

Watt's New in the Current Affairs of Battery Metals: Key Webinar Takeaways

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Asia’s black mass market transforms as China eases import restrictions

Regulatory Breakthrough in China

The Asian battery recycling market is entering a new era following China’s decision to ease restrictions on black mass imports. As of August 1, 2025, compliant black mass—processed material from end-of-life lithium-ion batteries—can now be legally imported into China under a revised regulatory framework.

The material, previously treated as “solid waste,” was subject to a de facto ban. Now, with the assignment of a dedicated HS code (3824999996) and the rollout of the GB/T 45203-2024 standard, black mass is classified as a regulated product. Strict thresholds on metal content and impurity levels must be met, including $\geq 25\%$ Ni+Co for NCM and fluoride content $\leq 0.4\%$.

Product	Ni-Co	Fe	P	Li	Water-soluble Fluorine
Ni-Co black mass	$\geq 25\%$	/	$\leq 0.8\%$	$\geq 3.5\%$	$\leq 0.4\%$
LFP black mass	$\leq 1\%$	$\geq 18\%$	$\geq 10\%$	$\geq 2\%$	$\leq 0.1\%$

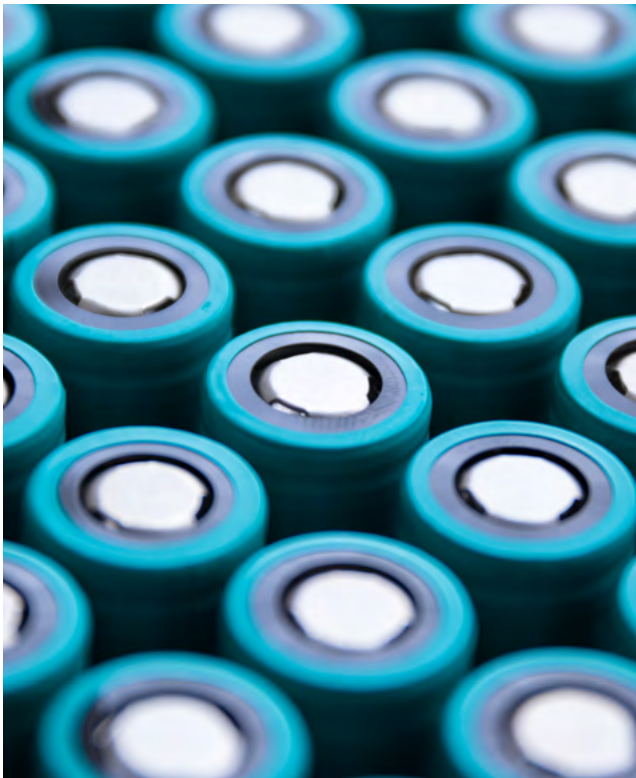
Source: Ministry of Ecology and Environment of China

Shifting Trade Flows Across Asia

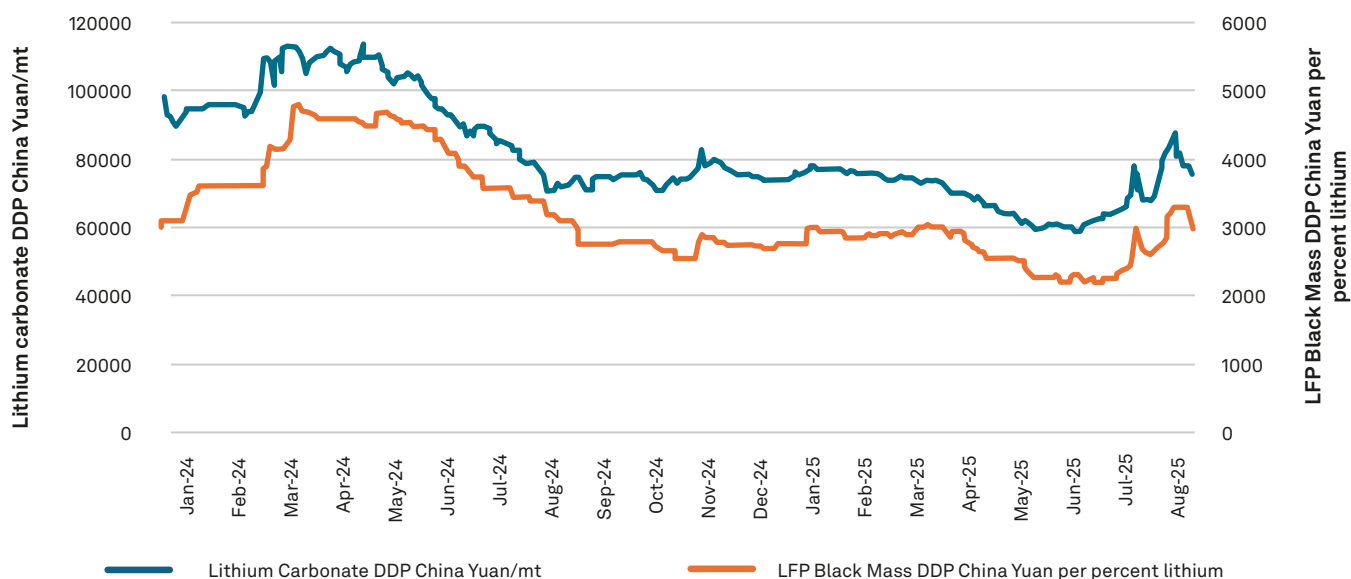
This regulatory shift is already altering trade patterns. Southeast Asia—particularly Malaysia, Indonesia, and Thailand—is likely to emerge as a processing hub, further processing black mass to meet Chinese import criteria. Direct exports to China are expected to increase, bypassing traditional transit countries.

