

TRADIUM Market Report

Muted Momentum and Persistent Risks

Compared with the first half of the year, the third quarter of 2026 was relatively quiet. Geopolitical factors, including China's export controls, continued to shape the supply of many critical raw materials. Precious metal markets, meanwhile, remained dynamic throughout the quarter. Our market report reviews the key developments.



Q3/26

The third quarter of 2026 saw no major new developments, but the supply of strategic raw materials remained closely tied to geopolitics. China's export controls continued to shape market conditions, with particularly tight availability for raw materials such as terbium and germanium. Recent talks between Beijing and Washington may point to some easing of tensions. Even so, securing reliable supplies is likely to remain challenging for buyers in the months ahead. Developing new raw material projects outside China therefore remains essential, and several initiatives made further progress during the quarter. Alongside gold and silver, platinum group metals attracted greater attention over the past three months. Limited supply and new sources of demand were key factors shaping these markets. Our report examines these developments and the other factors affecting the supply of rare earths, minor metals and platinum group metals.

Alternative Supply Chains Advance, but Questions Remain

After the strong political and industrial momentum of the second quarter, critical raw material markets were calmer over the past three months. Efforts to build supply chains independent of China nevertheless continued to gather pace. Neo Performance Materials began commercial production of rare earth magnets in Estonia, while new raw material projects were announced in Germany. Whether these initiatives can develop into competitive capacity remains to be seen. Announcements and initial production milestones alone do not yet resolve the wider challenge of diversifying supply.

For the time being, there is no way around China's market power: its shares of mining and processing are too large, and its expertise and infrastructure too significant. Export controls therefore remained a defining issue. Beijing extended restrictions to European companies and organizations in security-sensitive and dual-use sectors. In July, it added 14 to its export control list, tightening licensing requirements. Although [recent talks with the United States](#) suggested some easing of trade tensions, uncertainty over Beijing's export policy is likely to persist into the new year.

The West has so much catching up to do in critical raw materials such as rare earths, gallium and germanium that its dependence on China cannot be fully offset within the next few years. We therefore need to assess our own position realistically and recognize the scale of the challenge ahead. I have worked with Chinese trading partners since the company was founded around 27 years ago. That experience has convinced me that, alongside developing alternative sources of supply, diplomacy remains important and worthwhile. As long as Beijing dominates key raw material markets, dialogue with China will, in our view, remain essential to security of supply.



Matthias R  th

Managing Director TRADIUM

Europe's Raw Material Ambitions Face Market Constraints

An analysis by Germany's [ifo Institute](#) highlights the scale of Europe's challenge. For only four of the 27 critical raw materials examined does the EU account for more than 5% of global mining output; for nine, its share is zero. The institute therefore considers the Critical Raw Materials Act targets for 2030 difficult to achieve. More projects, reliable financing commitments and long-term offtake agreements are needed.

The US Department of Defense's [procurement rules](#), tightened in early July, are adding further pressure to supply chains. From 2027, stricter origin requirements will apply to certain rare earth magnets and tantalum and tungsten products. Through subcontractors, they could also affect companies outside the United States. Exemptions cover certain commercial off-the-shelf products, recycled magnets and cases where compliant material is not sufficiently available. US and Japanese buyers are also more willing to pay higher prices for non-Chinese supply, while European customers remain more price-sensitive. Competition for alternative volumes is intensifying, increasing Europe's risk of falling behind in securing supply.

Gold and Geopolitics Keep Markets Moving

Gold was an exception to the calmer market environment, with prices fluctuating more sharply during the quarter than those of many industrial metals. The conflicts in Ukraine and the Middle East remained risks for energy prices transport routes and strategic raw material supply chains. In the Middle East, oil and gas flows and key shipping routes are the main concern. The war in Ukraine puts longer-term pressure on metal, energy and defense supply chains. Higher defense production also increases demand for strategic raw materials and competition for available volumes.

