Commodity markets

Nickel market

Key market trends

After opening 2025 at USD 15,010/t, the LME nickel price briefly broke above USD 16,000/t in March, following some headlines about Indonesia's decision to raise nickel mining royalties. Soon after, at the beginning of April, prices fell sharply to USD 13,815/t — the lowest level since August 2020 — in response to the announcement of new US import tariffs.
The subsequent decision of the US administration to delay the tariffs for 90 days allowed prices to recover, and since then, nickel broadly stabilised around USD 15,000/t.

In August, the Indonesian authorities started to introduce a range of initiatives to improve oversight and support long-term sector development. These measures include stronger action against non-compliant and illegal mining, the temporary suspension of licences for a number of operators, and a move to shorten the duration of RKAB (Rencana Kerja dan Anggaran Badan, or Work Plan and Budget Scheme) mining quotas back to one year, as well as restrictions on issuing new operating licences for those smelters that are focusing solely on such products as NPI,[3] FeNi, matte, or MHP,[4] without further processing. However, these developments had no material impact on the market, and the LME nickel mostly traded within a narrow range around USD 15,000/t.

Then, in mid-November, the nickel price dropped to USD 14,280/t, a seven-month low, as a result of rising global stockpiles and continued oversupply.

From 17 December, the first news began to emerge about a possible reduction in Indonesia's nickel ore RKAB mining quota.

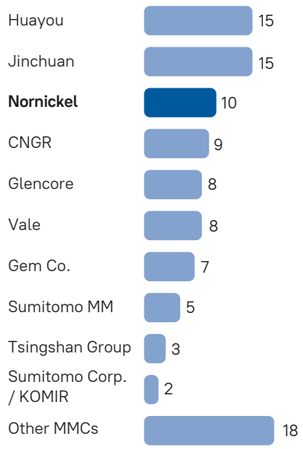
In response, price started to rise and by 31 December reached a 14-month high of USD 16,485/t.

As a result, the LME nickel price averaged USD 15,160/t in 2025, down 10% from the 2024 average of USD 16,812/t.

World's largest high-grade nickel[1] producers in 2025, %

Nornickel — No. 3

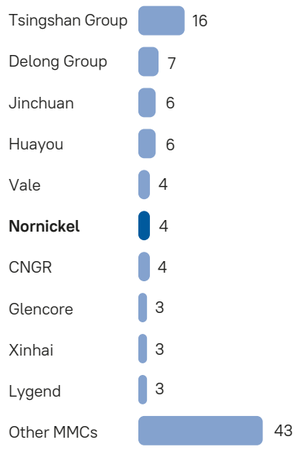
Sources: producer reports, Company analysis as of early March 2026



World's largest primary nickel[2] producers in 2025, %

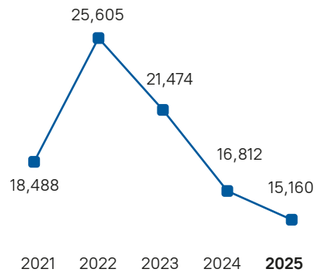
Nornickel — No. 6

Sources: producer reports, Company analysis as of early March 2026



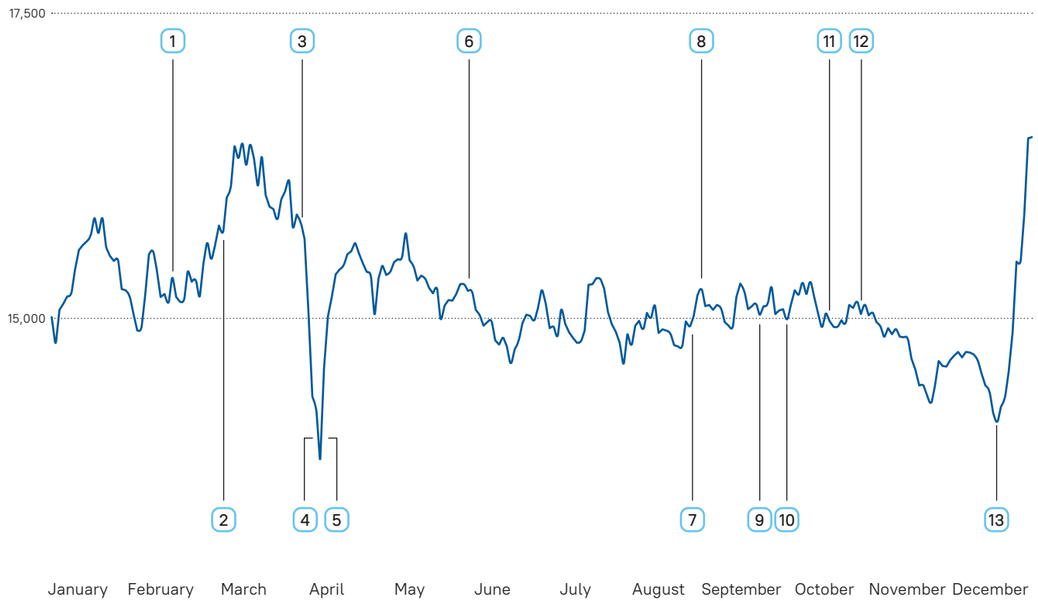
Average annual nickel prices, USD/t

Source: London Metal Exchange (cash settlement)



LME nickel price in 2025, USD/t

Source: London Metal Exchange, Company analysis



1. The Philippines poised to ban ore exports.
2. Indonesia considers changes in nickel royalties.
3. Massive drop in commodity prices on the prospect of higher US import duties.
4. Dam collapse at PT QMB.
5. USA pauses tariffs for 90 days.
6. Tsingshan cuts Indonesian stainless output.
7. Indonesian president announces intensified crackdown on illegal mining.
8. Indonesia suspends operations at 36 nickel mines.
9. First Federal Reserve Rate Cut in 2025.
10. Indonesia reduces RKAB quota validity to one year.
11. Second Federal Reserve Rate Cut in 2025.
12. Indonesia restricts IUI licences for new nickel projects.
13. First news about possible RKAB quota reduction in Indonesia to 250–260 mln t for 2026.

1. A type of nickel that includes metal nickel produced in the form of cathodes, briquettes, rounds, crowns, powders, pellets, and nickel salts.
2. A type of nickel that includes commercial nickel products that have undergone smelting and refining are destined for final consumption. This category does not include semi-finished products.
3. Nickel Pig Iron.
4. Mixed Hydroxide Precipitate.