Potentially higher regional premiums

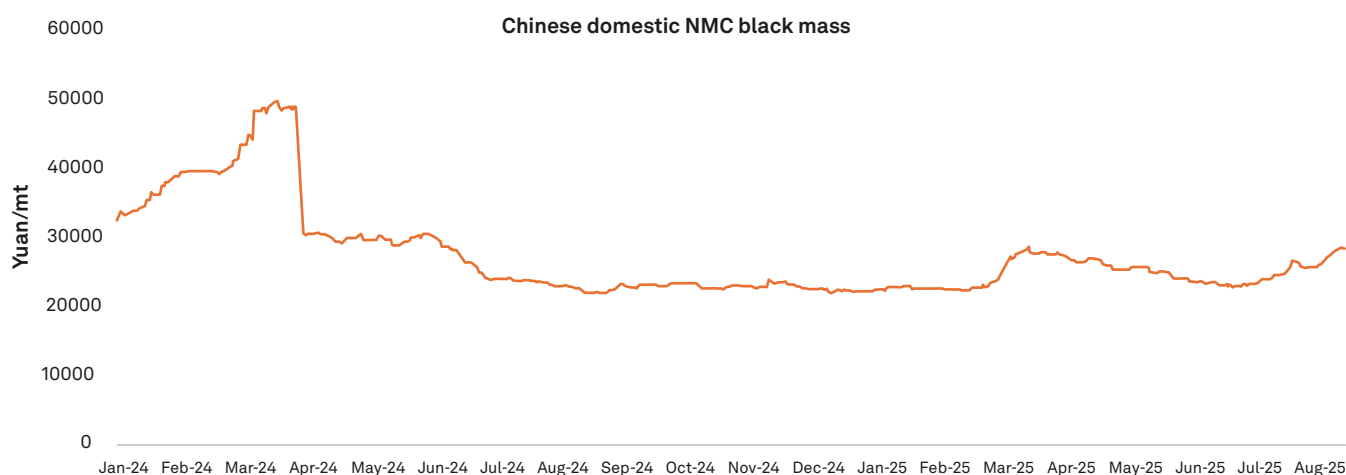
Chinese buyers are offering premiums for high-quality black mass, leading to rising feedstock prices and tightening supply for domestic recyclers in countries like South Korea, where some operators are running at reduced capacity. Increased competition for black mass feedstock, battery scrap amid battery scrap tightness has also led to higher offers observed in the spot market.



Chinese LFP black mass prices track DDP China lithium carbonate



NMV black mass sees better demand, tracks chemical prices



Sources: Platts

Opportunities and Compliance Challenges

While the new policy opens the door to expanded trade, it also introduces compliance complexities, such as mandatory origin verification and fluoride content testing. Stakeholders will need to adapt quickly to the updated documentation and customs requirements.

This might lead to an increased role/ importance of traders within the black mass space. According to market sources, the first few batches of black mass were successfully imported were through third parties/ traders.

