TRADIUM

TRADIUM Market Report

Critical Raw Materials: The U.S. Takes the Lead

Ongoing geopolitical tensions between the United States and China left a clear mark on global commodity markets and numerous industries in the third quarter of 2025. In this Market Report, we highlight the most significant developments and assess how the supply situation for key metals may evolve in the coming months.

The strained supply of critical raw materials and record-high prices for precious metals are closely linked to the ongoing economic and political standoff between China and the United States. Over the past three months, these tensions have shown little sign of easing. At the same time, momentum is building to establish production capacities independent of resource superpower China, led above all by the U.S.

The U.S. government has not only launched extensive financial support programs, but the Department of Defense has also taken a direct stake in the country's leading rare earth producer. Beyond being a clear vote of confidence in domestic industry, the Pentagon has set a precedent by offering purchase and price guarantees within this critical sector. Could this serve as a model for Europe? And what other factors have shaped the markets for rare earths, technology metals, and precious metals? Our Q3 2025 Market Report examines these questions in depth.

Rare Earths Made in the USA: Government Steps In

In July, the U.S. Department of Defense made headlines by investing in rare earth producer MP Materials. With a $400 million equity purchase, the Pentagon became the company's largest shareholder. At the same time, it committed to purchasing the full output of MP's rare earth magnet factory, which is slated to come online by 2028.

For industry observers, however, one aspect of the agreement stood out even more: under a 10-year contract, the Pentagon guaranteed a minimum price for neodymium-praseodymium (NdPr), a key precursor for the production of permanent magnets. This price floor, set above current market levels, is widely interpreted as a clear signal of Washington's intent to reduce reliance on Chinese imports and foster a domestic rare earth industry. In the past, high production costs in the West had made such ventures uneconomical. Shortly after the Pentagon's move, Apple, one of the world's leading tech companies, announced a separate partnership with MP Materials, adding further weight from both government and industry.

Government-backed minimum prices for rare earths produced outside China have since been repeatedly discussed as a potential lever to diversify supply chains. Beyond the U.S., Australia, the G7, and the EU have all taken up the issue in various formats, though concrete measures remain lacking. MP Materials CEO James Litinsky, meanwhile, views his company's arrangement with the Pentagon less as a blueprint than as a unique case: thanks to its integrated value chain, from mining to finished magnets, MP occupies a singular position in the market.

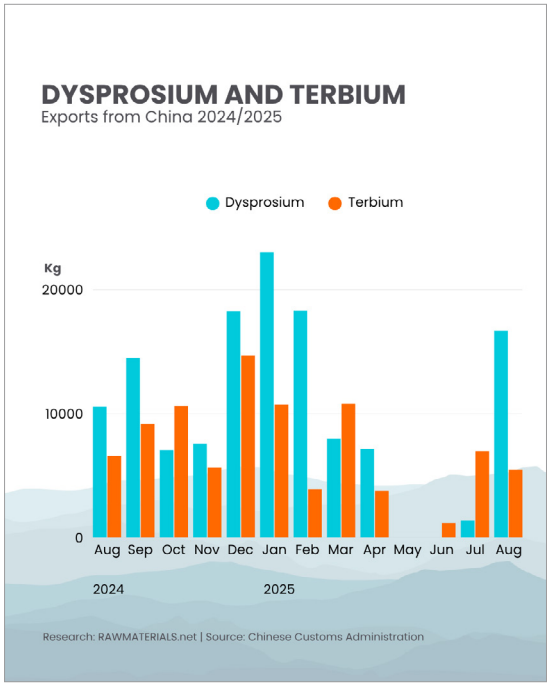
The U.S. government's willingness to pursue resource and technology sovereignty through both subsidies and direct stakes is underscored by its involvement in other strategic sectors. Notable examples include its investment in Lithium Americas, which plans to mine battery-grade lithium domestically, and the acquisition of state-held shares in chipmaker Intel.

Supply Risks Remain

The relevance of efforts to (re)build a rare earth industry outside China becomes evident when looking at recent export data. The picture is mixed: while exports of dysprosium, subject to strict Chinese export controls since April, have recently increased, exports of terbium are declining. The supply of the metal, which is critical for boosting magnet performance, remains tight.