Market balance

In 2025, primary nickel demand increased by 6% y-o-y to 3.62 mln t, driven by the stainless steel (+4% y-o-y), alloy (+5% y-o-y), and special steel (+2% y-o-y) sectors. In the battery sector, nickel use grew by only 2% y-o-y, reflecting demand deceleration on the back of a rising share of nickel-free LFP chemistries, which account for more than 80% of all new installations.

On the supply side, primary nickel supply rose by 8% y-o-y to 3.93 mln t, reflecting ongoing capacity expansion in Indonesia. In 2025, Indonesia increased output of NPI (+15% y-o-y), while Class 1 nickel production rose in China (+24% y-o-y) and Indonesia (+105% y-o-y). At the same time, NPI production in China declined (–11% y-o-y) and global ferronickel output remained at the previous year's level.

In 2025, the global nickel market recorded a surplus of around 312 kt amid ongoing overproduction in Indonesia, which now accounts for about 66% of global nickel supply. Exchange inventories also rose by 53% y-o-y to 301 kt, mostly driven by inflows of Chinese and Indonesian material, which accounted for 75% of total LME stocks by December 2025.

The Indonesian government's initiatives to curb excess supply and improve sector governance send positive signals in the medium and longer term but have had a limited impact on the near-term supply so far.

In December 2025, news began to emerge about a possible reduction of Indonesia's nickel ore mining quota to 250–260 mln t; under such a cut, the market could balance or move into deficit. In practical terms, only Indonesia — through strategic moderation of output and a more value-focused policy framework — can bring the nickel market closer to balance.

Demand

The largest nickel-consuming countries are China, Indonesia, EU member states, Japan, the USA, and South Korea.

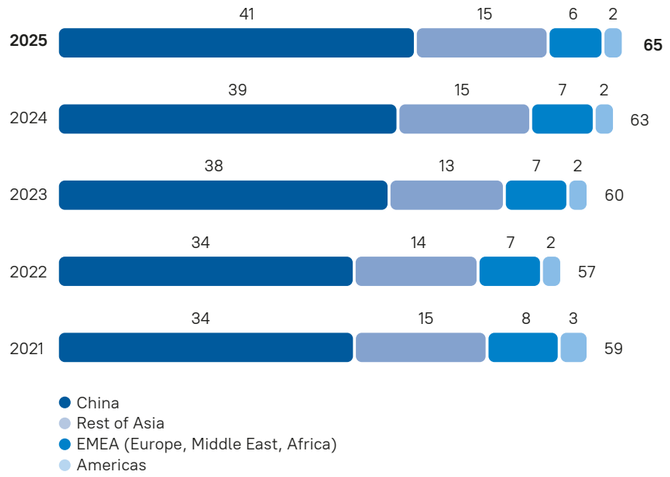
Stainless steel remained the key sector of primary nickel use in 2025 (about 65% of total demand).

Stainless steel production uses almost all types of nickel feed (except for certain special products, such as nickel powder and compounds). However, since the quality of nickel used has almost no effect on stainless steel quality, steelmakers primarily use cheaper low-grade nickel such as NPI, ferronickel, and nickel oxide. As a result, the share of high-grade nickel used in stainless steel has decreased in recent years.

In 2025, global stainless steel production rose by 3% y-o-y to 65 mln t on the back of production growth in China (+4% y-o-y) and the rest of Asia (+3% y-o-y). Stainless steel output in Europe declined by 3% y-o-y amid an economic slowdown. In the USA, stainless steel production grew by 6% y-o-y, supported by tariff policies and robust domestic demand.

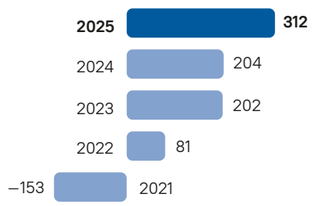
Stainless steel production, mln t

Sources: Eurofer, ISSF, USGS, SMR, METI, TSIIA, Company data



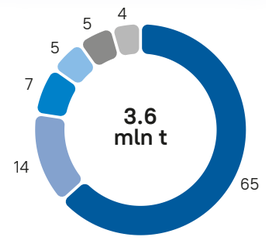
Nickel supply and demand balance, kt

Source: Company estimate as of February 2026



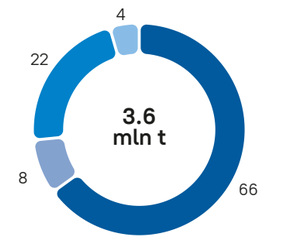
Primary nickel consumption by industry in 2025, %

Source: Company data



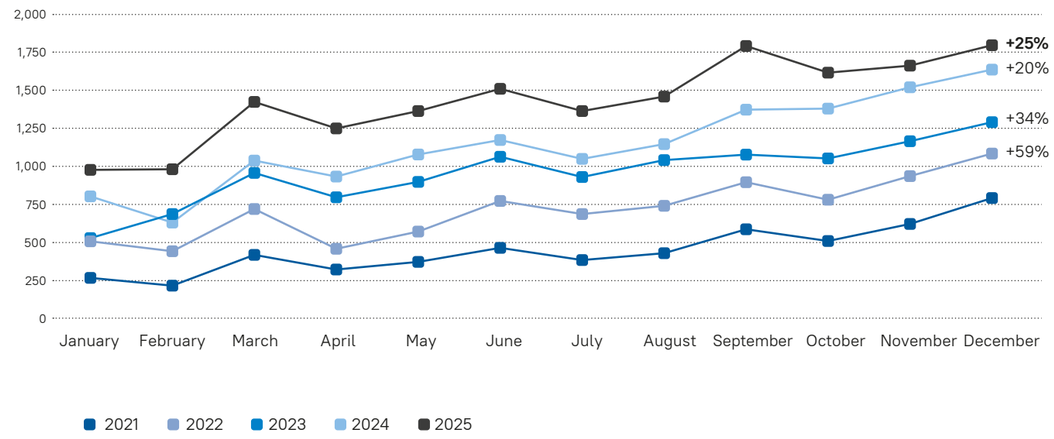
Primary nickel consumption by region in 2025, %