A Strategic Move Toward Resource Security

Ultimately, China's import policy shift reflects a strategic push toward resource security, enabling access to recycled battery materials as demand for critical metals surges. It strengthens China's position at the center of Asia's evolving circular battery economy, and signals a maturing global market for sustainable energy storage inputs.

Lithium

China continues dominating passenger plug-in electric vehicles (PEV) in the first half of the year, accounting for nearly two-thirds of the global total. The country's PEV exports is equivalent to approximately one-third of the rest of the world's sales in the first half of the year. Europe's PEV sales have increased faster compared to the first half of 2024 due to stricter carbon dioxide emission standards. Meanwhile, sales in the US have lagged further and now faces added headwinds of subsidy withdrawal and a possible repeal of vehicle emissions standards.

Lithium prices surged in August, with most prices of the prices now exceeding year-start levels, triggered by output stoppages in China as the revised Mineral Resources Law, implemented on July 1, tightens regulations on lithium extraction. The new law induced halts at two operations: CATL's Jianxiawo lepidolite mine on August 9 and Zangge Mining's Qarhan lake brine operation on July 16. Additional supply risks loom as seven other lepidolite producers operating in Yichun, Jiangxi, are required to submit updated resource data by September 30, possibly as the first step towards obtaining the correct extraction license for lithium.

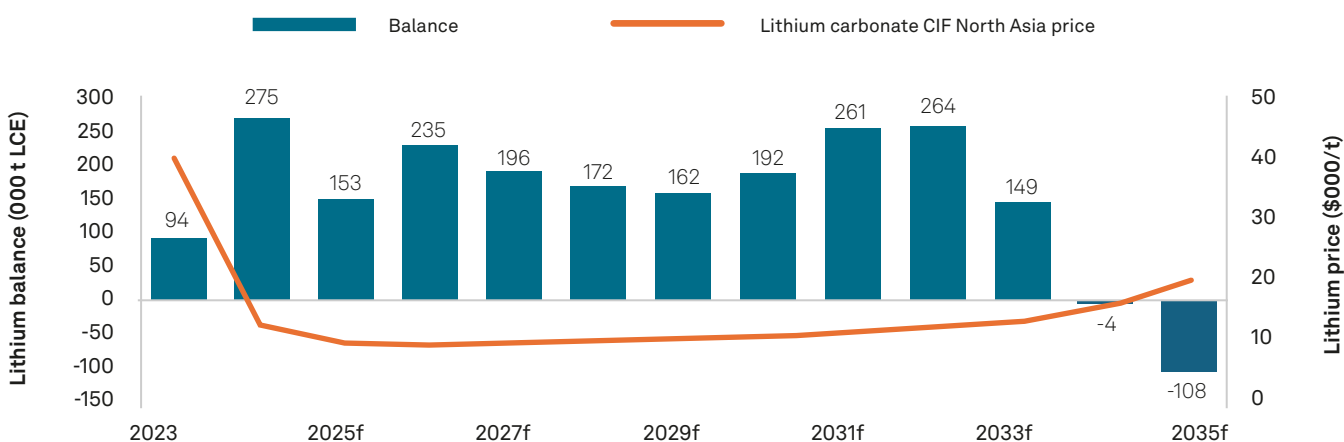
Capacity from new project commissioning this year outside of China can well offset the production losses from the two stoppages. Majority of these new capacities are based in Argentina and Africa and are also integrated with partners in China.

We anticipate that the supply disruptions in China to be temporary, as the country relies heavily on lithium raw material imports. Higher lithium prices mean China needs to pay more for imported lithium. We expect prices to correct as fears rescind from greater policy clarify.

High lithium prices are also postponing much needed production cuts from higher-cost operations globally, and these cuts are desperately needed given the prolongedly market oversupply. In the near term, prices are likely to gradually decline from the current spike. We expect a sustained price recovery to materialize only after widespread market-led production cuts take place.

Over the longer term, we expect lithium demand to triple from 2024 to 2035, fueled by the growing demand for batteries in vehicles and energy storage. Concurrently, lithium supply will become more geographically diverse, as countries outside of China strive to onshore production. Argentina is poised to be the primary driver of supply growth. Australia will remain the largest producer of lithium raw material, although its share of global output will decline. We expect a lithium market deficit to emerge in 2034 and forecast the lithium carbonate CIF North Asia price to rise to just under \$20,000/t by 2035.

