TRADIUM

TRADIUM Market Report

The West Builds Alternatives While China Continues to Set the Pace

Export controls, multi-billion-dollar investments, and interest rate pressures shaped the markets for rare earths, technology metals, and precious metals in the second quarter of 2026. Our latest market report highlights the key developments, market drivers and strategic decisions that defined the quarter—and explains what they mean for the industry.

From new export restrictions and multi-billion-dollar investment projects to strategic raw material partnerships, the second quarter of 2026 was marked by significant political and industrial activity across the markets for Critical Raw Materials. China not only reinforced its position as the key driver of global supply chains but also underscored the strategic importance of processing capacity and market access. Western economies responded with new initiatives aimed at strengthening supply security, expanding recycling capabilities, and increasing industrial resilience. The key question, however, is whether political commitments, funding programmes, and corporate investments can be translated into viable alternatives to existing supply chains quickly enough. Another potential challenge is already on the horizon: in November, the second wave of Chinese export controls on rare earths, which was suspended last year, could return to the political agenda. Our report examines the developments that shaped the markets in greater detail.

Rare Earths: Beijing Continues to Hold the Reins

China's rare earth exports increased significantly over the course of the second quarter, but the picture varies considerably depending on the individual elements. Exports of dysprosium declined again after a temporary recovery, while terbium shipments also declined. Both heavy rare earths have been subject to Chinese export controls since April 2025. The destination countries also reveal a politically sensitive pattern. Japan, alongside China one of the world's leading manufacturers of rare earth magnets, continues to receive virtually no supplies of these materials. This is widely attributed to the ongoing political tensions between Beijing and Tokyo.
For Japan, this represents a particular challenge, as heavy rare earths such as dysprosium and terbium remain indispensable for manufacturing high-performance permanent magnets. The country is therefore pursuing multiple strategies to strengthen its supply security. Shin-Etsu, Japan's largest chemical company, plans to build a domestic refinery for dysprosium, terbium, and yttrium, while the state-backed Japan Organization for Metals and Energy Security (JOGMEC) has invested in a recycling facility in France that is expected to begin supplying dysprosium, among other materials, from 2027 onwards.

China continues to determine who has access to certain raw materials—and who does not. I have been active in the raw materials trade for more than three decades. For most of that time, availability was simply a matter of price, not physical access. I never imagined I would one day have to tell customers that we simply cannot supply certain materials. That makes it even more important to develop alternative sources of supply and reduce dependence on individual supplier countries. Europe and the United States are pursuing different strategies, and ultimately it will become clear how quickly these approaches can contribute to building a more resilient raw material supply.

Matthias Rüth
Managing Director TRADIUM

The scale of the challenge is highlighted by an estimate from the International Energy Agency (IEA): around USD 60 billion in global investment will be required over the next decade to establish diversified rare earth supply chains for magnet production. According to the IEA, most of this investment must be directed towards refining, separation, and magnet manufacturing.

Raw Material Strategies Continue to Diversify

The second quarter also brought significant political momentum. The G7 countries have committed to substantially reducing their dependence on rare earths and permanent magnets by 2030. Their strategy includes project financing, strategic stockpiling, recycling, improved market transparency and potential market-based instruments such as price floors and supplier diversification quotas. Despite these shared objectives, Europe and the United States continue to pursue markedly different approaches. The United States is placing greater emphasis on an industrial „mine-to-magnet“ strategy, seeking to rapidly expand domestic capabilities and expertise through mining projects, equity investments, long-term offtake agreements and acquisitions. The planned acquisition of Vacuumschmelze, based in Hanau, by U.S. company Energy Fuels is a good example of this approach.
The European Union, by contrast, continues to focus primarily on regulation and implementation of the Critical Raw Materials Act, which entered into force in 2024. Within Europe, France has emerged as the most prominent player. Through Solvay‘s operations in La Rochelle, the Caremag/Carester project and announced investments by USA Rare Earth, the country is positioning itself as a key hub for processing, refining, recycling, and magnet materials. Meanwhile, China further strengthened state control over strategic raw materials. In mid-June, Beijing introduced a

