LICENSES

China started introducing export licenses for TMs and related exports in July 2023, starting with germanium and gallium, followed by graphite in October 2023³² and antimony in August 2024. It also started blocking exports of manufacturing equipment for rare earth magnets in December 2023, though the impact of this move has been unclear.³³

These export licenses introduced a degree of market uncertainty, but suppliers can reportedly still obtain them for destinations like the US, EU, Japan and South Korea.³⁴ Worsening trade tensions could nevertheless push China to throttle exports of these minerals by holding back licenses, as it did with exports of rare earth elements (REEs) to Japan in 2010.

Trade experts expect China to introduce further

export licenses for other TMs and dual-use materials. Tungsten may be next, with some predicting restrictions in the coming months and certainly by the end of the year.³⁵ An assessment of 73 TMs by Trivium China also ranked tungsten first, followed by REEs and vanadium in joint second.

Notably, Trivium's assessment (conducted in February 2024) ranked antimony as eighth most likely to have export controls applied, tied with bismuth, highlighting the difficulty of predicting Beijing's moves.³⁶ It's also surprising that manganese didn't rank higher given China's dominance of processing. And grouping REEs together is problematic in this context given that magnet-related elements are far more likely to be targeted than are other REEs.

■ Trump tariffs could spark retaliation

Beijing may be keeping its powder dry and crafting a strategy in anticipation of a drastic increase in trade tensions under a second Trump presidency. The president-elect has proposed tariffs on all Chinese imports ranging from 60% to 100%, along with a tariff of up to 20% on all imported goods from other countries.³⁷

UBS estimates that if Beijing were to respond with tit-for-tat measures, the ensuing trade war would roughly halve China's GDP growth in 2025, knocking

off about 2.5 percentage points.³⁸ This underscores the precarious outlook for China's economy, the health of which is a key factor underpinning the legitimacy of the Chinese Communist Party (CCP).³⁹ In short, restricting mineral exports at scale may not be economically viable for China.

While UBS expects that any retaliation from Beijing would further exacerbate the impact of Trump's tariffs on China's economy, security hawks and nationalist voices in China could nevertheless call on

Beijing to up the ante. This could trigger a more aggressive expansion of export licenses on TMs, as

well as higher tariffs on other key export industries in the US and EU.

■ EU ENGAGEMENT IN FOCUS

The EU has taken a less politicized approach than has the US, setting more moderate, targeted duties and leaving room for negotiation. The rates on EVs vary by manufacturer depending on several factors, such as the degree of cooperation with the EU's investigation into China's subsidies, the level of state support received, and sales volume in the EU.⁴⁰

China has appealed the findings of the EU's probe at the WTO,⁴¹ as well as launching its own investigations into key EU exports like dairy, pork and brandy.⁴² Meanwhile, China has engaged actively in discussions over EV tariffs, no doubt looking to exploit divisions in the bloc,⁴³ which is a far more important export market for China than the US. The EU accounted for

50.4% of China's NEV exports in 2023 compared with just 9% for North America.⁴⁴

The outcome of the EU's vote revealed divisions in the bloc over how to handle trade with China. Germany was among five members which voted against the tariffs, while 12 members abstained.⁴⁵ China is reportedly wielding the stick of retaliatory duties on large-engine vehicles – a worrying prospect for German automakers – while dangling the carrot of reduced duties if the EU tariffs are scrapped.⁴⁶ With negotiations continuing, a sizeable opposition to the tariffs indicates that further reductions or alternatives such as price control mechanisms might yet be possible.

■ Imports suffer but margins give leeway

China's auto industry association says EU tariffs have slowed growth in NEV exports 20-30 percentage points in recent months.⁴⁷ This is in line with projections from the Kiel Institute, a German thinktank, for a 25% reduction in Chinese EV imports because of the tariffs.⁴⁸

However, healthy profit margins for Chinese EV makers give them plenty of leeway to compete on cost and maintain market share. BYD, for example, sells cars for as much as twice the price in export markets, giving it plenty of padding to absorb the tariffs.⁴⁹

■ Engagement must be combined with financial incentives

China's edge has been built on an early mover advantage along with aggressive upstream investment, generous policy support, and a large and intensely competitive domestic market. Tariffs might help level the playing field but should be combined with incentives to encourage investment in upstream assets and innovation, as well as proactive engagement through technology transfers, JVs and licensing agreements.

The EU's more cooperative approach with more moderate EV tariffs will likely prove more conducive to reshoring downstream supply chains. This process is already underway, led by companies like BYD;⁵⁰ smaller Chinese EV producers are likely to follow. However, this downstream focus will need to be

combined with incentives to increase upstream investment to secure TM supplies, along with measures to encourage investment in innovation to build long-term resilience and competitiveness.

The US has provided much more generous incentives for upstream investment through the Inflation Reduction Act (IRA), though its aggressive and unilateral strategy could stymie technology transfers and licensing agreements, ultimately delaying efforts to build EV supply chains and meet decarbonization goals. While this strategy may play well in Washington and to voters, a more measured and cooperative approach would be more beneficial for the green energy transition.

- 1 These materials are key for energy transition technologies, like renewable energy, electric vehicles (EVs), and electricity grids, and include lithium, copper, rare earth elements (REEs), graphite, cobalt, nickel and manganese, amongst others.
- 2 Dual-use items (including software and technology) are items which can be used for both civil and military purposes.
- 3 Industries critical to the energy transition that China has identified as key growth drivers, including the “new three” (新三): new energy vehicles (NEVs), batteries and solar panels
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- 5 <https://www.reuters.com/business/autos-transportation/eu-report-details-widespread-chinese-interference-economy-2024-07-03/>, <https://www.bloomberg.com/news/features/2024-07-10/xi-jinping-s-plan-to-save-china-s-economy-comes-at-a-cost-for-factories>
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- 7 <https://asia.nikkei.com/Business/China-tech/CATL-tops-China-s-corporate-subsidies-list-outranking-oil-majors>
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The FSR was introduced in 2021 to increase scrutiny of foreign subsidies and address market distortions within the bloc.
- 16 <https://www.reuters.com/business/autos-transportation/turkey-impose-40-additional-tariff-vehicle-imports-china-2024-06-08/>
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