Overcapacity limits lithium price upside until next decade; deficit now to emerge in 2034



As of Aug. 20, 2025.
 f = forecast; LCE = lithium carbonate equivalent; t = metric ton.
 Sources: S&P Global Market Intelligence; S&P Global Commodity Insights.
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Cobalt

The three-month extension to the DRC cobalt export ban, announced on June 21, has further tightened material availability, supporting prices. Most cobalt exports that have left the DRC before the initial ban, announced Feb. 21, have now arrived in China.

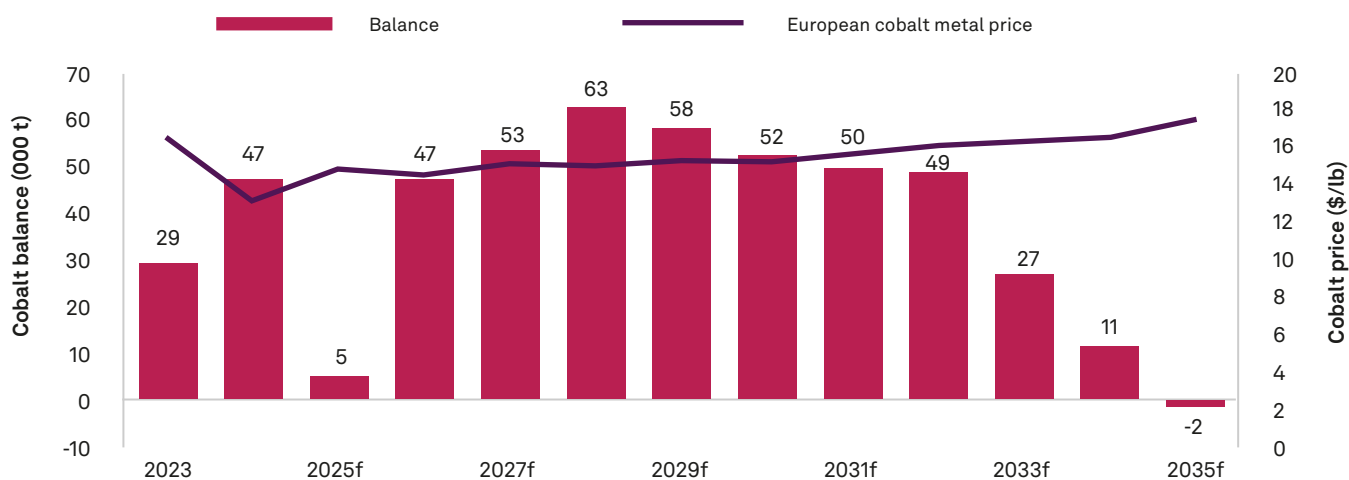
Cobalt refineries in China are reducing production due to rising costs and tightening feedstock supply. This has led to a sharp decrease in refined cobalt imports to Europe from China. Cobalt intermediates are also starting to be imported from China to Finland as refineries seek alternative feedstock outside of the DRC, but this could be short-lived as China's inventories deplete.

We anticipate the cobalt market to be in a tight balance this year, pending the DRC government's decision in September. We expect the DRC government to eventually resume exports, and prices to drop slightly in 2026 compared to 2025.

We expect the cobalt market to remain in surplus until 2034 given a relatively slower increase in cobalt demand due to thrifting, and downgrades to the US PEV sales outlook – where cobalt containing batteries are popular. Nevertheless, cobalt prices are expected to be more resilient than lithium's, as the DRC has dominating market power over supply volumes and could also potentially set a floor price, despite the rapid rise of Indonesian supply.



Supply-side limitations to support cobalt prices despite slower demand growth



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Nickel

In the second quarter of 2025, LME 3M nickel prices exhibited volatility despite a weaker US dollar. On July 23, nickel prices reached a four-week high of \$15,572 /t due to a weakening dollar and tariff uncertainty. However, by August 15, prices declined to \$15,161/t despite the US and China extending reduced tariff rates for an additional 90 days, expiring November 10. This extension followed an earlier agreement on May 12, where China reduced its tariffs on US imports from 125% to 10%, while the US lowered its tariffs on Chinese imports from 145% to 30%. The tariff announcements initially led to a drop in prices for China's nickel sulfate; however, this decline was short-lived as prices quickly rebounded. Despite this recovery, nickel sulfate prices continued to lag behind LME prices, reflecting broader market dynamics.