The rare earth market is beginning to change. Over the past several months, we have seen light rare earths such as neodymium and praseodymium gradually entering the market from new sources, albeit not yet in significant volumes. It is likely only a matter of time before this changes, as an increasing number of facilities in Europe and the United States are working intensively to bring production online. The situation is very different for heavy rare earths such as gadolinium and yttrium, which remain extremely difficult to source. It will still take considerable time before meaningful production capacity for these materials is established outside China. Nevertheless, Western countries are increasingly investing in alternative supply sources to reduce their dependence on the rare earth giant. This is both necessary and encouraging, as China‘s export data once again demonstrated during the second quarter that many countries still cannot rely on secure access to Chinese rare earth supplies.

Jan Giese
Head of Sales & Trading

comprehensive legal framework covering the exploration, mining, processing, trade, stockpiling, and emergency supply of strategic minerals. In addition, enforcement of export controls on strategic minerals was tightened with effect from 1 July. Violations, including unauthorized exports, attempts to circumvent export restrictions and illegal technology transfers, can now be reported more easily to the Ministry of Commerce.

Technology Metals: Markets Continue to Be Shaped by Supply Constraints

The technology metals markets continue to be driven by structural factors that have persisted for years. Demand from both civilian and defence-related high-tech industries remains strong—and in many cases continues to grow—while supply conditions remain volatile to critical. This is largely due to the high concentration of production in a small number of countries and the limited scalability of supply, as many technology metals are produced primarily as by-products. China's export controls, introduced over recent years for several technology metals and their various compounds, continue to add further pressure to already constrained markets.

Gallium—Export Recovery Without Meaningful Relief

Gallium illustrates these dynamics particularly well. Chinese exports collapsed at the beginning of the quarter, with just three kilograms leaving the country in April. Shipments recovered to 6,200 kilograms in May, although it remains to be seen whether this rebound will prove sustainable. One development stands out: for the first time this year, Japan received gallium shipments from China following the introduction of stricter export controls targeting the country's defence sector in January. Whether this signals the beginning of a broader easing of restrictions remains uncertain. Japan continues to face significant supply challenges for other strategic raw materials, including the heavy rare earths discussed above, as well as tungsten.

Conditions in the gallium market remained fundamentally unchanged during the second quarter. Although export volumes recovered following the dramatic collapse in April, there is still no indication of a reliable return to normal. Significant volumes are still missing from the market. The sharp fluctuations seen within just a few months once again demonstrate how closely global supply continues to depend on China's export licensing decisions. Japan's return as a destination for Chinese gallium exports is certainly noteworthy. After receiving no material for several months, the country imported significant volumes again in May. Whether this represents a lasting policy shift or merely a temporary adjustment to China's export strategy remains to be seen. The latest figures once again underline how selectively China continues to manage access to gallium. For industry, this means ongoing planning uncertainty and reinforces the need to systematically develop alternative supply chains.

Jan Giese
Head of Sales & Trading

Germanium—China's Exports Remain Concentrated on a Small Number of Countries

Although gallium and germanium often display opposing export patterns, germanium followed a very similar trajectory during the past quarter. After virtually no material left China in April, exports rebounded to 1,134 kilograms in May. As in previous months, the vast majority was shipped to Russia, while smaller volumes were delivered to Germany, Türkiye and several other countries that have also been regular recipients in recent months. This narrow group of destination countries reflects the continuing impact of China's export controls. Like gallium, germanium has been subject to strict export licensing requirements since the summer of 2023. As a result, trade flows have become increasingly volatile and, in some cases, appear to be influenced by China's political relations with individual importing countries. Both technology metals are essential for a wide range of civilian and defence-related applications, including semiconductor manufacturing.