Source: Company data



Global sales of electric vehicles, thousand units

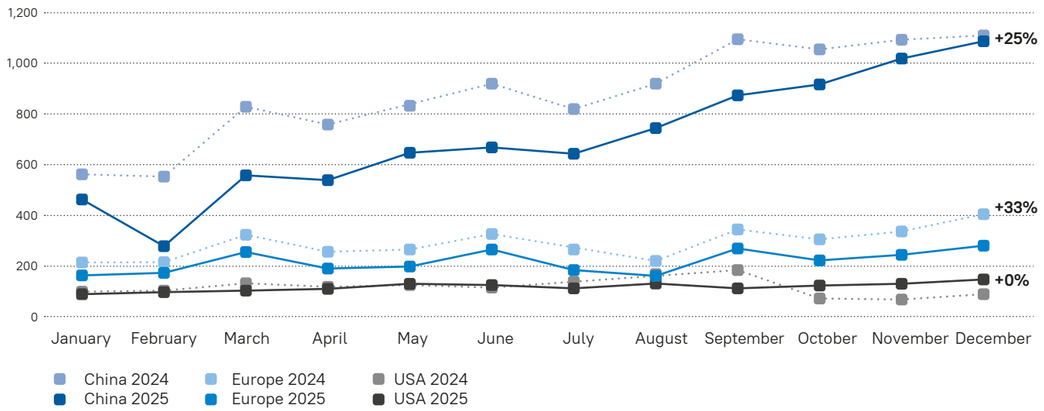
Sources: SNE Research, Company analysis



1 Note: Figures may not sum up due to rounding.

Sales of electric vehicles by region in 2025, thousand units

Sources: SNE Research, Company analysis



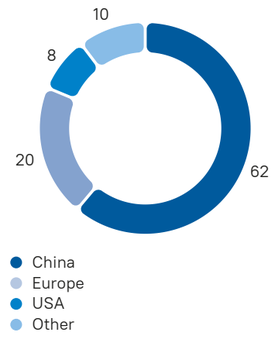
The **battery industry** uses nickel as a key element in the production of precursor cathode active materials for batteries. In 2025, nickel use in the battery sector increased only marginally by 2% to 0.5 mln t, reflecting demand deceleration on the back of a rising share of nickel-free LFP chemistries, now exceeding 80% of new installations.

Global BEV-equivalent sales[1] grew 25% y-o-y in 2025. Sales in China jumped by 25% y-o-y, primarily driven by rising BEV[2] sales, which surged by 30% y-o-y, while the growth rate of PHEV[3] sales was materially smaller (+2% y-o-y).

This extensive growth is still being driven predominantly by LFP-equipped models. The LFP share of new installations now exceeds 80%. At the same time, the scheduled reduction in new energy vehicle (NEV) purchase-tax exemptions from 2026, including the halving of the maximum tax break from CNY 30 thousand to CNY 15 thousand per vehicle, will raise the effective purchase cost at mainstream price points and has encouraged some consumers to bring purchases forward into late 2025. China's recent export controls on advanced lithium-ion batteries, key cathode and graphite anode materials and related manufacturing equipment introduce a new source of uncertainty for global battery supply chains and may slow the localisation of high-end cell production outside China. Together with Beijing's decision to exclude EVs from the list of strategic industries in China's 15th Five-Year Plan (2026–2030), this signals a shift from subsidy-driven expansion to a more mature market-based phase, aimed at curbing overcapacity and intensifying competition.

Sales of electric vehicles by region in 2025,%

Sources: SNE Research, Company analysis



In Europe, compared with 2024, BEV-equivalent sales have accelerated significantly, rising by +33% y-o-y in 2025. This recovery has been supported by renewed policy incentives, including new EV subsidy schemes in the UK and Italy's, as well as Germany's package of zero-emission vehicle purchase incentives.

At the same time, the European Commission has reported five battery cell projects signing Grant Agreements under the Innovation Fund, with total grants agreed amounting to USD 744 million. Most of the gigafactory projects announced in the European Union were designed to operate on imported raw materials, so this measure is unlikely to be a direct driver of nickel demand in the region.

That said, the long-term electrification path in Europe is under renewed debate: in summer 2025, the European Commission launched a formal review of the planned 2035 ban on new ICE[1] vehicles. If the ban is softened or delayed, this could dampen some of the demand growth for batteries and related raw materials currently baked into forecasts.

In the United States, the rollback of federal EV mandates, a looser regulatory stance, and broad automotive tariffs have created a much more negative outlook for the medium term.

Looking ahead, there is still a case for nickel demand in batteries to increase later in the decade, supported by the spread of solid-state batteries (expected to rely mostly on high-nickel cathode materials) and a future slowdown in LFP's dominance due to limited availability of advanced LFP formulations outside of China.

In 2025, nickel use in **other industries** (alloys, special steels, plating, etc.) increased by 3%, or 0.7 mln t, amid the steady recovery in industrial demand and robust economic performance in the aerospace and oil and gas sectors.

[1] Under this methodology, HEV and PHEV are recalculated according to their relative battery capacity ratio: HEV 2 kWh vs PHEV 20 kWh vs BEV 60 kWh.
[2] Battery electric vehicle.
[3] Plug-in hybrid electric vehicle.

[1] Internal combustion engine.

Supply

High-grade nickel is produced in the form of nickel cathodes, briquettes, pellets and powder, rounds, and other small special forms as well as chemical compounds, both from sulphide and from more common and available laterite raw materials. In 2025, the leading producers of high-grade nickel were Jinchuan, Huayou, Nornickel, Glencore, Vale, GEM Co., Zoomwe, and Sumitomo Metal Mining (SMM).

Low-grade nickel includes nickel pig iron, ferronickel, nickel oxide and utility nickel, which are produced from laterite raw materials only. In 2025, the key producers of low-grade nickel were Indonesian and Chinese NPI smelters, owned by Tsingshan and Delong, as well as the largest ferronickel producers: Anglo American, POSCO, Eramet, South32, etc.

The nickel market had been fundamentally divided into the low-grade and high-grade segments. However, these markets became interconnected once the practical implementation of the NPI-to-matte conversion started in early 2021 along with the massive HPAL[1] capacity additions, and the launch of nickel cathode production from low-grade Indonesian feed sources in 2023.

Refined nickel production increased by 8% y-o-y to 3.9 mln t in 2025, according to our estimates.

Supply growth in 2025 was mainly driven by the ongoing expansion of Indonesian NPI and HPAL intermediates projects as well as increased production of nickel cathodes in China and Indonesia from Indonesian materials. At the same time, NPI production in China declined and global ferronickel output remained at the previous year's level.

