TRADIUM

TRADIUM Market Report

Tariffs and Regulations: Politics Are Increasingly Shaping Raw Material Markets

The dizzying momentum in critical material markets continued into the last quarter of 2025. In our market report, we highlight key developments and provide a comprehensive review of the year.

The geopolitical rivalry between China and the United States remained the central challenge for raw material markets and industry in 2025. Upon taking office in late January, U.S. President Donald Trump implemented sweeping measures to strengthen domestic industry and rebalance exports and imports. The ‚Liberation Day Tariffs' in early April marked a new phase in the trade conflict with China, imposing the highest level of punitive tariffs on Chinese goods. Beijing responded swiftly with counter-tariffs and strict export controls on seven of the 17 rare earth elements, not only applying to the U.S. but also the global markets. Although exports have partially recovered since then, companies continue to face price increases, supply bottlenecks, and even production halts.

A temporary tightening of export restrictions was postponed by a year in October, but existing regulations, not only on rare earths, remain in force. Critical material markets, therefore, are still far from experiencing any major relief.

Against this backdrop, global efforts to achieve greater resource autonomy have gained momentum, led primarily by the United States. In addition to extensive support programs, the U.S. Department of Defense made headlines by investing in the country's largest domestic rare earth producer, sending a strong signal to industry through offtake agreements and price guarantees. Other countries, such as India, have also made significant investments to build their own capacities. Europe, by contrast, has progressed only gradually: small successes, such as the launch of the German Raw Material Fund, have been offset by setbacks, such as the cancellation of a planned rare earth refinery in the United Kingdom.

The precious metals markets also experienced pronounced momentum. Driven by geopolitical uncertainties, gold, silver, and platinum broke multiple record levels, particularly in the second and third quarters, and continued to perform exceptionally well in the fourth quarter.

The growing media interest in these developments was also reflected at TRADIUM, with the company more in demand as a point of contact in 2025 than ever before. A highlight was the participation of TRADIUM's founder and Managing Director, Matthias Rüth, in the economic delegation led by German Foreign Minister Dr. Johann Wadephul to India. The trip to Bangalore and New Delhi focused on deepening the strategic partnership between Germany and the emerging Asian nation.

This report provides a detailed overview of how technology metals, rare earths, and precious metals performed, along with our experts' assessments of these market developments.

Rare Earths: Risks Persist

The supply situation for rare earths drew particular media attention in the fourth quarter, following China's announcement in the first week of October of a tightening of export regulations that had been in place since April 2025. The measures were set to cover holmium, erbium, thulium, europium, and ytterbium, as well as related materials, and to introduce new rules for the use of Chinese rare earths abroad. However, this drastic expansion of trade restrictions was suspended in early November for an initial one-year period, following high-level diplomatic talks between the U.S. and China. Despite this temporary reprieve, there is no reason for complacency: the export regulations from April remain in effect. Supply remains tight, exerting upward pressure on prices for materials such as dysprosium and terbium.

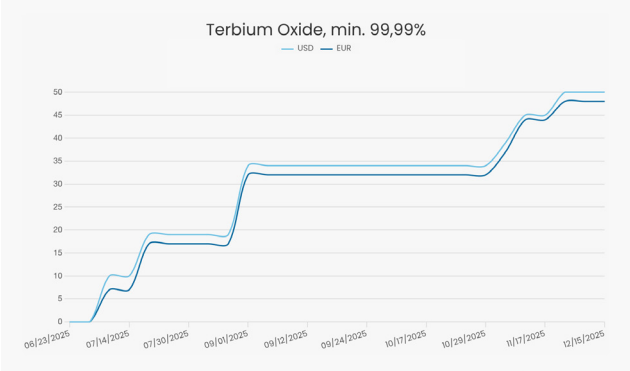
The trend toward building supply chains outside China has gained renewed momentum in light of recent developments. Following U.S. investments in the rare earth and magnet manufacturer MP Materials, the government is now also taking stakes in Vulcan Elements, which produces rare-earth magnets, and in REElement, an operator of a rare earth refinery. Washington has further announced investments in projects related to this resource group in Australia. There, mining company Lynas is active not only in extraction but also in refining rare earths and is scaling up production of heavy rare earths, which are considered particularly important. Despite Australia's ambitions to challenge China's dominance, the country currently accounts for just over four percent of global rare earth production.