Uncertainty over the future shape of China's export rules for critical raw materials remains a key factor in the markets. Questions persist over their scope, licensing practices and possible adjustments to the restrictions, making long-term planning more difficult for companies. This underlines the importance of reliable alternatives within the supply chain. There was considerable movement on this front in the third quarter. New projects were announced or advanced around the world, while expansions of existing capacity are also planned. This is a positive development, but it is not enough on its own to create more resilient supply chains. The entire value chain needs to be taken into account. A new mine offers only limited benefit if the material still has to be separated, refined or further processed in China. Conversely, a new magnet plant also requires a reliable supply of suitable feedstock and stable demand.



Eric Damasceno Hendrich

Market Analyst

Rare Earth Export Uncertainty Persists Until at Least January

Rare earth supply chains outside China continued to take shape in the third quarter, with greater attention to the full value chain, from mining and processing through to magnet production and recycling. In September, Neo Performance Materials began commercial production of neodymium-iron-boron magnets in Estonia. France's Carester plans to integrate several processing stages within Europe. Such projects remain essential: China's share of refining has declined only slightly, according to the [International Energy Agency](#). Dependence on Chinese processing capacity therefore remains high, especially for heavy rare earths, where alternative supply chains are still being developed.

Chinese export data highlight the need for alternatives. [Dysprosium shipments](#) fell from almost 11,300 kg in July to just under 890 kg in August. Terbium exports rose from just over 1,300 kg to more than 2,250 kg but remained below the previous year's level. Only a few destinations received material; the United States received none. Uncertainty over China's rare earth export rules remained high at quarter-end. Attention centered on [additional controls](#), originally due in November, that would extend Beijing's reach to products manufactured abroad. These would include products containing at least 0.1% Chinese-origin rare earth content.

Announced in early October 2025, the measures were soon suspended for one year. They were not explicitly mentioned at the September 24, 2026 meeting between US President Donald Trump and Chinese President Xi Jinping. Both sides did, however, confirm an extension of the trade arrangements agreed in Malaysia in 2025. Since the suspension was part of that package, there are strong indications of another postponement until January 10, 2027.

There is plenty of political discussion about improving rare earth supply, but little of that discussion has translated into improved availability on the physical market so far. Dysprosium and terbium prices outside China rose sharply in the third quarter as inventories in Western markets steadily ran down, leaving buyers with less material to draw on. Chinese exports of heavy rare earths also remained well below levels seen before the controls were introduced. Domestic Chinese prices, meanwhile, eased from their mid-quarter highs, significantly widening the gap between China and the rest of the world. Light rare earths presented a different picture: neodymium and praseodymium prices remained broadly stable. The main reason for this is the growing supply of these raw materials from sources outside China. The price floor agreed between the US Department of Defense and MP Materials also appears to be stabilizing the market, even though neodymium-praseodymium oxide in China recently traded below that level.



Brian Hendrich

Junior Trader and Market Analyst

New Gallium and Germanium Suppliers Come Into View as China Remains Dominant

Gallium and germanium remain subject to China's 2023 export restrictions. Prices outside China are now several times their pre-control levels, yet even buyers willing to absorb the additional cost cannot be certain that material will be available. AI infrastructure, fiber-optic networks and infrared imaging are major demand drivers. Some [companies are stockpiling](#) against potential shortages, which could further tighten availability.

New capacity is planned outside China: gallium projects in Greece and Australia, and germanium projects in the United States and Canada. It is likely to take time for these projects to deliver substantial volumes and meaningfully diversify supply. How much output will reach the open market is also uncertain, as long-term offtake agreements can commit volumes to individual buyers before operations begin, leaving only part of the planned production available to other customers. China's vast capacity and cost advantages make competition difficult for new suppliers. Chinese shipments therefore remain crucial to global supply, despite ongoing efforts to establish additional sources elsewhere.

Export volumes fluctuate sharply. In August, China's gallium exports fell around 95% from July to 350 kg. Germanium shipments rose to almost 2,800 kg, the highest monthly total so far in 2026. China's licensing system governs both volumes and which buyers receive material for which purposes. Trade flows can therefore partly reflect Beijing's current relationship with each importing country. Russia has been the main germanium destination for months. Notably, Japan received a small volume in August. Since Beijing tightened restrictions targeting Japan's defense sector in January, [gallium and germanium shipments to Japan](#) have fallen considerably, although civilian exports officially remain possible.