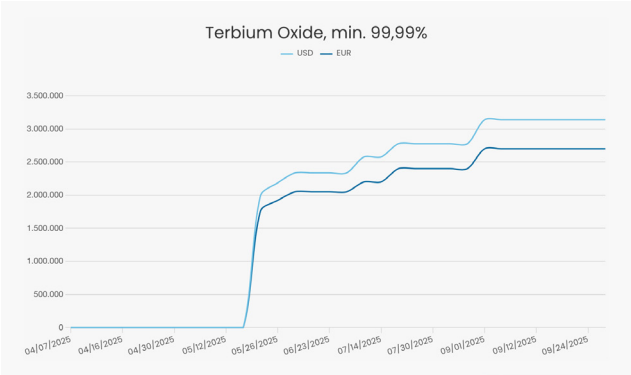
There is some positive news on the magnet side, however: supply to Western industries has begun to normalize. Still, Beijing's export controls introduced in April significantly restricted availability, as all rare earth magnets had to be screened for compliance before export. Meanwhile, China continues to refine its regulatory framework for critical raw materials, further tightening its grip on the sector.

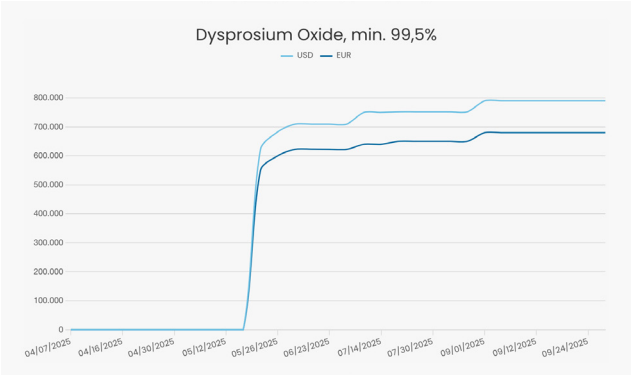
Positive Developments in Europe and India

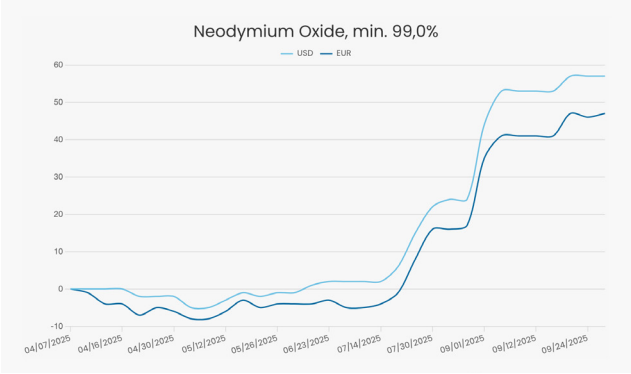


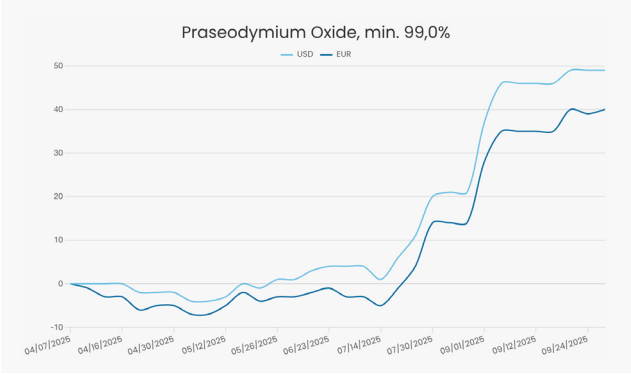
When it comes to securing an independent supply of magnets for European industry, September brought at least one positive development: a new production facility was officially opened in Estonia, operated by Canadian company Neo Performance Materials. The firm already runs a processing plant for raw materials in the country, making the new site a logical extension of its activities.