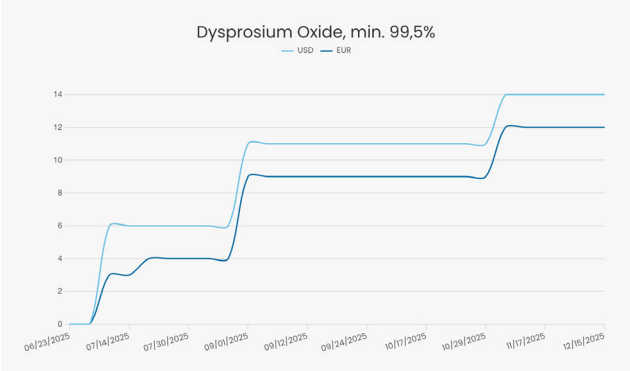
In November, India also announced substantial investments in the rare earth industry, particularly in magnets. The cabinet of the emerging economy approved a subsidy program totaling $815 million to reduce the sub-continent's dependence on imports from China.

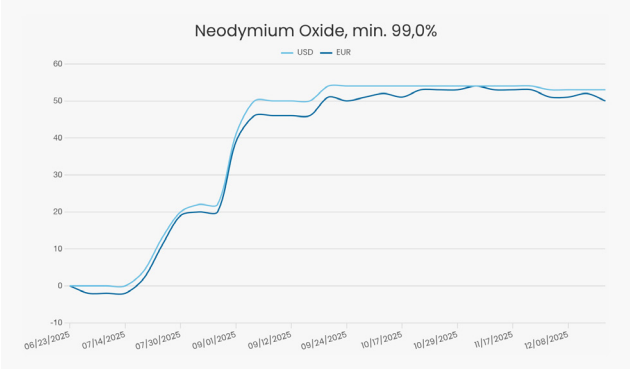
Europe: Step-by-Step Strategies for Success?

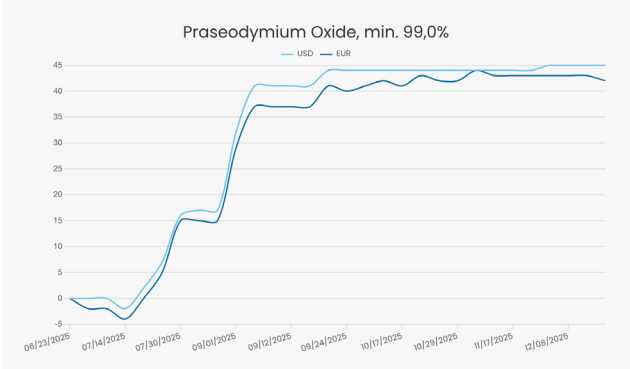
In Europe, ReSourceEU is expected to address some of these challenges; the initiative was unveiled in early December. The European Commission's plan includes funding commitments of around €3 billion to support key, rapidly implementable projects for the EU's raw material supply. However, rare earth projects are not prioritized initially. Instead, the first beneficiaries are Greenland Resources' molybdenum project, Malmbjerg, and Vulcan Energy's lithium project in Germany. The latter also receives support from the German Raw Material Fund, which, after long delays, officially launched in early December.

Alongside these advances, cautionary voices from industry were also heard. Critics pointed to a lack of political backing, while praising the United States' investment-friendly environment. Better market conditions in North America were also cited by British mining company Pensana, which in mid-October abandoned plans to build a rare-earth refinery in Hull, opting instead to focus on opportunities in the U.S.









Export data for rare earths since October may suggest a relaxation, but the controls remain in place. Beijing continues to make strategic and selective decisions regarding who has access to these resources. The suspension of additional export restrictions for twelve months, as well as certain shipments to the U.S., indicates a degree of willingness to engage in dialogue. However, at present, these measures are better understood as political signals rather than a fundamental policy shift. For industrial consumers, the message is clear: the market remains politically influenced.

Jan Giese

Senior Manager Minor Metals and Rare Earth Elements

Technology Metals – Is Scarcity Becoming the New Normal?