Looking forward, there is an anticipated surge in battery nickel demand from 2024 to 2035, driven by the increasing adoption of electric vehicles (EVs) that require high energy densities and the growing energy storage market. Global primary nickel demand is expected to grow steadily across various sectors, including stainless steel, EVs, and other industrial applications. Notably, battery nickel demand is projected to outpace overall nickel demand, underscoring nickel's crucial role in the clean energy transition. The US is poised to be a significant driver of passenger plug-in EV primary nickel demand during the 2024–29 period. However, the expiration of EV tax credits by September 30, as mandated in President Trump's One Big Beautiful Bill Act, may hinder this growth.

On August 13, the US Department of Energy announced nearly \$1 billion in funding opportunities for the development of mining, processing, and manufacturing technologies within the critical minerals supply chain.

This initiative aligns with the executive order signed by Trump on March 20, aimed at enhancing domestic production of critical minerals to reduce reliance on foreign sources.

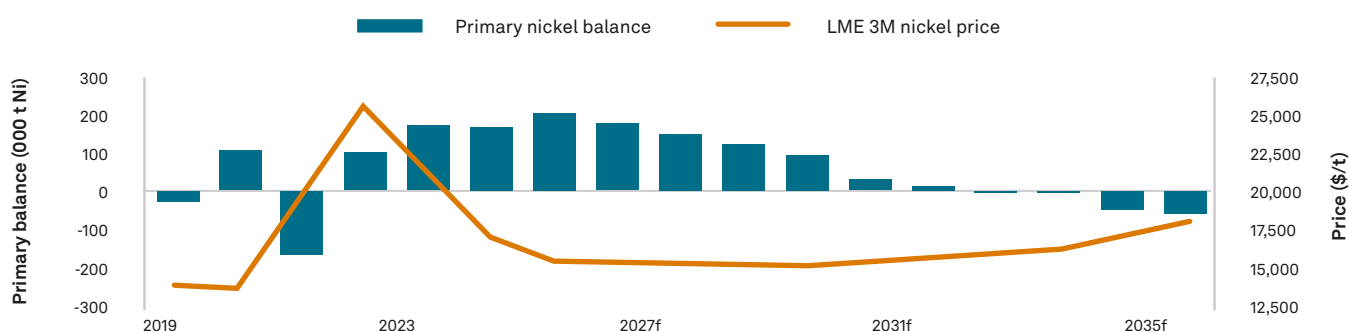
Supply concerns have emerged as the US raised tariffs on Canadian imports to 35% as of August 1. This increase could significantly impact US imports of nickel sulfate, which represent a notable share of total primary nickel imports in 2024, highlighting the US's reliance on Canada for nickel, especially for EV batteries.

Additionally, Indonesia's Ministry of Energy and Mineral Resources mandated that mining companies submit applications for annual mining production quotas by October 2025, preparing for 2026 implementation. This change follows Indonesia's decision to shift from a three-year to an annual issuance of quotas, a response to oversupply, price fluctuations, and regulatory challenges.

From 2024 to 2035, Indonesia and China are expected to lead global nickel production, increasing output to meet rising demand from the EV and stainless steel sectors. Despite current stainless steel surpluses in China, global primary nickel output is projected to rise steadily.

In conclusion, global trade uncertainty remains a significant issue, particularly due to new US trade policies. On August 7, the US implemented higher tariff rates for imports, ranging from 10% to 50%. Despite these challenges, our forecasts for global primary nickel supply and demand remain largely unchanged, with expectations that global nickel stocks will peak in 2029. We project the LME three-month nickel price to average \$15,544 per ton for 2025.

LME 3M nickel price forecast to average \$15,544/t in 2025



As of Aug. 19, 2025.
f = forecast; LME 3M = London Metal Exchange three-month; t = metric ton.
Sources: S&P Global Market Intelligence; London Metal Exchange
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Graphite

Throughout the first half of 2025, both fine flake and spherical graphite prices have been on a downward trend. Recent trading activity in the graphite market has led to a recovery in spot prices for natural graphite. The Platts-assessed price for fine (-100 mesh) 94%-95%C flake graphite rose 3.5% to \$410/t, while 99.5%C uncoated spherical graphite declined 2% to \$1,535/t as of August 20. The current graphite market is characterized by weak demand for natural graphite, particularly in the battery sector, where synthetic graphite is increasingly favored.