Elsewhere, fresh initiatives and projects are also gaining traction, India being a notable example. The country holds the world's third-largest reserves of rare earths, after Brazil and China, but has so far played only a marginal role in the industry. Through government programs, however, this is set to change, with efforts spanning mining, processing, magnet production, and recycling.









Three to four months after the introduction of Chinese export controls, we are seeing the expected slight easing in rare earths and magnets. However, this is far from a return to normal. Exports remain heavily restricted and are limited to only a select number of destinations. A pattern is emerging that we have already observed with gallium and germanium: some countries receive shipments, others do not. Additionally, there is uncertainty in the approval process. It remains unclear how many applications are never submitted or ultimately rejected. Nor is it certain whether the rising magnet exports include products containing heavy rare earths, which remain subject to export controls. All of this is creating structural supply gaps and putting additional pressure on markets, prices, and policymakers.

Against this backdrop, the U.S. government's price guarantee for MP Materials' products must be understood: Washington is incurring considerable costs to diversify supply chains and safeguard access to raw materials. For Europe, the task remains to establish comparable framework conditions so that domestic companies can successfully position themselves along the entire value chain.

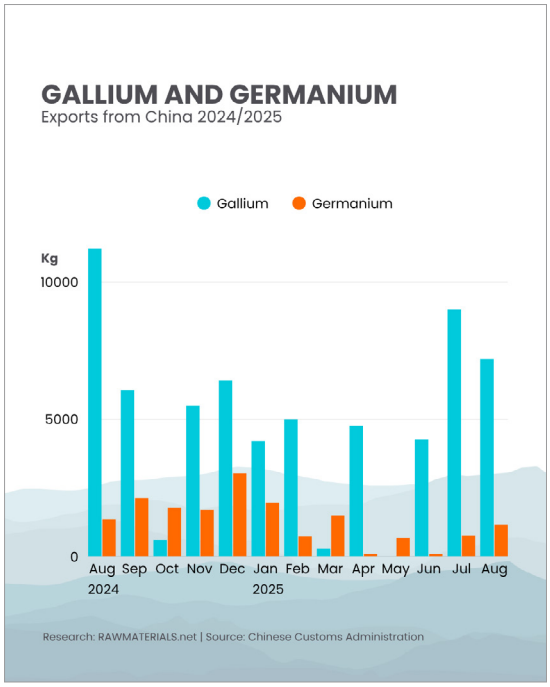
Jan Giese

Senior Manager Minor Metals and Rare Earth Elements

Technology Metals: Between New Normality and Rising Criticality

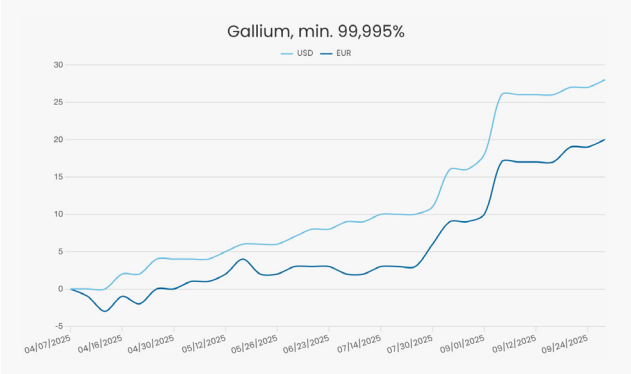
Beyond rare earths, the limited availability of technology metals is drawing increasing attention. Many of these are subject to Chinese export restrictions, officially justified by their potential military applications, but with far-reaching consequences for global supply. Among six proposed additions to the list of minerals deemed critical to the U.S. economy, two are technology metals: rhenium and silicon. In its review, the U.S. Geological Survey (USGS) also assessed which resources pose the greatest economic risk in the event of supply disruptions. Notably, germanium, gallium, and tungsten, whose production is highly concentrated in China, rank among the top ten. Recent export data underscores this dependency.