Gallium and Germanium

The export restrictions on gallium and germanium imposed by China, the main producer, in the summer of 2023 continue to have a noticeable impact. Officially, the issuance of an export license takes 45 working days, but in practice, the process often takes significantly longer. Since the introduction of the licensing system, shipment delays and declining export volumes of gallium and germanium have been recurring themes. The resulting supply shortages have also pushed prices steadily higher. Germanium reached a new peak this summer and has maintained that level, while gallium prices surged again sharply at the end of October.

Export volumes for the two technology metals, however, moved in different directions this quarter. The situation is particularly critical for germanium: although October exports were more than double those of September, overall exports continue to decline. Compared with the same period last year, the first ten months of 2025 showed a significant decrease. Currently, the market is short of an entire year's global production of germanium, as Dr. Christian Hell, Senior Manager for Germanium and Minor Metals, noted already in the summer.

There has been little movement in the germanium market over the past three months. Export volumes remained extremely low, widening the supply deficit further. It is also important to note a shift in recipient countries: Russia continues to receive reliable deliveries, while other nations are largely excluded and effectively have no access to the primary raw material. The market thus remains extremely tight. Thanks to our international network and strong market relationships, we are still able to serve our customers effectively.

Dr. Christian Hell
Senior Manager Germanium and Minor Metals

The situation in the gallium market did not fundamentally change in Q4. China continues to manage supply very selectively: export spikes like the one in October do not mask the strategic scarcity. Global supply remains structurally constrained, and prices stay high. The announced easing of delivery conditions for the U.S. is primarily a political signal. In practice, it remains to be seen if and how access to the raw material will improve. For the industry, this means ongoing planning uncertainty and limited sourcing channels. China's export controls continue to function as a precise and uncompromising instrument of power.

Jan Giese
Senior Manager Minor Metals and Rare Earth Elements

Gallium, on the other hand, saw a surprising spike in October following three months of declining exports, reaching the highest monthly export volume since June 2022. However, this does not indicate a fundamental easing of the supply situation, as monthly export volumes remain highly volatile. The export ban on gallium and germanium to the U.S., which was suspended for one year at the beginning of November, is unlikely to alleviate the scarcity in the long term. As a result, the U.S. continues to invest in domestic gallium production and related capacities in partner countries.

Hafnium

Hafnium reached an all-time high in the quarter. The surge reflects booming demand amid constrained supply chains. Since 2024, certain hafnium compounds have been subject to strict Chinese export controls due to their potential military applications, causing exports to drop sharply.

On the demand side, hafnium serves a range of strategically important and rapidly growing sectors: aerospace, gas turbines, nuclear energy, and the semiconductor industry, where hafnium oxide is considered a promising material for next-generation, energy-efficient memory chips. Annual production, estimated at only 75 tons, is difficult to expand, as hafnium is exclusively a byproduct of zirconium refining and available only in limited quantities. Consequently, even small shifts in supply or demand can trigger disproportionately large price fluctuations.

The supply of hafnium remains challenging. For months, hardly any material has been available on the market, and the situation has recently worsened. Currently, nothing is coming from China, as authorities strictly review every export application for potential dual-use concerns. Approvals are slow to materialize. The key issue for buyers is simply obtaining the material, regardless of quality or the high price.

The antimony market presents a different picture compared with many other critical raw materials. Since the introduction of Chinese export restrictions in September 2024, supply has noticeably expanded. New sources, for example in Thailand and several South American countries, have revitalized the market. For a reliable supply, China is therefore no longer indispensable. The country remains dominant only in the production of high-purity material.

Frank Meier
Senior Manager Minor Metals

Rhenium

The technology metal continued the upward price trend that began in spring into the final quarter of the year, even reaching levels last seen in 2012. This is driven by rapidly growing demand from the aerospace sector, particularly in China. The country is currently expanding its state-supported aircraft industry, partly in response to U.S. export restrictions in this sector. Another emerging application for rhenium is in medical implants. With an estimated annual primary production of only around 62 tons, the market remains relatively small, making the global supply situation increasingly challenging. It is therefore unsurprising that in November, rhenium was added to the U.S. Geological Survey's list of Critical Minerals.