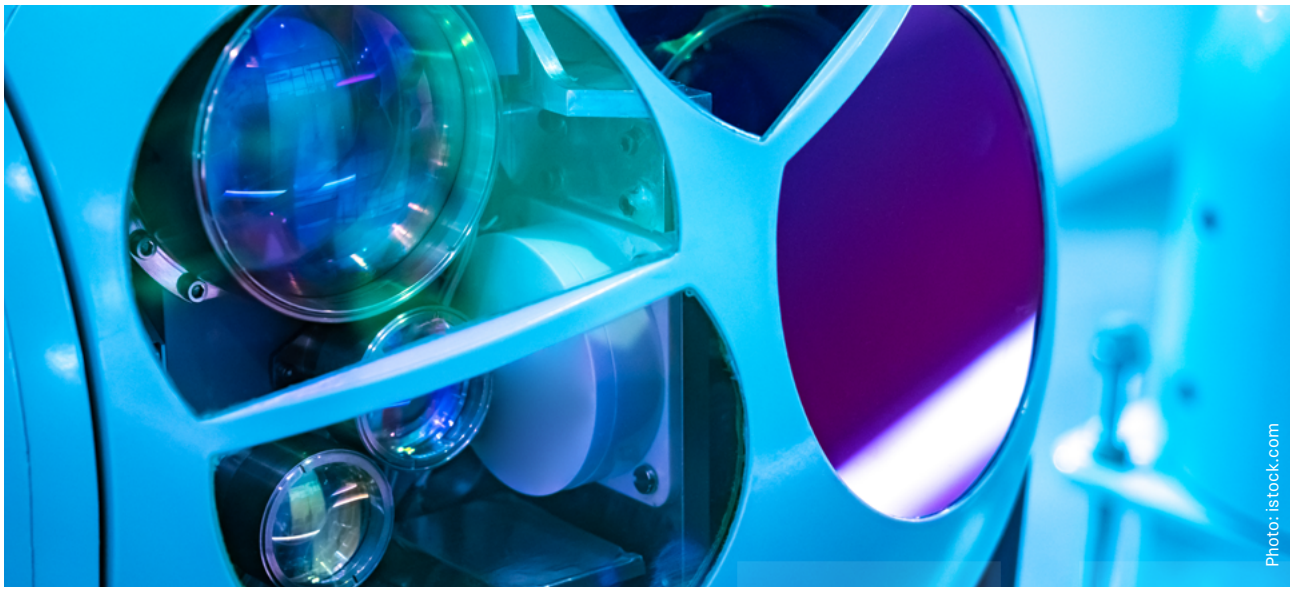


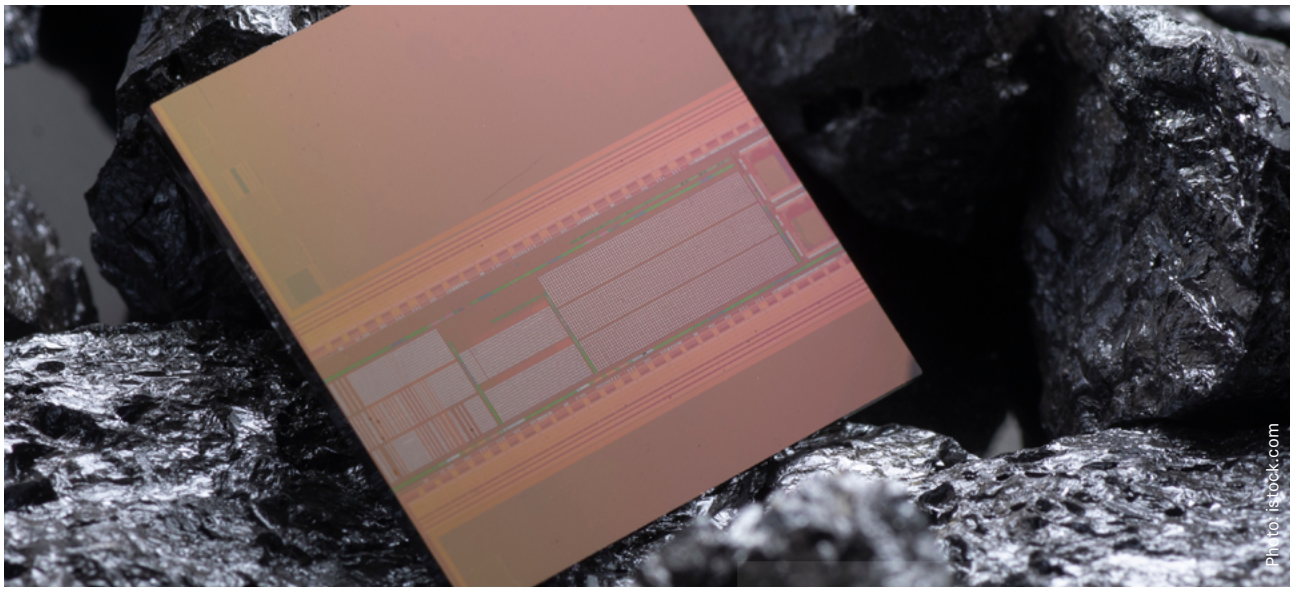
Photo: istock.com

The second quarter once again demonstrated that the germanium market continues to be shaped less by supply and demand fundamentals than by China's export policy. April's near-zero exports were followed by a sharp rebound in May. However, this does not signal a more stable market—it merely creates greater uncertainty. Shipments remain concentrated on a small number of destination countries, with Russia receiving by far the largest share. As a result, many consumers outside China continue to have only limited access to germanium. For end users, this means ongoing planning uncertainty in a market that has already been affected by structural supply constraints for an extended period. The prospects for a meaningful and lasting improvement in supply conditions therefore remain limited.

Dr. Christian Hell
Senior Manager Germanium and Minor Metals

Will Further Export Controls Follow?

The indium market continues to be characterized by its relatively small size and the strong concentration of demand in a handful of key applications. While indium tin oxide (ITO) remains essential for screens, touch panels, and displays, demand from the semiconductor industry is becoming increasingly important. In particular, indium phosphide is a critical material for optical chips and high-speed data transmission. China, however, introduced export restrictions on this and several other indium compounds in February 2025. More recently, media reports have suggested that export inspections are becoming increasingly stringent. According to these reports, export licenses for indium phosphide are already facing delays, resulting in order backlogs that could ultimately slow the global expansion of AI data centers. Given the relatively small size of the indium market, even modest shifts in supply or demand can trigger significant price movements.