Germanium availability did not improve in the third quarter. By 2025, we estimate that the market was already short by roughly the equivalent of one full year of global production. Since then, the gap between the amount of material needed and the amount available has continued to grow. Beijing's export restrictions remain unchanged, while prices outside China have reached levels we have never seen before. Given the continuing trade restrictions and geopolitical conditions, this development was foreseeable. Even so, some buyers expected conditions to ease, more raw materials to return to the market and prices to fall. Those expectations have not been met, and the anticipated improvement has so far failed to materialize. Buyers that need material cannot rely on waiting for an improvement. Companies must prepare to spend substantially more on procurement than they have in the past. Unless the supply situation changes fundamentally, I see little scope for lasting market relief in the foreseeable future.



Dr. Christian Hell

Senior Manager Germanium and Minor Metals

Strong Demand in Niche Markets: Hafnium and Rhenium

Hafnium is one of the few critical raw materials in which China still has a comparatively small market share. France alone accounts for almost half of global production, according to [EU data](#). This could change over time, as China's JPTech seeks to expand its European presence. In mid-September, the group announced plans to produce high-purity hafnium in Bad Leonfelden, Austria. JPTech also plans a new facility in China's Jiangsu province. Aerospace is a major demand driver for both hafnium and rhenium. These raw materials are added to alloys to improve heat resistance and durability. Hafnium also sees demand from the nuclear and semiconductor industries. Substitution remains difficult in many of these applications, limiting buyers' options when sourcing becomes more challenging.

Both metals face growing demand from high-tech sectors, but supply remains limited. Hafnium is recovered during zircon processing, with estimated annual output of no more than around 75 metric tons. China also imposes export controls on certain hafnium products, including the pure metal. How much additional material the planned Austrian plant could supply in the near term remains unclear. According [to the company](#), electricity supply at the site is currently insufficient for a major expansion.

Rhenium supply is likewise tied to other metals. It is generally recovered from molybdenum concentrates, while molybdenum itself is often a by-product of copper mining. The scale of copper mining, and therefore the associated production of these by-products, is not determined by demand for rhenium itself. Because the global markets for both rhenium and hafnium are relatively small, supply disruptions or additional orders can have a noticeable impact on prices.

The rhenium market was quieter than expected in the third quarter. Aircraft manufacturers and aerospace suppliers in particular held back on purchasing. This purchasing restraint does not, however, change the metal's underlying structural scarcity or the limited supply available to the market. Softer demand initially removed some upward pressure from prices, but they stabilized at elevated levels and declined only marginally during the quarter. The slight price decline is therefore far from a fundamental easing of market conditions. Demand is only part of the equation; supply is even more important. The amount of material actually available determines how stable the market can remain. Current purchasing restraint may also mean that demand is simply being deferred rather than disappearing. If buyers catch up on their purchases, the market could quickly tighten again. Additional volumes cannot be made available at short notice, leaving very little room for maneuver.