Production of high-grade nickel grew 8% to 1.6 mln t in 2025.

Nickel metal output increased by 10% y-o-y to 1.1 mln t driven by new Class 1 production capacity launches in China and Indonesia.

On top of this, Class 1 nickel output grew in Canada, Japan, and Norway but declined in Australia and France.

Nornickel slightly reduced nickel output volumes in 2025 due to a higher share of disseminated ores and lower grades of rich ores in processed raw materials. The Company's nickel output came in line with the annual production guidance.

Production of nickel compounds, including nickel sulphate from primary sources (excluding sulphate produced by Class 1 nickel dissolution), increased marginally by 2% y-o-y in 2025, as despite weaker demand from the battery sector in the first half of 2025, nickel sulphate demand remained steady in the second half due to increased cathode precursor production in China.

Low-grade nickel output grew by 9% y-o-y to 2.3 mln t.

Indonesia continued ramping up its nickel pig iron capacities, which was the main driver behind the growing supply of low-grade nickel in 2025.

But alongside this growth, some projects were forced to suspend production due to low profitability. An analysis of the suspended production lines reveals that the majority employ the electric furnace (EF) process, which is characterised by higher energy consumption and operating costs compared with the rotary kiln electric furnace (RKEF) process. In contrast, temporary production halts for NPI products in the RKEF process are largely driven by the enterprises' own decisions as they seek to manage utilisation to match current market conditions and adjust product output mix in line with their marketing strategy. Producers continue to face declining nickel grades as high-grade ore reserves in the country are being rapidly depleted. This trend is evident in the decreasing nickel content of Indonesia's exported NPI. Against this background, in October 2025, Indonesia's Ministry of Energy and Mineral Resources (MEMR) issued a Ministerial Regulation revising the approval terms for RKAB quotas for mineral resource development: the existing three-year approval cycle (implemented in 2023) was reverted to a one-year term, with the regulation taking formal effect from January 2026. This policy adjustment signals that the Indonesian government is poised to tighten its regulatory oversight over the mineral resources sector, which is expected to put supply pressure on the high-grade saprolite market.

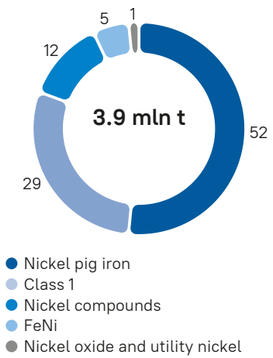
As a result, Indonesia's NPI output was 1.8 mln t in 2025.

China's NPI production continued to decline in 2025, falling by 11% y-o-y to 0.3 mln t, due to competition from Indonesian NPI imports. The use of more expensive imported raw materials put further pressure on the margins of Chinese producers.

Ferronickel production remained flat from the prior year at 0.2 mln t in 2025. The primary headwinds are the continuing negative price dynamics (FeNi is traded at a discount to the LME nickel price), high production costs, and low capacity utilisation rates shown by multiple major producers. Production at a number of sites in New Caledonia, North Macedonia, Serbia, and the Dominican Republic reportedly remains suspended, and some projects were put up for sale in 2025.

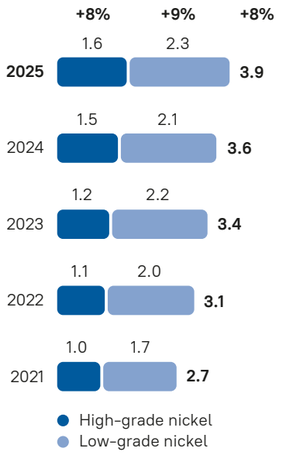
Primary nickel production by product in 2025, %

Source: Company data



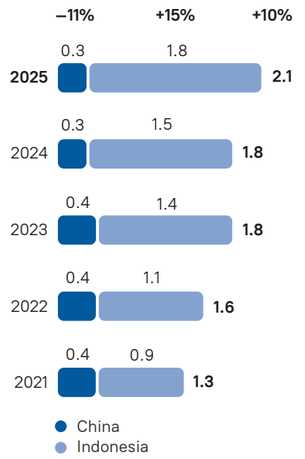
Primary nickel production[2], mln t

Source: Company data



NPI production[2], kt

Source: Company data



[1] High Pressure Acid Leaching.
[2] Note: Figures may not sum up due to rounding.

Copper market

Key market trends

In 2025, global demand for refined copper reached 27.5 mln t, representing a 3% increase compared with the previous year. The main growth drivers were the expansion of power grid infrastructure, the development of renewable energy and decarbonisation, as well as the rapid commissioning of data centres and the expansion of digital infrastructure, including cloud- and AI-related applications.

At the same time, demand growth remained constrained by slowing global economic activity, weakening industrial activity, and escalating trade and economic tensions. Despite ongoing macroeconomic challenges and a downturn in the construction sector, China retained its key role in shaping global copper demand, with copper use in the country rising to 16.1 mln t, a 5% increase compared with 2024.

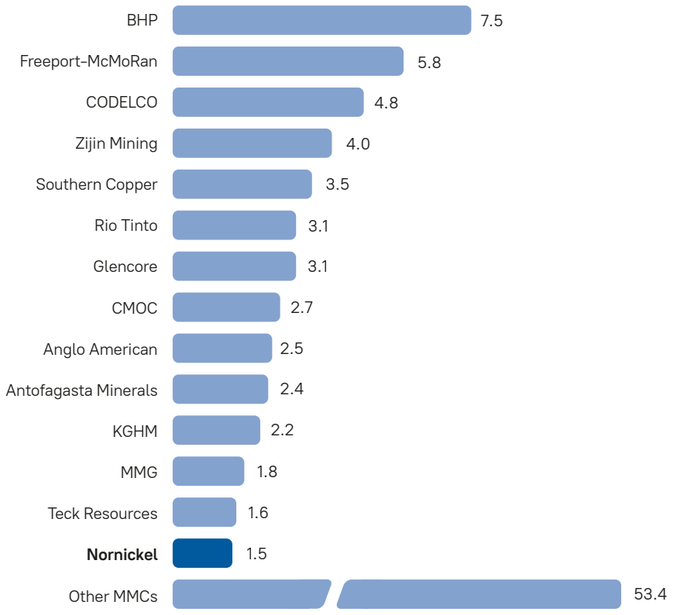
Global exchange inventories across the LME, the Shanghai Futures Exchange (SHFE), and the Chicago Mercantile Exchange (CME) reached 704 kt, which is 272 kt higher than at the end of 2024, amid the redistribution of metal among key trading venues and the outflow of stocks from the LME to COMEX.