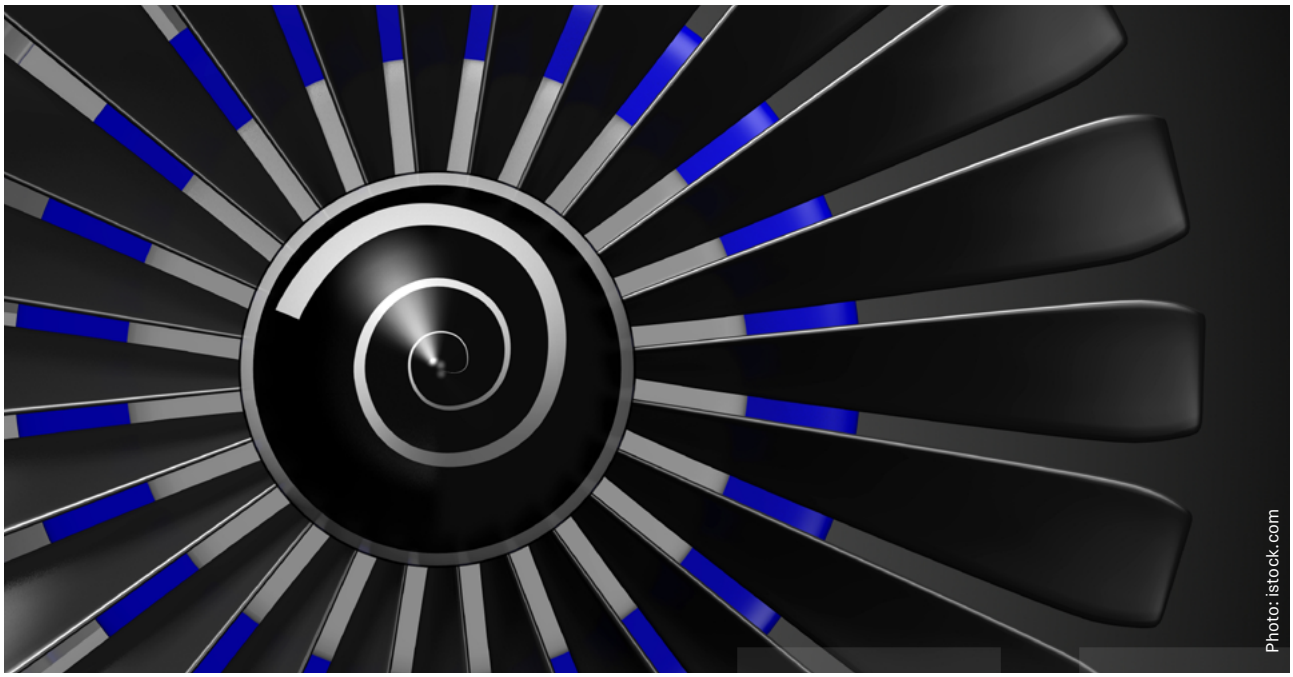


Demand for indium continues to be driven by advanced technologies such as semiconductors and advanced electronics. At the same time, supply can only be expanded to a limited extent, as indium is produced primarily as a by-product of zinc refining. This continues to support prices at a structurally elevated level and leaves little room for any meaningful easing of the market in the near term. Although China has not imposed export restrictions on indium metal itself—only on selected indium compounds—exports of indium metal are now also subject to closer scrutiny. This adds another layer of uncertainty to the market, even though no export suspensions have been reported so far.

Brian Hendrich
Junior Trader and Market Analyst

Hafnium—Persistent Tightness Continues to Support Prices

The trend observed over recent quarters continued in the hafnium market: robust demand combined with constrained supply chains, and this continues to support prices. Since hafnium is produced exclusively as a by-product of zirconium processing, annual production—estimated at just 70 to 75 metric tons—cannot easily be scaled up to meet growing demand. Since 2024, certain hafnium compounds have also been subject to Chinese export controls due to their potential military applications. As China remains one of the world's leading producers of hafnium metal, these restrictions have further reduced material availability and added to supply uncertainty.