Indium

After a sharp increase in Q2, indium prices largely stabilized from October onwards. This is likely driven by steadily rising demand in its key applications. The primary use of indium is in coatings for screens, touchscreens, and displays, where it is processed as indium tin oxide. Demand in this sector continues to grow as digitalization advances. Indium is also sought after in the semiconductor industry, where key indium compounds have been subject to Chinese export restrictions since February. In this very small market, even minor shifts in availability can quickly trigger significant price reactions.

The supply of rhenium tightened further in Q4. Its official inclusion on the U.S. Critical Minerals list, along with concrete stockpiling plans by the Defense Logistics Agency of the U.S. Department of Defense, has created a strategic demand. This comes on top of an already structurally tight market, as rhenium is produced almost exclusively as a byproduct. The result is further scarcity of freely available material amid persistent demand from the aerospace sector, where substitution is practically impossible. Industrial consumers face the challenge of securing their supply in a market that is now also shaped by political decisions.

Jan Giese

Senior Manager Minor Metals and Rare Earth Elements

Antimony

In September 2024, China, the world's leading antimony refiner, introduced export restrictions, citing the potential military use of this critical raw material. Antimony is used, among other applications, to harden lead alloys, produce flame retardants, and manufacture ammunition. Following the restrictions, exports dropped sharply, and rising prices reflected this development. At the same time, efforts to establish new production capacities gained momentum, particularly in the U.S., where the Pentagon even invested directly in the domestic supply chain. While global supply remains tight, a gradual diversification of sources is emerging, which may also explain the slight price decline in recent months.

For January 2026, China has announced new export regulations. Exporters will face stricter scrutiny and must demonstrate creditworthiness and a verified export history. Only approved companies and individuals will be permitted to export antimony, silver, or tungsten.

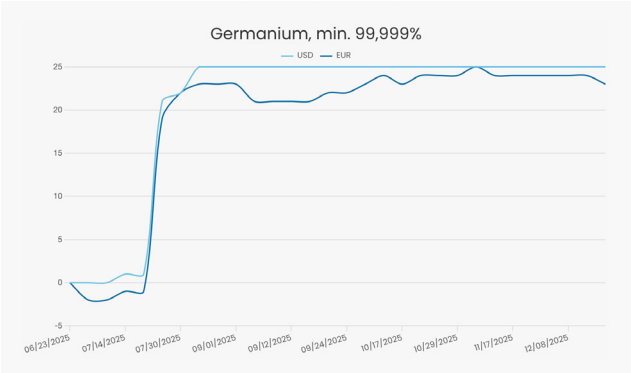
Bismuth

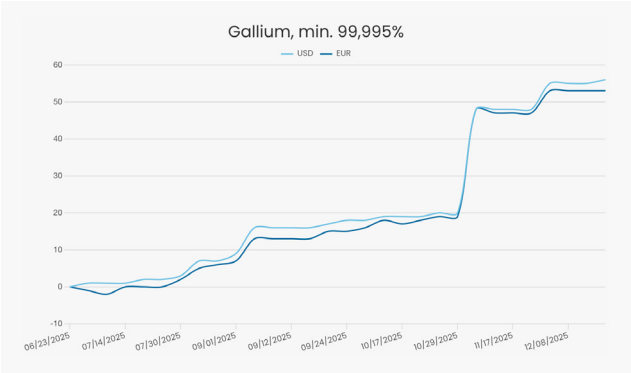
China imposed export restrictions on bismuth products in December 2024, which were tightened in February of this year. As a result, exports of high-purity bismuth have declined and currently remain well below last year's levels. China accounts for 13,000 of the total 16,000 tons of bismuth produced in 2024. The metal is used for soldering materials as well as in pharmaceutical applications.