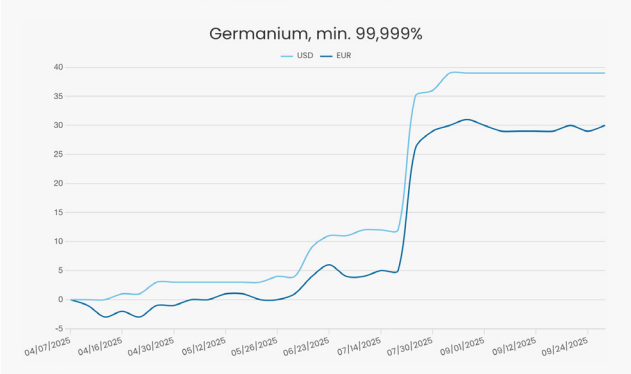
Germanium and Gallium: The Long Shadow of China's Export Policy

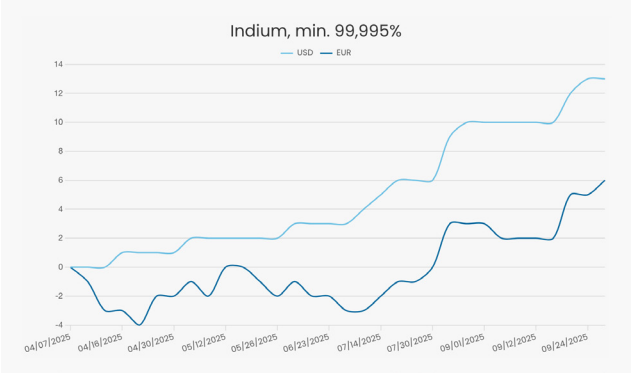


Although germanium exports rebounded in August after months of decline, this snapshot should not obscure the long-term effects of China's export controls. Two years on, export volumes remain far below historical averages, and the number of recipient countries has steadily shrunk. Russia remains a constant buyer, while countries such as Germany still receive limited shipments, significantly reduced compared to pre-license system levels. Others, like the Netherlands, have been effectively cut off. In fact, exports to the United States were explicitly banned at the end of 2024.

The situation with gallium is similar. Restrictions imposed at the same time as those for germanium continue to weigh heavily. While exports increased again in the third quarter, the overall supply situation remains tight, exacerbated by the shrinking pool of recipient countries. As with germanium, shipments to the U.S. have been banned since late 2024.







The germanium market remains extremely tight. China has not tightened export controls further, but it has given no sign of easing them either. Material is leaving the country, but almost exclusively to specific destinations and for clearly defined uses. For others, the market is effectively empty, and building strategic stockpiles is out of the question. Roughly speaking, European industry is currently short by the equivalent of one full year of global production, about 130 tons. At the same time, demand has risen, especially in defense applications, as geopolitical tensions escalate.

Dr. Christian Hell

Senior Manager Germanium and Minor Metals

China's export controls continue to have a marked effect. Although more gallium was exported in the third quarter, shipments went to only a handful of destinations. For the rest of the world, supply remains strained. Unsurprisingly, prices outside China have been rising steadily.

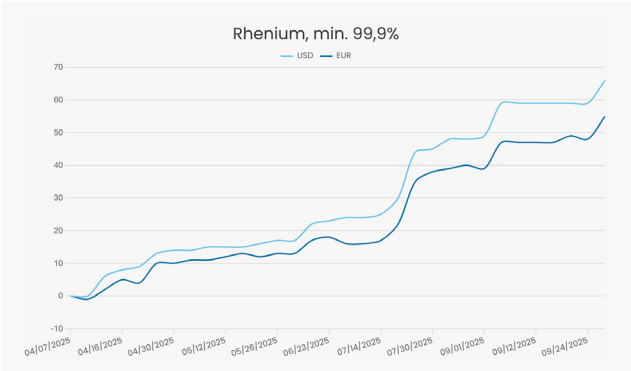
Jan Giese

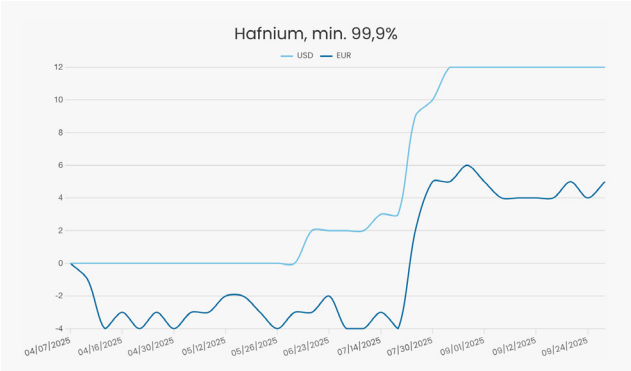
Senior Manager Minor Metals and Rare Earth Elements