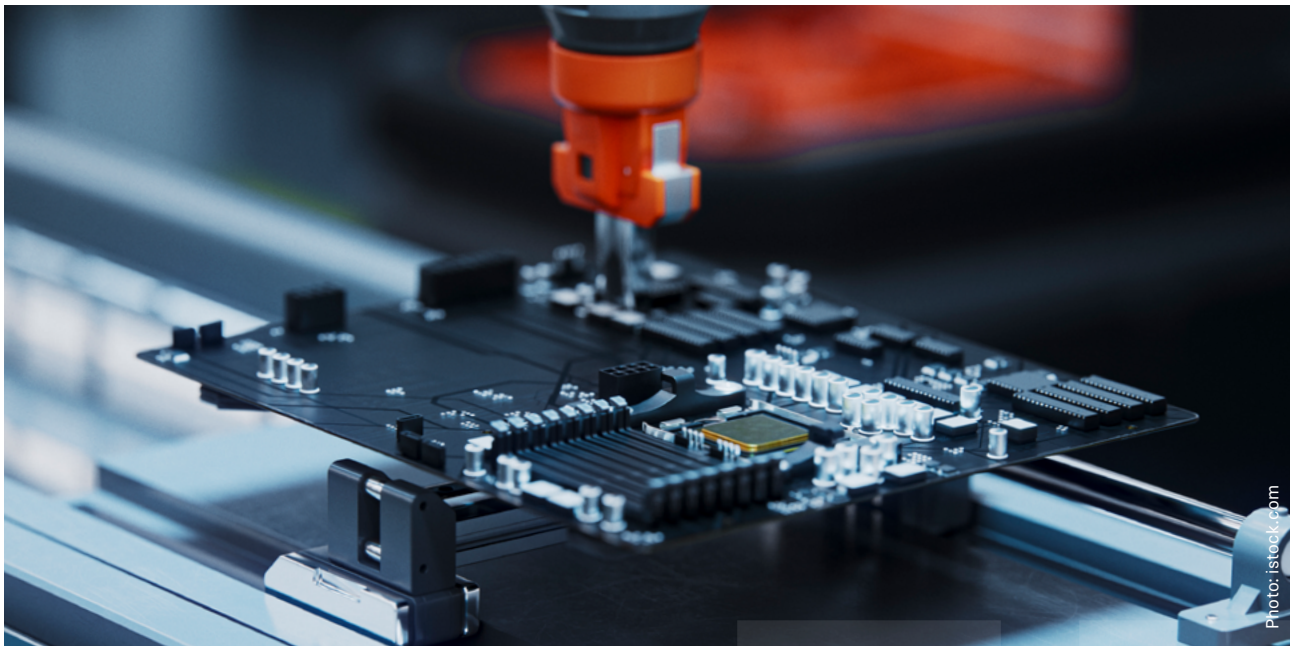


The hafnium market continues to be shaped by long-term supply agreements between producers and major consumers. Overall, market conditions remain relatively stable. In the spot market, efforts are being made to bridge supply gaps through the issuance of export licenses. However, progress remains slow. Reliable additional sources of supply are still unavailable, while material from China is becoming increasingly scarce. This persistent uncertainty continues to keep prices at a high level. At the same time, demand remains strong, particularly from the aerospace and power generation industries. There is currently no indication of any meaningful improvement in supply conditions or a decline in prices.

Frank Meier
Senior Manager Minor Metals

Antimony, Bismuth, and Tellurium—No Further Escalation for the Time Being

Antimony, bismuth, and tellurium are also technology metals—relatively small and highly specialized markets where even modest shifts in supply or demand can have a noticeable impact. At present, however, market conditions appear less strained than those for germanium or indium. Antimony is widely used in flame retardants, alloys, and battery technologies. Bismuth is primarily used in pharmaceuticals, solders, and lead-free products, while tellurium is an important material for thin-film solar cells and thermoelectric applications. China continues to dominate the processing of both bismuth and tellurium, accounting for more than 80% of global capacity in each case. Although China‘s share of global antimony mine production is comparatively lower at around 36%, downstream processing remains highly concentrated there as well.



Industrial demand for antimony has remained stable. At the same time, supply is gradually increasing, as new producers have begun mining ore deposits and expanding processing capacity in several regions around the world. This is adding material to the market and providing some relief to supply conditions. In contrast, there have been no significant developments in the bismuth and tellurium markets. Overall, both markets appear well balanced, with temporary supply disruptions currently being absorbed relatively quickly.

Frank Meier
Senior Manager Minor Metals

Precious Metals Under Pressure from Higher Interest Rates —Consolidation Defines the Second Quarter