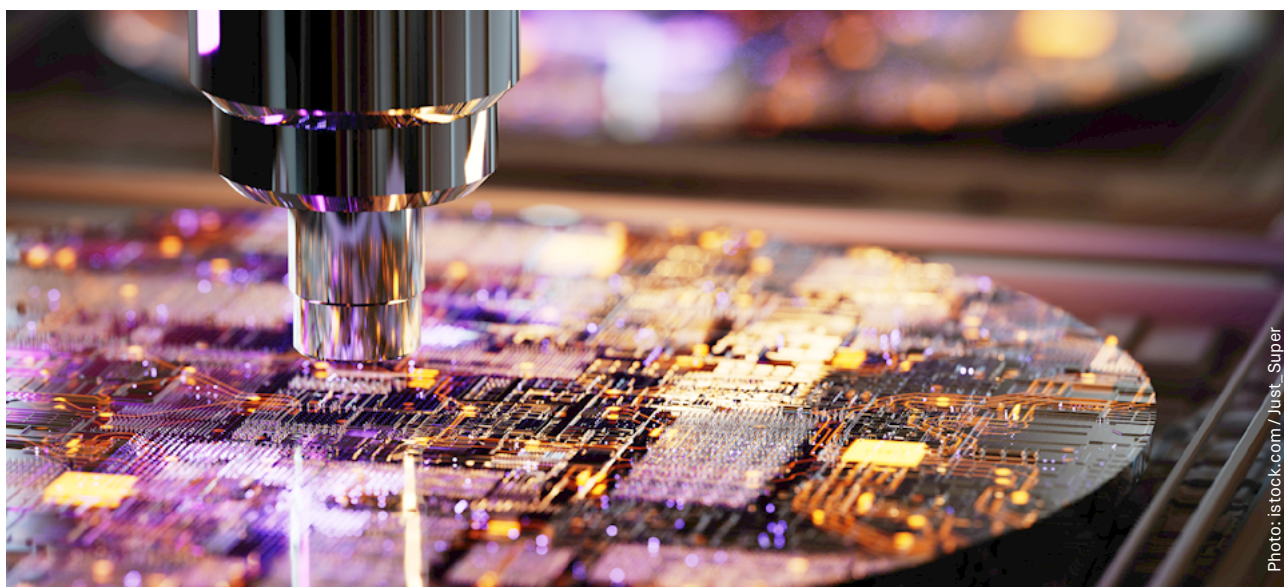


Philipp Götzl-Mamba

Head of Sales & Trading

Indium Buyers Face Persistent Supply Uncertainty

Indium demand remains concentrated in a few key applications. Indium tin oxide (ITO), used as a transparent conductive coating in displays and touchscreens, accounts for the largest share of consumption across these applications. Indium phosphide is also gaining importance in optical chips for high-speed data transmission. China, the leading producer, has imposed export controls on these and other indium compounds since February 2025, citing their potential use in military applications. Civilian shipments can still receive licenses, but processing times are difficult to predict, creating persistent procurement uncertainty. Indium metal itself is not covered by the controls. Nevertheless, supply problems remain possible in a market with annual refined production of only slightly more than 1,000 metric tons. Exports of the metal also face increasingly strict scrutiny, adding another source of uncertainty for buyers seeking reliable deliveries.



The indium market is under pressure. Alongside strong demand for indium tin oxide (ITO) for touchscreens, consumption of indium phosphide is rising, especially in data centers. As a by-product of zinc production, indium supply cannot easily be scaled up. As a result, prices in Europe and North America rose steadily throughout the past quarter. China's export licensing for indium phosphide and tighter customs checks on indium metal constrain availability. Domestic Chinese prices recently eased slightly, while quotations in Europe and the United States rose, further widening the price gap, or spread, between the Chinese and Western markets.



Brian Hendrich

Junior Trader and Market Analyst

Antimony, Bismuth and Tellurium Remain Reliant on China

Antimony, bismuth and tellurium are minor metals with small, specialized markets and a general trend toward rising demand from specific high-tech sectors. Supply conditions were less critical in the third quarter than for gallium or indium. Dependence on China remains high, however, as the country dominates refining for all three metals. Beijing has also imposed strict export controls on selected products, including the pure metals, antimony ores, high-purity antimony oxides, bismuth germanate and crystalline cadmium telluride. Shipments of the affected materials require export licenses, keeping access to Chinese supply subject to regulatory approval despite the calmer conditions seen during the quarter. Antimony is used in flame retardants and alloys, among other applications. Bismuth's uses include solders and lead-free products, while tellurium serves thin-film solar cells and thermoelectric applications.



The antimony market continued to ease in the third quarter. Sufficient material is available in various grades, allowing buyers to cover their requirements without major difficulty. Prices have declined accordingly, although it is still too early to determine whether this decline has brought the market to its price floor. Notably, China's export controls remain unchanged but currently have little impact on the market. Tellurium prices have also eased somewhat, without a clear trigger for the decline. Bismuth, meanwhile, has been uneventful: supply and demand are well balanced, and prices have remained correspondingly stable throughout the period.