In the first half of 2025, copper prices rose from USD 8,685/t to USD 10,115/t driven by expectations that the United States would impose Section 232 tariffs on a broad range of copper products, including refined metal. Additional support came from a tightness in the copper concentrate market and record-low TC/RC (treatment and refining charges for copper concentrate), which resulted in Chinese smelters operating at a loss on average, while rising sulphuric acid prices only partially offset the decline in processing margins. The sell-off in early April following the announcement of US tariffs led only to a temporary price correction, and the upward trend resumed by late April.

World's largest copper producers in 2025, %

Nornickel — No. 14

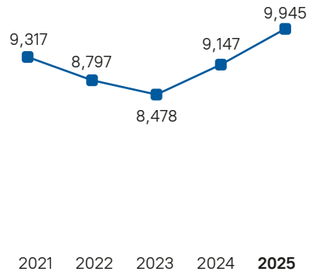
Sources: producer reports, Company analysis as of early March 2026



In August, after the United States introduced tariffs on selected copper product categories rather than on copper as a whole, the market experienced a downward correction, with prices temporarily stabilising at approximately USD 9,600/t. However, the market returned to an upward trajectory following an incident at the Grasberg mine (Indonesia), increasing concerns about the outlook for concentrate supply. As a result, by mid-autumn, prices increased to USD 10,900/t. In December, the pace of price growth accelerated: figures reached USD 12,512/t amid persistent supply-side risks and an active shift of copper inventories from London's LME to the US exchange COMEX, which reduced available stocks on the international market and reinforced expectations of supply tightness.

Average annual copper prices, USD/t

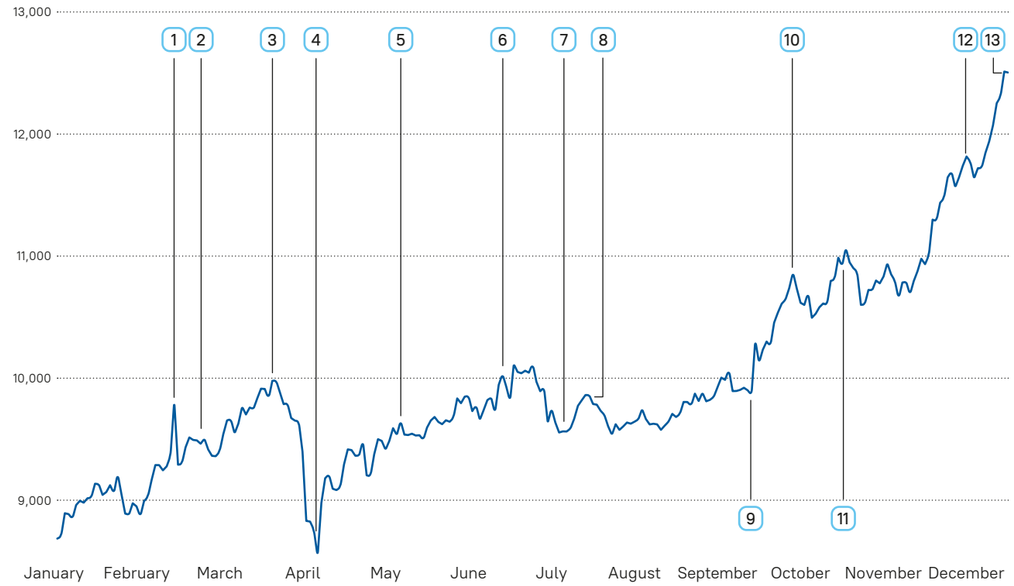
Source: LME (cash settlement)



The average annual copper price was USD 9,945/t in 2025, which is 9% higher than the level recorded in 2024.

LME copper price in 2025, USD/t

Source: London Metal Exchange, Company analysis



1. Accident at the Sino-Metals Leach Zambia copper mine.
2. Massive blackout in Chile severely disrupts mine operations, including at the Escondida mine.
3. Copper prices rise on announcements of potential US tariffs, triggering regional supply imbalances and increased market volatility.
4. LME copper prices fall by around 7% following the announcement of US import tariffs.
5. Kamoa Copper officially announces temporary suspension of some underground operations at Kakula due to seismic issues.
6. US administration announces a 50% tariff on copper imports, effective from 1 August.
7. Record outflow of LME stocks to COMEX amid tariff expectations.
8. White House says import tariffs apply only to semi-products.
9. Grasberg mine accident, prompting Freeport-McMoRan to suspend key operations.
10. Copper prices surge as supply tightens following the Grasberg mine accident.
11. In September—December, copper receives support from expectations of a Fed rate-cutting cycle, driving dollar weakness and stronger investment demand for the metal.
12. Leading research firms revise copper balance forecasts towards deficit due to lower production at the Grasberg mine.
13. Approval of the merger between Anglo American and Teck Resources.

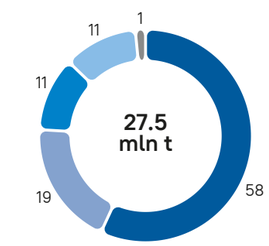
Demand

In 2025, global refined copper use totalled 27.5 mln t, representing a 3% y-o-y increase.

China showed a steady positive trend, with copper consumption rising by 5% to 16.1 mln t. Demand was supported by infrastructure investment, power grid expansion, and growth in renewable capacity, despite the continued downturn in the construction sector and broader macroeconomic uncertainty.

In Europe, consumption rose by 1% y-o-y to 3.2 mln t, while North America showed a 4% increase to 2.3 mln t. Consumption in Asia (excluding China) also grew by 2% y-o-y, reaching 5.4 mln t.

Refined copper consumption by region in 2025, %



In 2025, global refined copper use totalled

27.5 mln t

Supply

The world's largest copper mining countries are Chile, Peru, the Democratic Republic of the Congo, China, and the USA.

Chile, the world's top copper producer, increased mine output by 2% y-o-y to 5.5 mln t, while Peru's production remained flat from the prior year at 2.7 mln t.

Africa grew mine production by 5% to 4.3 mln t despite a 12% y-o-y decline to 3.6 mln t in the Democratic Republic of Congo.