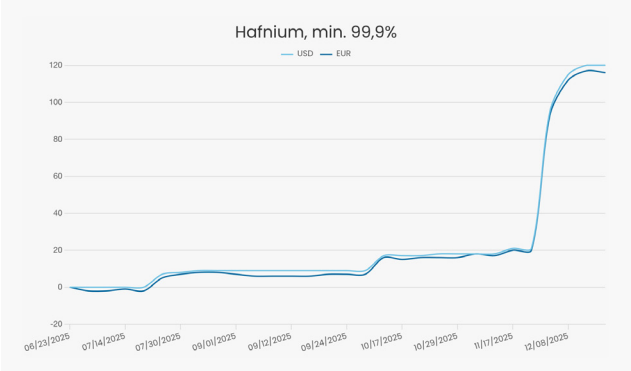
Tellurium

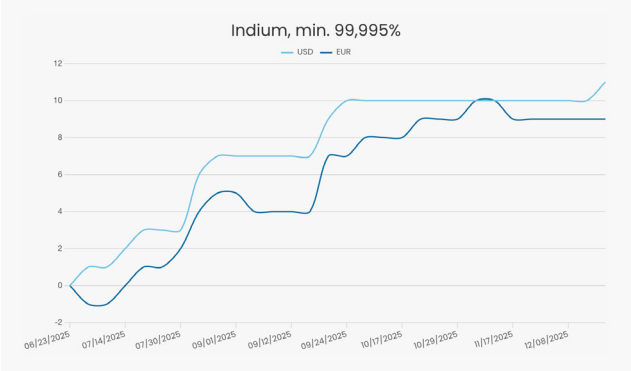
With the export controls imposed on tellurium products in February, China has significantly influenced market dynamics. As this technology metal is primarily produced as a byproduct of copper refining, supply cannot be adapted as easily and is directly linked to primary copper production. Global output is also low, at around 980 tons per year, of which approximately 750 tons come from China.

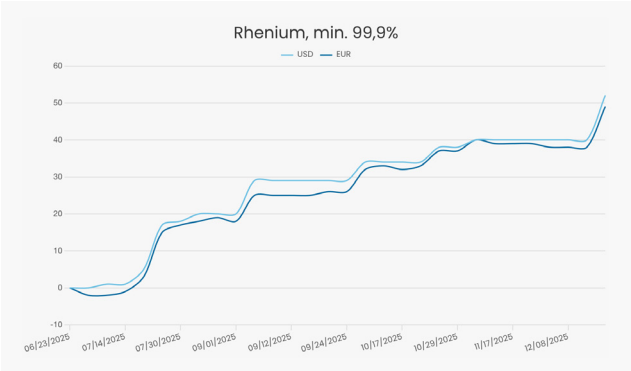
Against this backdrop of rigid, limited supply, regulatory interventions have a particularly strong impact. At the same time, demand continues to grow, driven by the expansion of thin-film solar cells and growth in the electronics sector. The previously proposed removal of tellurium from the U.S. Geological Survey's Critical Minerals list was reversed due to its increasing importance, highlighting the dynamic nature of raw material markets that requires constant reassessment. After a price surge following the export controls earlier in the year, tellurium prices stabilized at a high level in the fourth quarter.











Precious Metals Markets – From Record to Record

The precious metals markets remained anything but calm in the fourth quarter. Both gold and silver exceeded their previous highs over the past three months, setting new record prices in both U.S. dollars and euros. A weakening U.S. dollar and the risk of a potential government shutdown drove investors toward stable assets outside of equities and bonds.

Over the course of the year, silver prices have effectively doubled, fueled by tight supply and rising demand. Additional market momentum came from silver's inclusion on the U.S. Geological Survey's Critical Minerals list. Furthermore, China's announcement of new export rules for silver, antimony, and tungsten added further movement to the silver market, signaling that the coming year is likely to remain eventful.

Platinum Group Metals Gaining Momentum

The fourth quarter was equally turbulent for other precious metals, particularly the platinum group metals (PGMs). Platinum and palladium, in particular, came into focus. With the introduction of futures trading on the Guangzhou Futures Exchange, the country is further expanding its presence in the market, evolving from a pure consumer into an active market maker and risk manager. This development is likely to give China greater influence over price formation in the future. The launch of futures trading immediately triggered significant price swings, with platinum and palladium both rising by several percentage points at times.

Additional uncertainty arose from U.S. President Donald Trump's announcement that South Africa would be excluded from the upcoming G20 summit in Miami. As the world's leading producer of nearly all platinum group metals, South Africa's potential diplomatic sidelining casts a shadow over future PGM supply.