Frank Meier

Senior Manager Minor Metals

Precious Metals: Gold and Platinum Group Metals Gain Fresh Momentum

Precious metal markets remained dynamic in the third quarter. Alongside gold and silver, platinum group metals (PGMs) attracted greater attention. Platinum and palladium benefited from tight market balances and firmer automotive demand. For smaller PGMs, structurally limited availability and emerging technological applications attracted growing attention. Rhodium remained volatile amid low inventories and heavy reliance on South African production. Ruthenium and iridium are gaining strategic importance in semiconductors, AI infrastructure, specialized electronics and the hydrogen economy. Technological developments are increasingly influencing prices alongside traditional supply and demand fundamentals.

Gold is sending a remarkable signal. Despite yields on 10-year US Treasuries above 5%, its price is holding above \$4,000 per ounce. When US yields approached 5% in the fall of 2023, gold was trading around \$2,000. The comparison illustrates how much the market has changed: the traditional relationship between interest rates and gold prices has shifted, at least to some extent.

High yields remain a headwind for a non-yielding asset such as gold. Meanwhile, geopolitical uncertainty, diversification of foreign exchange reserves and sustained central bank demand have increased its strategic importance. US monetary policy will be crucial to the market's direction. If inflation remains elevated and the economy stays robust, high real yields could weigh on gold. A return to easier monetary policy, by contrast, would reduce one of the major headwinds currently facing the gold market. Gold's resilience in the current high-interest-rate environment is therefore particularly striking.

We also see changing dynamics among platinum group metals. Rhodium remains vulnerable to sharp short-term price spikes because production is extremely concentrated and inventories are low. Over the medium term, however, its heavy dependence on automotive catalysts could become a burden as vehicle electrification advances.

Ruthenium and iridium are attracting additional demand from emerging technologies. Semiconductors, AI infrastructure, specialized electronics and, over time, the hydrogen economy are generating additional demand in markets where supply is both extremely small and highly concentrated. More than 90% of mined ruthenium and iridium comes from South Africa. Even moderate shifts in demand can therefore significantly affect availability and prices. For industrial buyers, security of supply, early procurement and active inventory management are becoming increasingly important.



Philipp Götzl-Mamba

Head of Sales & Trading

Policy Decisions Shape the Year-End Supply Outlook

Relations between China and the United States are likely to remain a major influence on rare earth and minor metal markets in the fourth quarter. Further meetings between US President Donald Trump and Chinese President Xi Jinping will be closely watched, including at APEC in Shenzhen in November and the G20 summit in Miami in December. The key question is whether diplomacy can bring greater planning certainty to raw material supply.

The Kuala Lumpur trade arrangement, extended through January 10, 2027, points to another postponement of the additional rare earth export controls. Separate confirmation is still pending, however, and the older, extensive restrictions introduced in April 2025 remain in force. For gallium, germanium and antimony, the suspension of the US-specific export ban is currently due to expire on November 27. The immediate impact is likely to be limited, since direct Chinese shipments to the United States are already heavily restricted.

The US midterm elections on November 3 could also affect the development of alternative supply chains. Future majorities in Congress are likely to influence support programs, defense spending and critical raw material legislation in 2027.

For Europe, the EU-Canada summit on October 29–30 could provide fresh momentum. Closer cooperation on critical raw materials and the EU's proposed associate membership for Canada are likely to feature in discussions. The details of that arrangement remain undefined.

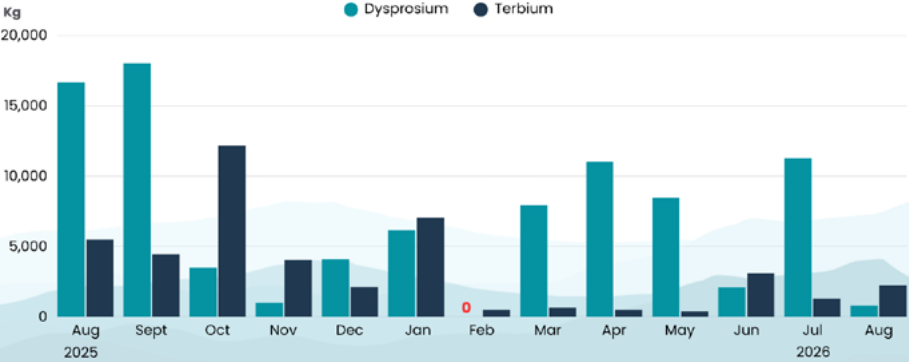
In precious metals, attention will turn to interest-rate decisions in the United States and the eurozone in October and December. Their effects on bond yields and exchange rates can influence investment demand. Geopolitics will also remain important. Escalation involving Iran or the war in Ukraine would likely strengthen demand for gold as a safe haven. Higher energy prices, however, could add inflationary pressure. Expectations of higher interest rates could then weigh on gold.