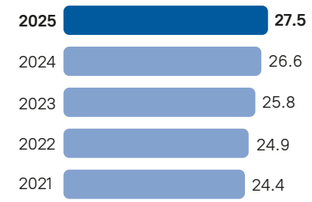
China increased production of copper in concentrate by 4% y-o-y to 2.0 mln t, while North America grew copper mine production by 5% to 2.3 mln t.

In the United States, production remained flat y-o-y at 1.1 mln t, while Canada grew its mine output by 10% to 438 kt and Mexico by 0.4% to 703 kt.

Refined copper production grew 3% y-o-y to 27.9 mln t amid capacity expansions, primarily in China.
In South and Central America, copper cathode output fell by 8% to 2.2 mln t, with Chile recording a decline from 1.9 mln t to 1.8 mln t.

Production of refined copper, mln t

Sources: Company data, CRU

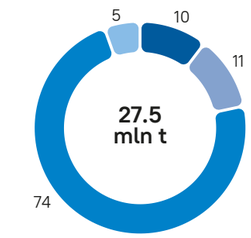


Africa saw an 18% increase in production to 3.3 mln t, while Asia (including China) ramped up its output to 17.2 mln t.
China's refined copper output increased to 13.1 mln t, while in Japan it decreased to 1.4 mln t. Production in Europe was 3.4 mln t, while copper output in North America stood at 1.5 mln t.

Refined copper consumption by industry

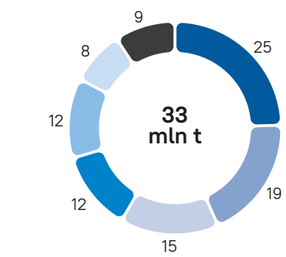
First use, %

Sources: Company data, CRU



End use by industry, %

Sources: Company data, CRU



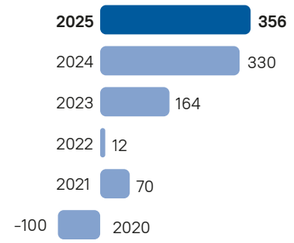
Market balance

In 2025, global copper mine production increased by 1% y-o-y to 23.5 mln t. Refined copper output rose by 3% to 27.9 mln t, while global refined copper use totalled 27.5 mln t, up by 3% y-o-y.

In 2025, the refined copper market recorded a moderate surplus of 0.36 mln t, equivalent to around 1% of annual consumption.

Refined copper market balance, mln t

Source: Company analysis as of January 2026



PGM market

Key market trends

Palladium

During the first five months of 2025, the palladium price remained within the narrow USD 900–1,100/oz range established back in 2023. However, from May 2025, prices rose significantly, reaching as high as USD 1,871/oz by the end of December. The rally was driven by US dollar weakness amid monetary easing by the US Federal Reserve, as well as investors' efforts to diversify away from dollar-denominated assets and gold. From August, prices also received some support from a petition filed by Sibanye-Stillwater and the United Steelworkers union seeking the imposition of antidumping and countervailing duties on imports of unwrought palladium from Russia into the United States. Towards the end of the year, the PGM market rallied sharply following the launch of PGM futures and options on the Guangzhou Futures Exchange (GFEX), which established the first domestic price benchmarks for these metals in China and drew strong investor interest.

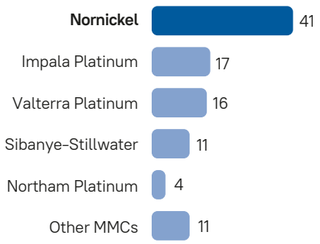
These developments took place against a backdrop of declining primary supply from South Africa, due to flooding at the Tumela mine, and from North America, where output at the Stillwater mine was cut by 50%. Industrial demand for palladium (excluding investments) increased by 1% y-o-y, driven primarily by higher production of ICE-powered vehicles, which rose to 80 million units (+2% y-o-y), largely supported by hybrids.

The average price of palladium in 2025 increased by 17% y-o-y, reaching USD 1,149/oz.

World's largest palladium producers in 2025,[1] %

Nornickel — No. 1

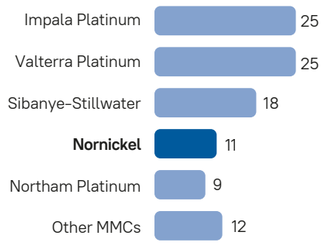
Sources: producer reports, Company analysis as of early March 2026



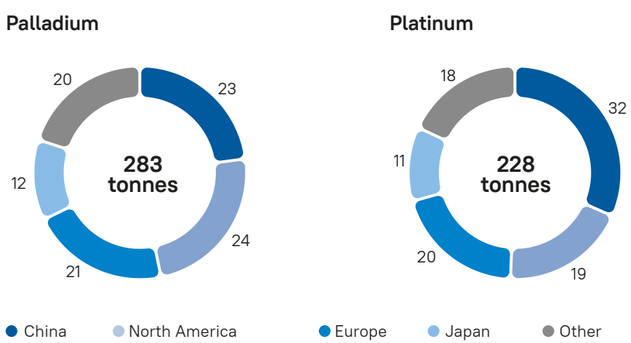
World's largest platinum producers in 2025,[1] %

Nornickel — No. 4

Sources: producer reports, Company analysis as of early March 2026



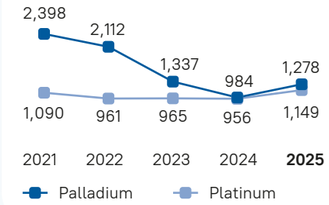
PGM consumption by region in 2025, %



[1] Refined metal output including production from third-party feedstock and production from own feedstock by third parties under tolling agreements.

