minelife

WEEKLY RESOURCE REPORT by Gavin Wendt

ISSUE 385 **14th December, 2025**

OVERVIEW

- The ASX All Ordinaries Gold Index (XGD) is up 98% over the past 12 months, significantly outperforming the ASX 300 Metals & Mining Index (XMM) (up 29%) and the ASX All Ordinaries Index (XAO) (up 5%).
- Gold has continued with its strong run, having now reached the US$4,300/oz level (and A$6,460/oz level), in turn further reinforcing interest in gold equities. The broader mining sector is also seeing improvement, with iron ore prices resilient above US$105/ton, copper at fresh records, and lithium continuing its price recovery.
- Globally though, concerns persist with respect to trade issues, inflationary pressures, and geopolitical turmoil. China's economy remains under pressure, which could stymie growth without major stimulus measures.

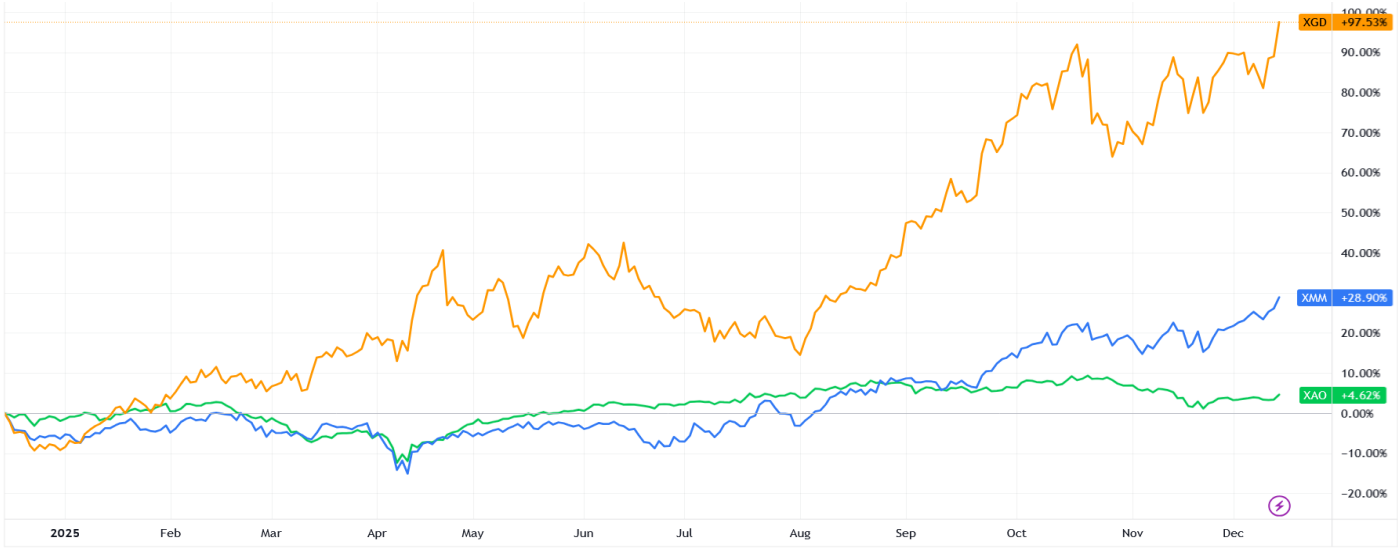

Figure 1: 12-month rolling graphic comparing the performance of the ASX Gold, ASX300 Metal & Mining, and All Ordinaries indices.

COMMODITY COMPARISON CHART

- We have updated our rolling 12-month commodity price graphic below. Precious metals as a collective continue to be far and away the best performers – encompassing gold, silver, platinum and palladium.
- Cobalt remains far and away the stand-out performer within the industrial minerals complex, with tin and copper and aluminium also solid performers, and lithium consolidating its recovery.
- Energy commodities - uranium and crude oil – have struggled over the 12 months, however US natural gas is performing solidly.