The second quarter of 2026 brought no recovery for precious metals markets following the correction that began in March. The dominant driver over the past three months was U.S. monetary policy. The energy price shock triggered by the U.S.–Iran conflict, particularly the temporary closure of the Strait of Hormuz, pushed U.S. consumer inflation to 4.2% in May, its highest level since April 2023. As a result, markets progressively priced out expectations of interest rate cuts. Since gold and silver do not generate any yield, higher interest rates significantly increase their opportunity cost relative to bonds and money market instruments. Consequently, the appeal of both metals declined compared with interest-bearing investments.

At the same time, expectations of a prolonged period of elevated interest rates lifted the U.S. dollar to a 13-month high, adding further pressure to precious metals priced in the currency. The combination of a stronger dollar, rising real yields, and persistently high oil prices prompted investors to rotate capital out of precious metals and into the energy sector as well as U.S. equities, both of which reached new record highs during the quarter.

Central Banks Continue to Buy

Demand trends presented a mixed picture. Physically backed gold ETFs recorded significant outflows during the quarter. In contrast, central bank demand remained robust. China increased its gold reserves for the eighteenth consecutive month, while the European Central Bank confirmed that gold has overtaken U.S. Treasury securities as the world‘s largest reserve asset, now accounting for approximately 27% of global central bank reserves.

Silver faced a double headwind during the quarter. Like gold, investment demand suffered from the higher interest rate environment. At the same time, concerns over slowing economic growth—fuelled by the energy price shock—also weighed on silver because of its significant industrial applications. The gold-to-silver ratio rose from around 62 at the beginning of the quarter to between 85 and 89 at times—a level that has historically indicated a relative undervaluation of silver.

Shortly before the end of the quarter, the announcement of a ceasefire between the United States and Iran provided temporary relief. Oil prices and inflation expectations eased, allowing both gold and silver to gain more than three percent in a single trading session. Whether this marks the beginning of a sustained recovery, however, remains uncertain.