For platinum, palladium and rhodium, economic conditions and demand for emission-control catalysts in combustion-engine and hybrid vehicles remain key factors. On the supply side, mining remains highly concentrated in a few countries. South Africa and Russia in particular shape global availability, so production disruptions or geopolitical tensions can quickly feed through into supply chains.

DYSPROSIUM AND TERBIUM

Exports from China 2025-2026

TRADIUM

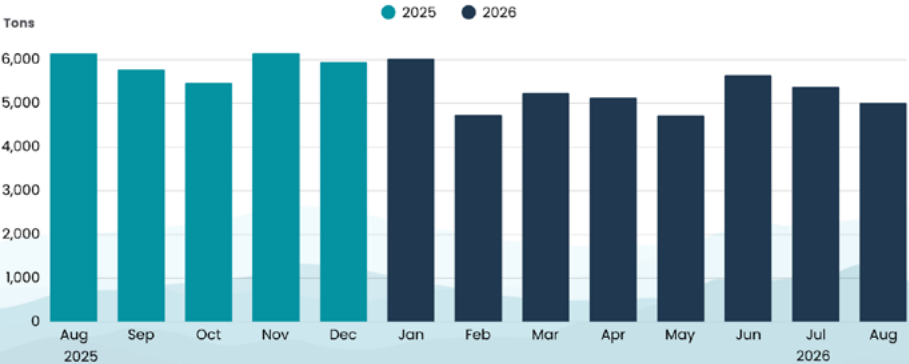


Research: RAWMATERIALS.net | Source: Chinese Customs Administration

RARE EARTH MAGNETS

Exports from China 2025-2026

TRADIUM

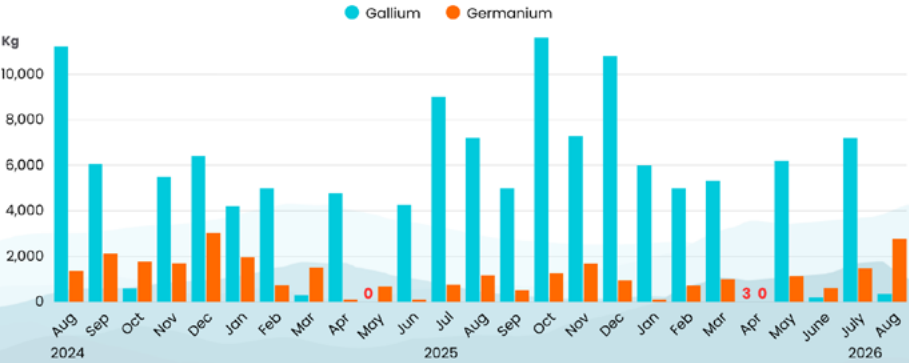


Research: RAWMATERIALS.net | Source: Chinese Customs Administration

GALLIUM AND GERMANIUM

Exports from China 2024-2026

TRADIUM



Research: RAWMATERIALS.net | Source: Chinese Customs Administration

This TRADIUM market report was produced in cooperation 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 third 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:

tradium.com/company/media/

rawmaterials.net/rohstoff-net-rawmaterials-net-in-the-media/

About TRADIUM

TRADIUM GmbH is an owner-managed company based in Frankfurt am Main and has been active in the international raw materials trade since 1999. The company supplies industrial and commercial customers with technology metals, rare earths, and precious metals. These raw materials are used in a wide range of applications, including electronics, automotive manufacturing, and medical technology.

TRADIUM's international network provides access to diversified sources of supply and alternative material streams. In addition, the company offers refining services for selected raw materials through specialized partners. For secure storage, customers have access to the high-security and bonded warehouses operated by TRADIUM's partner company, 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.