Average annual PGM prices, USD/oz

Source: Company analysis

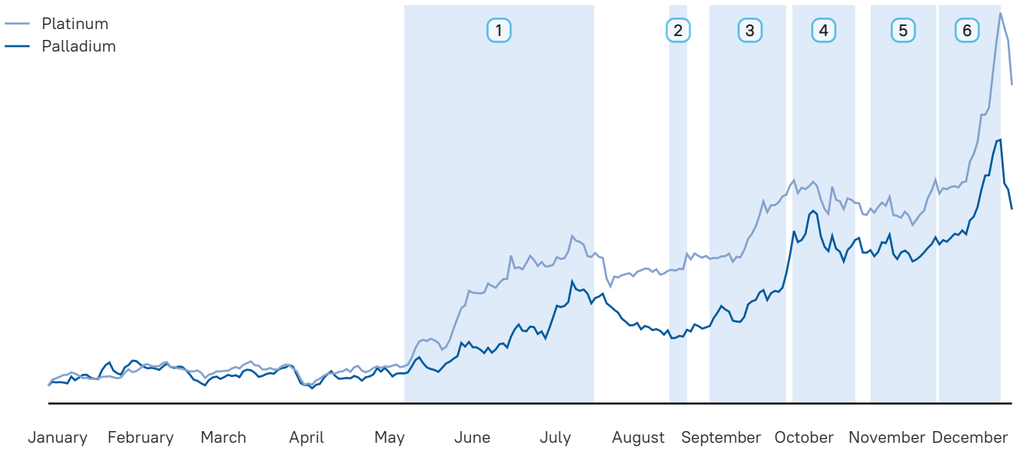


Platinum

In the first four months of 2025, platinum prices remained relatively stable within the USD 900–1,000/oz range. Since mid-May 2025, the price of platinum followed an upward trend, reaching a historic high of USD 2,303/oz in December, driven by the US dollar's depreciation against other currencies and overall stronger investor interest in precious metals. Significant support for prices came from a sharp surge in jewellery demand in China in the first half of the year amid record gold prices, as well as reduced production in South Africa, which exacerbated market tensions. The upward trend was also supported by changes to platinum import regulations in China in October and the launch of PGM futures and options on the GFEX in November.

The average price of platinum in 2025 rose by 34% y-o-y to USD 1,278/oz.

Palladium and platinum prices in 2025, LPPM



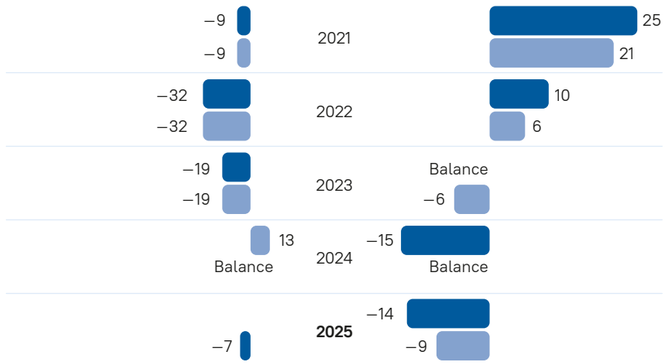
1. Sharp uptick in demand for platinum from Chinese jewellers amid record gold prices triggers stronger investment activity across all PGMs.
2. Sibanye-Stillwater and the United Steelworkers union file a petition seeking the imposition of antidumping and countervailing duties on imports of unwrought palladium from Russia into the United States.
3. Changes in the US Federal Reserve's monetary policy in the second half of the year and three rate cuts between September and December contribute to the US dollar's depreciation against other major currencies, supporting commodity prices, and PGMs in particular.
4. 43-day U.S. government shutdown prompts investors to flee to safe-haven assets, including PGMs.
5. On October 21, the Chinese government announced that it would revoke the tax incentives on platinum imports previously granted to China Platinum Company.
6. The launch of platinum and palladium futures and options on the GFEX on November 27 drew interest from the Chinese investment community.

Market balance

In 2025, the palladium market balance (excluding investments) was in equilibrium, supported by stronger demand from the automotive sector amid higher production of ICE-powered vehicles and lower supply from North America and South Africa. Including investments, the market recorded a slight deficit of 7 tonnes.

The platinum market balance (excluding investments) showed a deficit of 9 tonnes, driven by lower primary supply from South Africa and stronger jewellery demand. Including investments, the platinum market recorded a larger deficit of 14 tonnes.

Palladium Market, t



Platinum Market, t

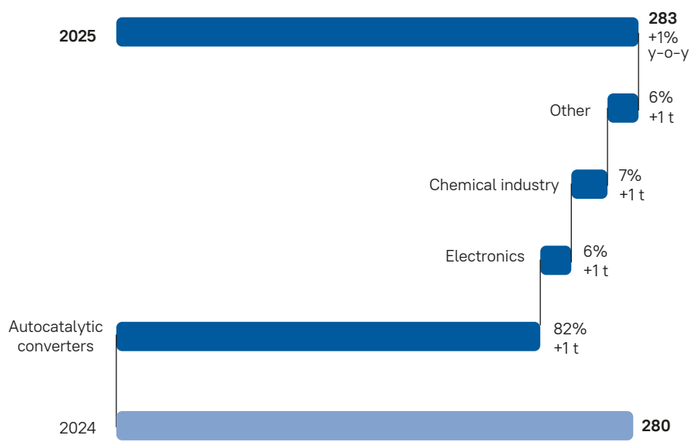
Balance including investment demand and inventory movements
Balance excluding investment demand and inventory movements

Demand

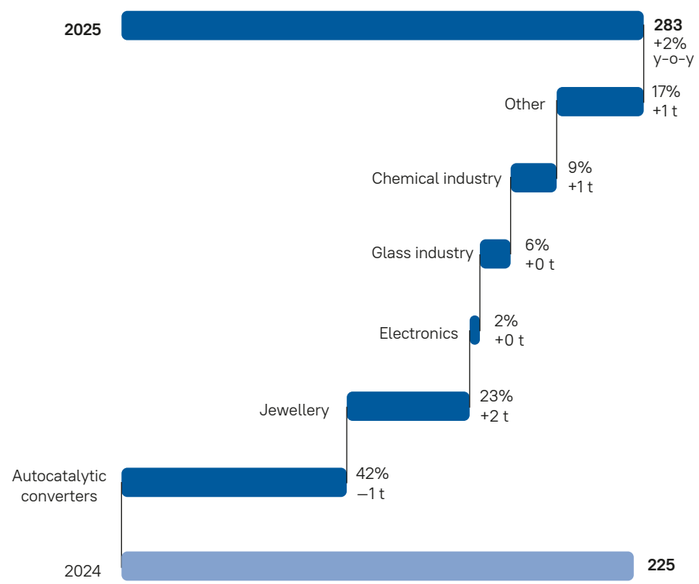
The main consumers of PGMs are China, EU countries, Japan, and the USA.

In 2025, industrial consumption of palladium increased by 3 tonnes (+1% y-o-y) to 283 tonnes, while industrial demand for platinum grew by 3 tonnes (+2% y-o-y) to 228 tonnes.