Platinum Group Metals Also Under Pressure

The platinum group metals (PGMs) also came under pressure during the quarter, although for different reasons. Platinum continued to trade in a structurally tight market characterized by persistent supply deficits. At the same time, it is facing declining demand from the automotive sector as the market share of battery electric vehicles continues to grow. Palladium, meanwhile, presented a different picture. Higher Russian production and increasing recycling volumes are expected to push the market into surplus in 2026 for the first time in several years, putting downward pressure on prices. Overall, the platinum group metals broadly followed the wider precious metals market in responding to U.S. monetary policy and macroeconomic expectations, albeit to varying degrees.

The second quarter of 2026 will likely be remembered as the quarter in which macroeconomic forces erased roughly half of an unprecedented precious metals rally within just a few weeks. Gold, silver, and the platinum group metals all reached historic highs during the first quarter—gold at USD 5,595, silver close to USD 121 and platinum just below USD 3,000. By the second quarter, however, they had fallen below key psychological thresholds: gold dropped below USD 4,000, silver below USD 60, platinum below USD 1,600 and palladium below USD 1,200.

The correction was driven by two major developments. First, the new Federal Reserve Chair, Kevin Warsh, made it unmistakably clear that his tenure is unlikely to provide a supportive environment for precious metals investors. Second, the ceasefire between the United States and Iran removed much of the geopolitical risk premium from the market. Capital did not return to gold but instead flowed increasingly into AI-related stocks, space companies, and other risk assets. Silver faced an additional challenge, as the artificial supply tightness caused by the U.S. tariff dispute earlier in 2026 has now completely disappeared. Inventories have normalized and the market is once again adequately supplied. For platinum, one important structural development received relatively little attention despite the broader market correction. With the first successful physical delivery against a GFEX platinum futures contract, China has established a credible physically deliverable futures instrument that could support additional demand over the longer term.

From TRADIUM‘s perspective, the outlook is clear: we do not see a fundamental shift in the market, but rather the unwinding of speculative excesses. The Jackson Hole Symposium at the end of August, where Kevin Warsh is expected to formally outline his monetary policy stance, will likely be the next key market catalyst. Until then, patience remains the most prudent strategy.

Philipp Götzl-Mamba
Head of Sales & Trading

Outlook: Between Fed Signals and New Export Controls

The unusually wide range of year-end gold price forecasts reflects the high degree of uncertainty currently surrounding the market. Goldman Sachs has revised its target down to USD 4,900 per ounce, while J.P. Morgan and Wells Fargo continue to project prices of USD 6,000 and USD 6,100–6,300 per ounce, respectively. All these forecasts remain well above current market levels.

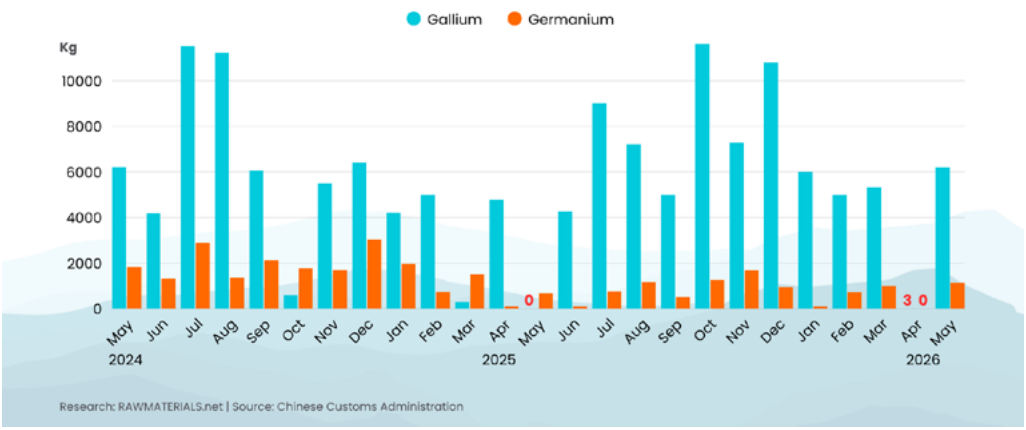
In the near term, developments in the gold market—and across precious metals more broadly—are likely to continue to be driven primarily by trends in energy prices, foreign exchange markets, and signals from the Federal Reserve. Further de-escalation in the Middle East, lower oil prices, and easing inflationary pressures would create room for a return to a more accommodative monetary policy, providing the most important prerequisite for a recovery in precious metals prices.