The precious metals markets saw an exceptionally strong fourth quarter. Gold reached new highs, at times approaching $4,400/oz, while silver climbed above $65/oz. This price rally is occurring in a complex geopolitical environment, shaped by potential tariff increases, a Federal Reserve policy that is increasingly data-driven yet constrained by personnel issues, and ongoing global tensions. As a result, interest in safe-haven assets remains elevated. Silver, in particular, has shown remarkable momentum. Beyond geopolitical factors, a structural market deficit has added upward pressure on prices. Growing industrial demand, especially from the solar and electronics sectors, meets limited physical availability, which is also reflected in shortages at major trading hubs. Together, these factors are driving prices higher and contributing to increased market volatility.

Platinum group metals posted a strong quarter. Rhodium surpassed $8,000/oz for the first time since 2023, signaling growing scarcity and attracting investor attention. Meanwhile, platinum reached levels above $1,700/oz for the first time since 2011. The market is supported by several structural factors: the introduction of a platinum futures market in China has increased market depth and liquidity, while the significant price gap relative to gold boosts demand in the Asian jewelry and investment segments. At the same time, market deficits and higher refinancing rates are supporting physical buying trends.

Overall, the precious metals sector remains well supported amid a backdrop of geopolitical risks, structural supply constraints, and growing investment demand. Short-term corrections are likely, but the fundamental basis for continued strength remains solid.

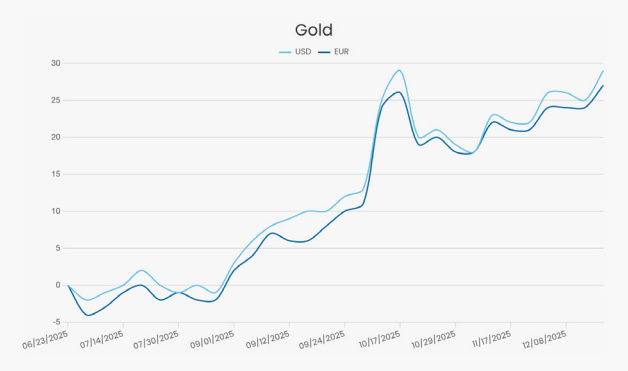
Philipp Götzl-Mamba
Senior Manager Precious Metals

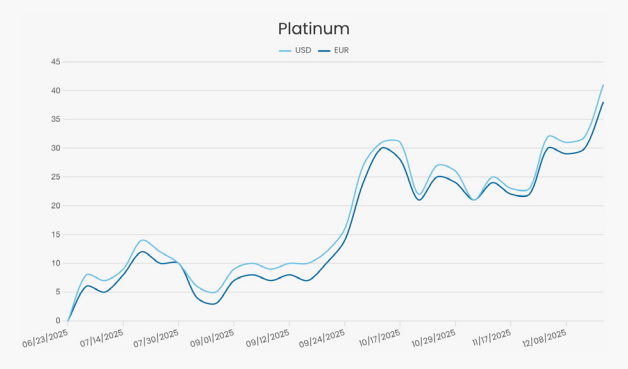
EU-Wide Combustion Engine Ban Gets a Possible Reprieve

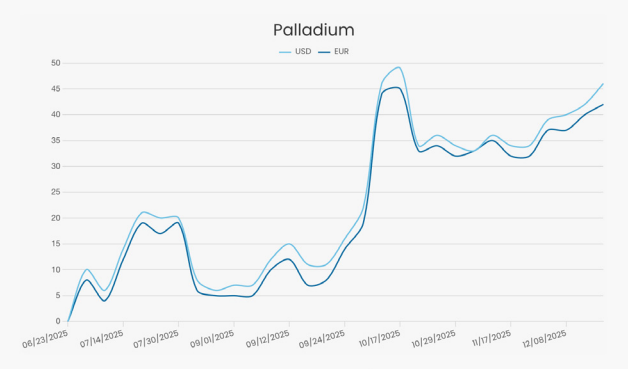
Europe has also provided momentum for the PGM markets in the past quarter. Under previous EU regulations, no sales of vehicles with internal combustion engines were to be approved from 2035 onward to significantly reduce CO_2 emissions in the transport sector. The European Commission has now stepped back from this de facto ban on combustion engines.