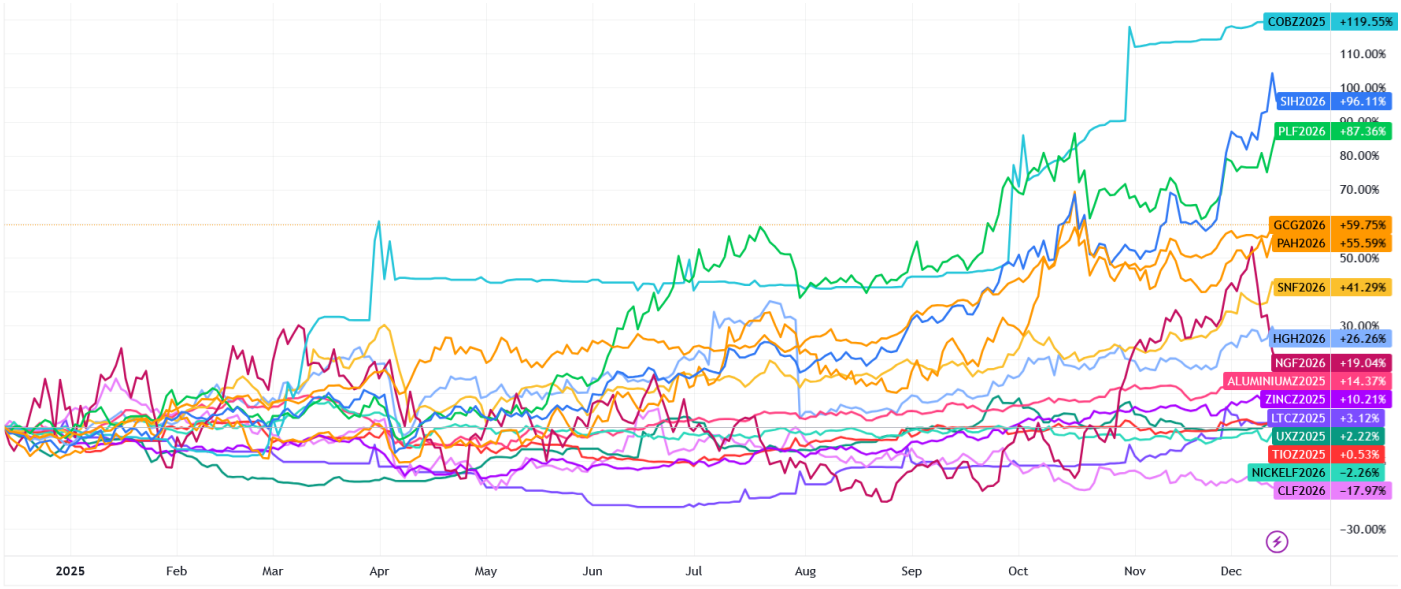

Figure 2: 12-month rolling graphic showing the relative performance of a basket of commodity futures prices.

The best performing commodities are:

- Cobalt (+120%)
- Silver (+96%)
- Platinum (+87%)
- Gold (+60%)
- Palladium (+56%)
- Tin (+41%)
- Copper (+26%)
- Henry Hub US Natural Gas (+19%)
- Aluminium (+14%)
- Zinc (+10%)
- Lithium Carbonate (+3%)
- Uranium (+2%)
- Iron Ore (+1%)

The worst performing commodities are:

- Nickel (-2%)
- Crude Oil (-18%)

EQUITY COVERAGE

Friday 12 December – Chalice Mining (ASX: CHN)

Chalice Mining (ASX: CHN) - Share Price: $1.59 | Market Cap: $619M | Initiated @ $0.16 in March 2019|

Since March 2020, the company's outstanding Gonneville Project, located just an hour's drive northeast of Perth in Western Australia, has generated world-class platinum group element (PGE) and nickel-copper results from an extensive program of exploration drilling that culminated in Dec 2025 with a comprehensive Pre-Feasibility Study. The Maiden Ore Reserve comprises 260Mt @ 0.86g/t 3E, 0.16% Ni, 0.098% Cu, 0.017% Co – containing 7.1Moz 3E, 400kt Ni, 250kt Cu, 43kt Co - which is limited by infill drilling. The Pre-Feasibility Study has confirmed a long-life, globally competitive critical minerals operation at Gonneville, which can generate A$4.7bn in pre-tax free cashflow over an initial 23 year open-pit mine life, with a rapid payback of 2.7 years. An FID is targeted for H1 CY28.

The metals to be produced are currently dominated by Russia, China, South Africa and Indonesia. Gonneville could provide a secure and reliable supply chain from a new independent western producer. CHN will now undertake a Feasibility Study and the next stage of regulatory approvals and offtake/financing talks.

Wednesday 10 December – Metro Mining (ASX: MMI)

Metro Mining (ASX: MMI) - Share Price: $0.07 | Market Cap: $428M | Initiated @ $0.16 in August 2017|

MMI represents Australia's only pure-play bauxite producer, having commissioned its flagship Bauxite Hills Mine during 2018. Bauxite Hills is one of the largest independent projects within the internationally acclaimed Weipa Bauxite Region, encompassing ~1,900 sq km located 95km north of Weipa on Western Cape York in Queensland.

The Bauxite Hills Mine hosts ore Reserves of 101.5Mt and total Resources of 131.2Mt, with ore shipped to China to meet its rapidly growing bauxite market, with Cape York bauxite being a classic Western Cape York-style pisolitic bauxite, one of the highest alumina bauxites in the world. Bauxite Hills Mine's proximity to Asia and large vessel capability has significant advantages including lower costs, reduced travel and turnaround times.