Meanwhile, markets for rare earths and technology metals are expected to remain heavily influenced by geopolitical developments in the months ahead, particularly the relationship between China and the United States. The meeting between U.S. President Donald Trump and Chinese President Xi Jinping in May already demonstrated how closely raw material supply has become intertwined with foreign and trade policy negotiations. While the meeting produced no concrete outcomes regarding rare earths, the issue is likely to become even more urgent for the United States and its Western allies given their continued dependence on Chinese supply and the prospect of additional export controls.

Another summit is scheduled for the autumn, shortly before the suspended second wave of Chinese export controls on rare earths could once again come into effect. Against this backdrop, it remains to be seen whether the prospect of new trade restrictions will further accelerate the development of alternative supply networks outside China, or whether industry will continue to rely on a political agreement between Washington and Beijing.

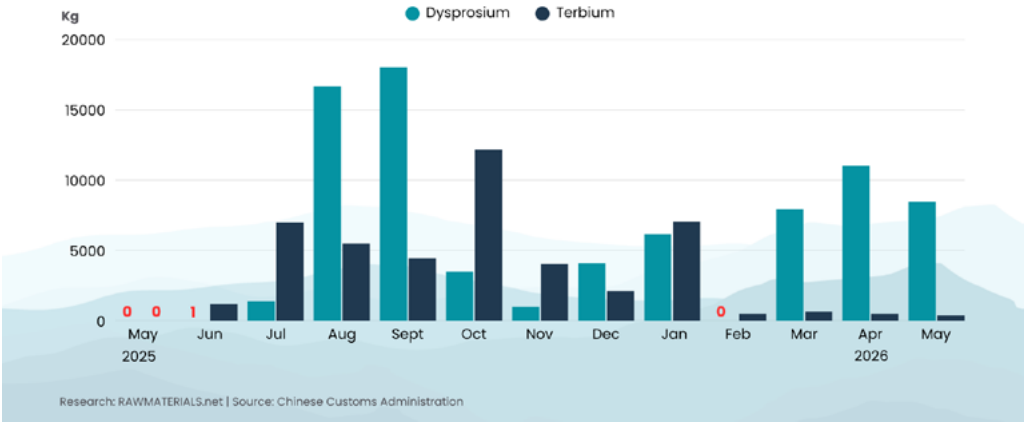
GALLIUM AND GERMANIUM

Exports from China 2024–2026



DYSPROSIUM AND TERBIUM

Exports from China 2025–2026



RARE EARTH MAGNETS

Exports from China 2025–2026

This TRADIUM Market Report was produced in collaboration with the news portal Rawmaterials.net.

TRADIUM/Rawmaterials.net in the Media

The expertise of TRADIUM and rawmaterials.net remained in high demand throughout the second quarter of 2026, providing commentary and clear explanations on current developments in critical raw materials.

In the media overview from TRADIUM and Rawmaterials.net, you can find a summary of the most important mentions:
https://tradium.com/company/media/
https://rawmaterials.net/rohstoff-net-rawmaterials-net-in-the-media/

About TRADIUM

Founded in 1999, TRADIUM GmbH is a privately owned company based in Frankfurt am Main, Germany.
We supply a wide range of high-tech industries—including electronics, automotive, glass, ceramics, and dental technology—with technology metals, rare earths, and precious metals. TRADIUM works globally with a trusted network of international producers. Our long-standing partnerships ensure reliable sourcing, market proximity, and up-to-date product availability. Companies can use our high-security bondes warehouse operated by partner METLOCK.

About Rawmaterials.net

Rawmaterials.net is the first news portal dedicated exclusively to rare earths and technology metals.
It offers breaking news, in-depth analysis, expert interviews, and historical insights—all in one place.