Antimony: Exports at an Extremely Low Level

The pattern extends to antimony. This technology metal, which also has numerous military applications, has been subject to export restrictions since September 2024. Since then, shipments have collapsed. In July, they even fell to their lowest level since October 2024, immediately after the license system was introduced. In response to these shortages, efforts to establish alternative Western supply chains have accelerated, led by initiatives in the U.S.

Rhenium: Irreplaceable and in Growing Demand





The antimony market is under pressure. Less and less material is coming from China, and exports have remained extremely low for months. Controls are strict, particularly given the potential military applications, and lengthy approval processes further delay shipments. Globally, alternative sources are being developed to offset the lost Chinese supply. Since antimony can be smelted relatively easily from ores and cast into lower- to mid-grade ingots, additional material has been entering the market. As a result, prices for these lower-quality products have recently declined.

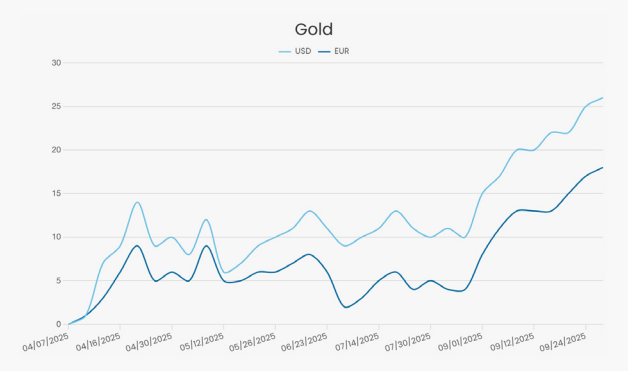
Rhenium is back in the spotlight: the U.S. has added it to its Critical Minerals list—a clear signal. At the same time, the Defense Logistics Agency (DLA) has moved the market by issuing a request for 40 tons to replenish national reserves over the coming years. Given the global output of only about 65 tons annually, there is concern that this stockpiling will further tighten an already constrained market. Prices, already high, have risen further. Substitution is virtually impossible. Hafnium could theoretically serve as an alternative alloying element for aerospace turbines, but its own market has long been severely constrained."