Additionally, needle coke prices, essential for synthetic graphite production, are also on the decline. This trend diminishes the appeal of natural graphite, as the cost advantages of synthetic alternatives become more pronounced. Despite robust sales of plug-in electric vehicles (PEVs), demand for natural graphite used in battery anodes remains stagnant, with a slowdown in steel production anticipated in the latter half of 2025 likely to further weaken overall demand.

Imports from Tanzania have increased, driven by a Chinese-operated mine supplying larger flake sizes that are not produced domestically in China. In contrast, Mozambique, which historically supplied more graphite, is seeing reduced imports due to low demand and pricing. The current market dynamics indicate that the rise in Tanzanian imports is closely tied to specific demand for jumbo flakes, rather than a general increase in imports from other regions.

China remains the primary producer of spherical graphite, although exports to South Korea, Japan, and the U.S. have slowed due to weaker EV demand outside of China. However, exports to Indonesia are increasing as BTR New Material Group ramps up its new anode plant with a production capacity of 80,000 metric tons per year.

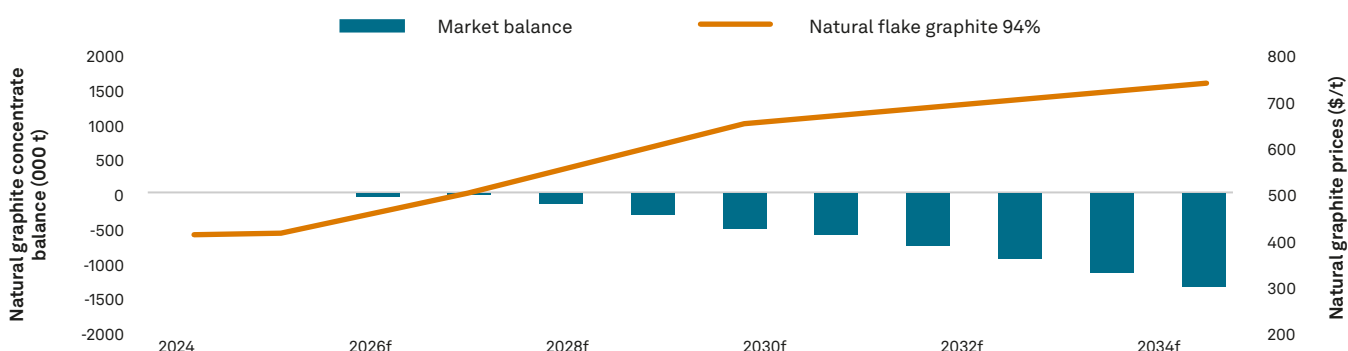
One of the major developments in the graphite market is the announcement from the US Commerce Department regarding its investigation into active anode material from China. On July 17, the department concluded that China has been dumping this material into the US market. Consequently, a substantial tariff of 93.5% has been imposed on imports of this anode material. Following this ruling, the total effective tariffs on China-origin active anode material now reach 160%.

These tariffs are expected to significantly impact battery pack costs for U.S. EV manufacturers. For instance, our analysis shows that if there were no tariffs, the anode material costs for a Tesla Model 3 with an 80-kWh battery pack would be around \$432. But with the new antidumping tariffs added to existing ones, that cost rises to \$1,123. Similarly, for larger vehicles like the Ford F-150 Lightning, where the estimated anode costs jump from \$529 to \$1,376 after tariffs.

While U.S. manufacturers are limited in sourcing active anode material domestically, potential alternatives exist like Posco Future M Co. Ltd. in South Korea and BTR New Material Group Co. Ltd. in Indonesia. The ongoing investigations by the U.S. Commerce Department may result in further tariffs, but they also present opportunities for U.S. anode material developers as operational capacity is expected to grow by 2028, driven by rising demand for battery production.

Despite the challenges, the outlook for the graphite market remains complex, with anticipated price stabilization as we approach year-end, when colder weather typically leads to reduced mining activity in northern China. The average price projection for 2025 stands at \$412 per ton, with expectations of gradual increases as market conditions evolve.

Natural graphite market might enter structural deficit over medium, longer terms



As of Aug. 20, 2025.

f = forecast; t = metric ton.

Sources: S&P Global Market Intelligence; S&P Global Commodity Insights.

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