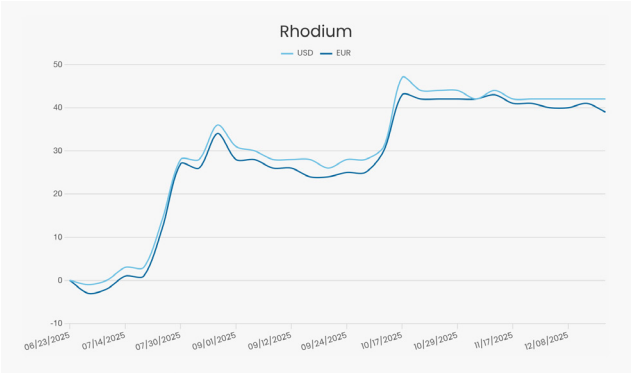
On December 16, the Commission published a package of measures to strengthen the European automotive sector, granting manufacturers greater flexibility in meeting climate targets. While the goal of overall emission reduction remains, future assessments will place more emphasis on upstream production steps, such as the use of sustainably produced steel. A blanket ban on the sale of combustion engines is therefore off the table for now.

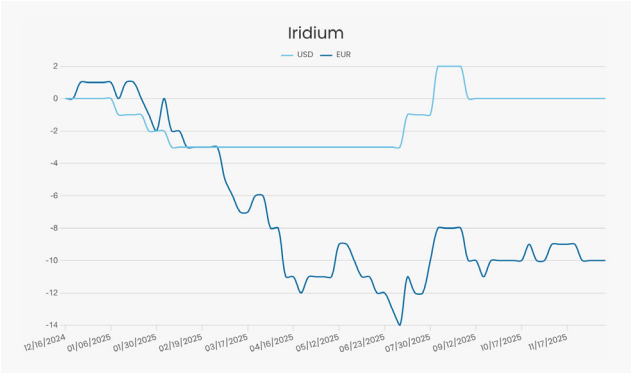
This represents an important signal for the PGM markets. The automotive sector, particularly catalytic converters, is the largest end-use for palladium (70–85% of demand) and rhodium (55–80%). Easing the planned EU regulation is expected to support demand for these metals for a longer period. Platinum, which is also used significantly in catalytic converters (30–45%), is likely to benefit as well.

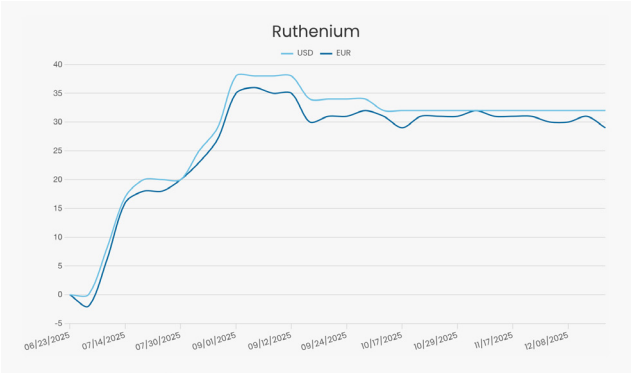












2025 Has Shown: Rethinking Is More Necessary Than Ever

Across the various raw material groups, the fourth quarter highlighted just how much overall pressure the markets are under. The spectrum ranges from selective export approvals to sudden supply shortages. Moreover, major developments are occurring faster and with less predictability than just a few years ago. For companies along the value chain, this translates into significantly higher operational uncertainty and a constant need to adapt.

The past few months have once again shown us how much raw material trading is changing. Established processes no longer work as reliably as they once did. From sourcing routes and producer relationships to processing times and regulatory requirements, many aspects are now conditional and demand creativity. We are seeing markets shift more rapidly in a short period than I have witnessed in over 30 years. What matters now is that industry, trade, and policymakers work together to find pragmatic solutions. This could mean sourcing outside China, increasing recycling, or forming new partnerships. The key is to maintain supply as steadily as possible under conditions that can change at any time. In our view, the new year is unlikely to bring true relief. Too many decisions made in 2025 continue to have lasting effects and are permanently reshaping the framework conditions.

Matthias Rüth

Managing Director TRADIUM

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 internationally throughout the fourth quarter of 2025, providing commentary and clear explanations on current developments in critical raw materials.

In the media reviews, you will find an overview of the most important mentions:
https://tradium.com/press/
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 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