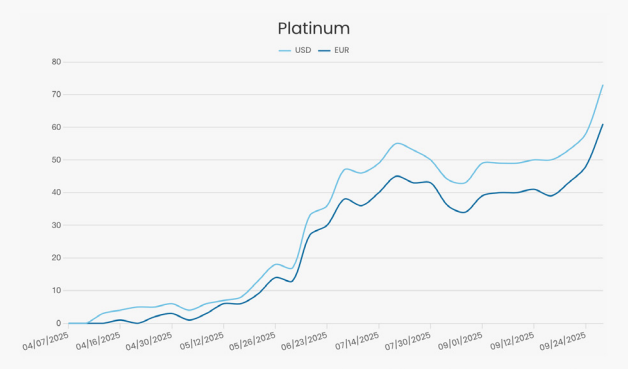
Frank Meier

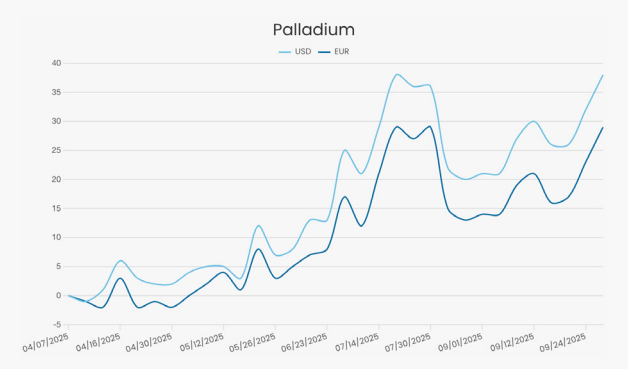
Senior Manager Minor Metals

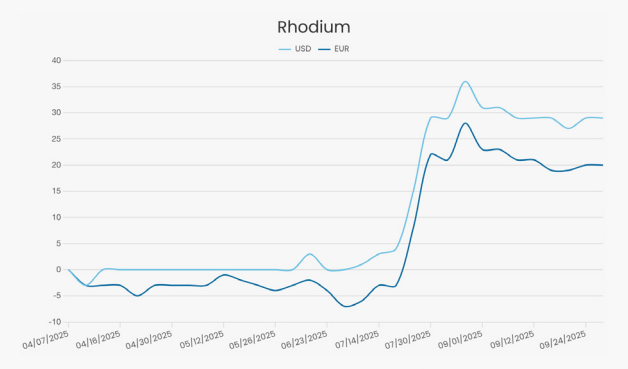
Although rhenium has not (yet) been subjected to export controls, its supply situation is far from stable. Prices surged in recent weeks, driven primarily by stronger demand from China, tied to the expansion of its state-backed aerospace industry. Used as a critical alloying element in jet engine turbines, rhenium has no true substitute. Even small demand shifts have a significant impact, given a global primary output of only about 62 tonnes per year. Scaling production is not realistic, as rhenium is extracted solely as a by-product of molybdenum, which is itself a by-product of copper mining. The growing criticality of rhenium is reflected in its proposed inclusion on the USGS list of Critical Minerals.

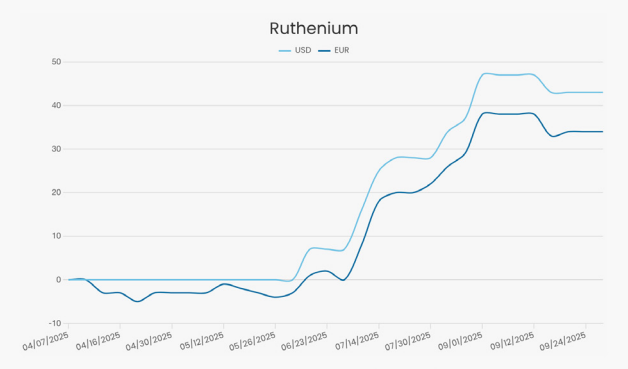
Precious Metals: Momentum Continues in the Third Quarter











The international precious metals markets maintained strong momentum in the third quarter. Alongside gold, silver and the platinum group metals were in sharp focus, driven by fundamental demand and macroeconomic factors. Silver in particular is expected to gain further importance: its anticipated classification as a Critical Mineral by the U.S. Geological Survey (USGS) is drawing greater attention from policymakers, industry, and investors, potentially accelerating mining projects, recycling initiatives, and supply chain investments.

Macroeconomic factors, namely persistent inflation risks, U.S. Federal Reserve interest rate policy, and a volatile dollar, supported robust demand and rising prices. Platinum, after its sharp gains in Q2, held firm at elevated levels, underpinned by automotive demand amid tight supply. Production constraints in South Africa, the leading supplier, further influenced the market balance.

Palladium saw a marked peak in July, driven by supply bottlenecks and tightening availability. Recycling and secondary sources are playing an increasingly important role, particularly in the auto sector. Rhodium also benefited from this industrial demand, with the growth of hybrid vehicles pushing prices higher, reinforced by a constrained supply. Discussions on the future of combustion engines contributed to market volatility. For instance, German Chancellor Friedrich Merz recently called for greater flexibility regarding the EU's planned phase-out of combustion engines during the International Motor Show (IAA) in Munich.

Ruthenium continued its upward trend, reaching new record levels. Expanding data center capacity and applications in artificial intelligence are driving demand for hard disk storage, underscoring the growing strategic significance of ruthenium in key technology industries.