Palladium: demand by industry, %, **and by application,** t, **in 2025**



Platinum: demand by industry, %, **and by application,** t, **in 2025**



Automotive industry. Exhaust treatment systems account for the bulk of total PGM consumption. In this sector, palladium and platinum are used in catalytic converters, which are mandatory for road transport and legally regulated in most countries. These solutions drastically reduce emissions of hazardous substances.

Due to their unique catalytic properties ensuring effective chemical reactions throughout the entire vehicle life cycle, there are almost no alternatives to PGMs in this sector.

ICE-powered vehicles continue to account for 84% of production, while all-electric vehicles make up only 16% of total vehicle output. That said, the trend throughout 2025 was that transport electrification was driven primarily by hybrids rather than all-electric

vehicles, which do not use catalytic converters, increasing the production of ICE-equipped vehicles by 2% y-o-y.

Palladium use in the industry increased by 1 tonne to 231 tonnes, while platinum consumption decreased by 1 tonne to 92 tonnes as diesel vehicles were phased out and manufacturers shifted towards palladium as a lower-cost alternative.

Electronics. In the electronics industry, palladium and platinum are widely used due to their conductivity and corrosion resistance properties. Palladium is widely employed in contacts, connectors, multilayer ceramic capacitors (MLCCs), and printed circuit boards, offering stable electrical performance and corrosion resistance at a lower cost than gold. Platinum is used in hard drives and other components where strength and reliability are critical. Palladium demand in the industry was up 2% y-o-y to 16 tonnes in 2025, while platinum use increased by 5% to 5 tonnes.

Chemical industry. In the chemical sector, palladium and platinum are widely used as catalysts in a range of chemical processes. Palladium is primarily used in the production of purified terephthalic acid (PTA), a key feedstock for PET[1] plastics. Platinum is employed in oxidation catalysts in the production of paraxylene and silicone, as well as in petrochemicals. In 2025, palladium demand in the sector grew by 5% to 20 tonnes, while platinum demand was up 2% to 22 tonnes.

Healthcare. In the healthcare sector, palladium and platinum are used in a variety of medical devices and dental materials due to their unique properties. Palladium is employed in dental alloys for crowns and bridges due to its strength, corrosion resistance, and biocompatibility. However, its use declined by 10% over the past year to 5 tonnes in 2025 due to a shift to metal-ceramic and all-ceramic crowns. By contrast, platinum demand in the healthcare sector increased by 4% to 9 tonnes, as this metal is used in the manufacture of medical implants and devices such as pacemakers, stents, and neuromodulators due to its biocompatibility, corrosion resistance, and excellent conductivity.

Jewellery. Owing to its high density, durability, and rarity, platinum is prized for its exceptional wear resistance as well as its lustrous appearance and natural white colour. Palladium, on the other hand, is often used as a master alloy in white gold and as an alternative to platinum in jewellery. In 2025, palladium demand in the jewellery industry declined 4% y-o-y to 4 tonnes due to limited marketing support. By contrast, demand for platinum rose 5% to 55 tonnes, reflecting growing interest in the metal amid record gold prices.

Glass industry. Palladium and platinum have important applications in the glass industry, where they are used in the manufacture of specialised glassmaking equipment, including glass melting equipment, crucibles, and other high-temperature resistant components. Platinum is particularly valued for its corrosion resistance and stability at high temperatures, making it ideal for use in glass melting processes. Despite industry efforts to reduce reliance on these costly metals through design optimisation and a shift to lower-cost alloys, demand for platinum continues to grow. In 2025, platinum consumption in the glass sector increased by 3% to 15 tonnes. At the same time, palladium is also gaining traction in the sector, supported by new technologies developed by Nornickel's Palladium Centre and currently being tested by leading glass makers in China, which could significantly expand its use going forward.

Investments. Palladium and platinum are widely used as an investment instrument, which became a key price driver for these metals in 2025. Physical investments may vary from coins and smaller bars to investments in ETFs. Palladium stocks in ETFs increased by 12 tonnes to 36 tonnes in 2025, while platinum stocks also grew by 3 tonnes to 103 tonnes.

Supply

In 2025, primary refined palladium production declined by 6% y-o-y to 190 tonnes, and platinum supply was down by 3% to 172 tonnes.

In Russia, a leading palladium producer, supply declined marginally by 2%, or 2 tonnes.

South Africa, the world's top platinum producer, saw a 4% decline in mined metal volumes as flooding at a number of mines and an inability to ramp up production after years of underinvestment weighed on supply, bringing palladium and platinum production to 119 tonnes and 66 tonnes, respectively.

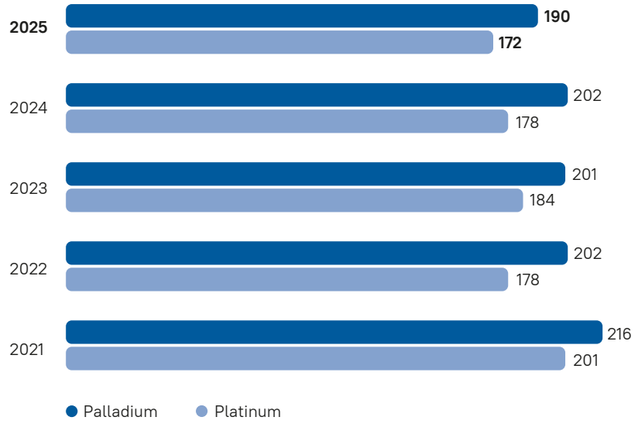
In Zimbabwe, primary palladium and platinum output in 2025 remained almost unchanged from the prior year at 13 tonnes and 16 tonnes, respectively.

Palladium production in North America fell by 6 tonnes to 22 tonnes, while platinum production declined by 1 tonne to 9 tonnes due to lower output at the Stillwater mine.

The main sources of secondary PGM supply are spent automotive exhaust catalysts as well as recycled jewellery and electronic devices. In 2025, recycled palladium and platinum supply grew by 3 tonnes and 2 tonnes to 94 tonnes and 48 tonnes, respectively. The increase was driven by higher metal prices and recyclers' willingness to step up the release of previously accumulated metal.

Primary PGM production, t

Source: Company data



[1] Polyethylene terephthalate is a thermoplastic polymer that belongs to the polyester family.