The precious metals markets gained significant momentum in the third quarter. Gold surpassed the symbolic threshold of €100 per gram. Silver hit an all-time high in euros and is approaching $50, while also being classified as a Critical Mineral in the U.S.—a clear sign of its strategic relevance. Platinum crossed $1,600/oz in September for the first time since 2013, fueled by strong jewelry demand from Asia, its discount to gold, and the launch of a new futures market in China. Palladium remained volatile with swings of around 10%, while rhodium surged by over 37% at its peak.

Ruthenium also marked a new record high. Adding to the dynamics, the debate in the European Parliament over extending the production of combustion engines beyond 2035 could further support demand for platinum, palladium, and rhodium through continued use of catalytic converters. Overall, these developments highlight the rising importance of precious metals as strategic industrial resources.

Philipp Götzl-Mamba
Senior Manager Precious Metals

Outlook: No Relief in Sight

As the year progresses, supply challenges for many Critical Raw Materials are intensifying against the backdrop of geopolitical tensions. This trend is evident not only in heightened media attention and increased efforts to diversify supply chains but also in the accelerated buildup of state stockpiles. The U.S. has already taken concrete steps this quarter, including the addition of scandium to its list of Critical Minerals. At the same time, the EU and India have at least outlined initial plans.

This TRADIUM Market Report has been made in collaboration with the news platform rawmaterials.net.

The supply of strategic raw materials remains highly challenging. Never before have so many metals been subject to Chinese export controls, and rarely has predictability been so low. Companies are scrambling for material, while policymakers seek solutions through resource partnerships and trade missions—most recently to India. For suppliers, the environment is equally demanding. Overcoming these challenges requires deep market experience and a broad, globally diversified network of suppliers and industrial customers.

Matthias Rüth
Managing Director TRADIUM

TRADIUM and RAWMATERIALS.net in the Media

The expertise of TRADIUM and rawmaterials.net was once again in high demand internationally in the third quarter of 2025, providing commentary and context on current developments in Critical Raw Materials.
A selection of media contributions can be found here:

Handelsblatt:

Rohstoffe: Germaniummangel sorgt für „Entsetzen in der Industrie“, September 25, 2025

Außenminister-Reise: Chance auf Freihandelsabkommen mit Indien wächst – dank Trump, September 2, 2025

Seltene Erden: „China will nicht, dass die NATO aufrüstet“, July 29, 2025

tagesschau.de:

Chinas Exportbeschränkungen: Wie Unabhängigkeit bei seltenen Erden gelingen könnte, September 23, 2025

Financial Times:

China’s curbs on metal germanium create ‘desperate’ supply squeeze, September 15, 2025

ARD:

Seltene Erden – China bringt deutsche Industrie in Bedrängnis, September 10, 2025

14. Jahrestagung House of Pharma & Healthcare:

Schulterblick zum Workshop „Rohstoffe. Technologien. Märkte.“ im Rahmen der 14. Jahrestagung des House of Pharma & Healthcare, September 19, 2025

Technik+Einkauf:

Neue kritische Rohstoffe in den USA: USGS bewertet Silber und fünf weitere Rohstoffe als kritisch,
August 28, 2025

Boston Consulting Group:

Africa Unleashed: Harnessing Africa’s Critical Mineral Opportunity, August 25, 2025

WirtschaftsWoche:

Seltene Erden in Brasilien: Hier gibt‘s sie: Schwere Seltene Erden, billig wie in China, August 25, 2025

Wirtschaft von oben: Myanmars „goldene Böden“ sichern Chinas Macht, July 14, 2025

Frankfurter Allgemeine Zeitung:

Schlüsselelemente: China liefert mehr Seltene Erden, August 21, 2025

Frankfurter Rundschau:

„Thema lange unterschätzt“ – Westliche Antwort auf Chinas Monopol bei seltenen Rohstoffen, August 12, 2025

Deutsche Welle:

How China outsmarted Europe and the US on rare earths, August 15, 2025

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 without dedicated storage can use our high-security bonded 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. Its content is relevant to both industrial buyers and private individuals interested in physical assets.