MMI has implemented a capacity expansion to 7.0 Million Wet Metric Tonnes (MWMT) annually, which will generate improved economics, resilience and optionality in a market of improving bauxite prices, with the potential for a further expansion to 8 to 9 MWMT p.a. in the future.

Tuesday 9 December – Kairos Minerals (ASX: KAI)

Kairos Minerals (ASX: KAI) - Share Price: $0.036 | Market Cap: $121M | Initiated @ $0.052 (Sep 2017) |

A diverse Western Australian exploration portfolio, focused primarily on its 100%-owned Mt York Gold Project, which lies immediately adjacent to the major lithium-tantalum projects owned by Pilbara Minerals (ASX: PLS).

Since acquiring the project in early 2016, KAI has upgraded the Mt York Gold Project resource base to 43.08 Mt @ 1.00g/t Au for 1.39 Moz (at a 0.5 g/t Au cutoff), which incorporates a higher-grade component of 21 Mt @ 1.5 g/t Au for 1.0 Moz, with significant brownfields and regional exploration potential.

A 2024 Scoping Study demonstrated Mt York to be a technically and financially robust project – with forecasts of life-of-mine production of 657,200oz over an 8-year mine life at an all-in sustaining cost (AISC) of A$2,205/oz, with a payback period of 2.7 years based on a receivable gold price of A$3,500/oz (presently A$6,330/oz – up +80%).

KAI has recently signed a Mining Agreement with Nyamal Aboriginal Corporation (NAC), who are the Traditional Owners of the country where the Mt York Gold Project is located in the Pilbara. KAI has also received assay results from the Main Hill and Gossan Hill prospects, with an overall Mt York Resource upgrade expected during Q1 2026.

PRECIOUS METALS

Gold

- Extended its powerful 2025 rally this week, blasting to fresh all-time highs above $4,300/oz in the wake of the Fed's final rate cut of the year. The FOMC delivered a widely expected 25-basis-point reduction and restarted Treasury purchases, initially sending spot prices sharply higher as traders reacted to easier financial conditions.
- However, the Fed's messaging was far from fully dovish. Three dissenting votes, projections for only one cut in 2026, and an outlook that keeps inflation above 2% through 2028, all signalled caution. Markets chose, at least temporarily, to look past that restraint. Gold saw its most aggressive buying during Thursday's US session, when prices surged through $4,270/oz before briefly spiking to $4,349/oz on Friday.
- For the first time in more than five years, three voting FOMC participants dissented against the rate cut, implying real division within the Fed about whether and at what pace cuts will play a role in 2026 monetary policy.
- In his post-meeting press conference, Chair Powell made a considerable effort to underline that there should be no market expectations of multiple cuts front-loaded for next year or even under consideration. And in the Staff Economic Projections, the Fed estimated that overall inflation in the US economy will remain above the central bank's 2% target until 2028, while the "dot plot" (unsurprisingly) projects just a single rate cut next year.
- By the week's close, some of that froth had come out of the market. With key releases like delayed Non-Farm Payrolls and CPI due this coming week, traders will be watching closely to see whether the data justify the market's more dovish view - or push gold into another round of volatility.
- Fresh labour-market data reinforced the dovish shift in market pricing. Initial jobless claims for the week of December 6 climbed to their highest level in more than two months, adding to evidence of cooling in hiring conditions. This followed the Fed's 25-basis-point cut and a tone that was less hawkish than expected. Traders now price in two cuts for 2026.
- The Fed also announced a US$40bn program to purchase short-term Treasury bills, a step expected to cap front-end yields and indirectly support precious metals.

Silver

- Touched a fresh record high on Friday of $64.64/oz, before closing at $61.96/oz, and are up nearly 5% for the week. The same factors that are positively impacting gold are also driving silver prices higher.
- Silver prices have roughly doubled this year, outpacing a 60% rise in gold. The rally has accelerated in the last two months, in part thanks to a historic squeeze in London. While that crunch has eased in recent weeks as more metal has been shipped to the world's biggest silver trading hub, other markets are now seeing supply constraints – with Chinese inventories at their lowest level in a decade.

Platinum

- Has surged impressively by nearly 90% from the US$885/oz low of early Q2 this year, following almost three years (2022-2024) of relatively muted sideways price movement. This subdued phase stemmed from several factors, including large inventories accumulated by vehicle manufacturers after COVID, persistently high interest rates, concerns over a global economic slowdown, a lacklustre Chinese market, continuous ETF outflows, and capital flows shifting in favour of gold.
- Platinum is an essential component in the production of exhaust catalysts, the petrochemical industry, fuel-cell technology, and hydrogen electrolysis. Meanwhile, its supply is extremely concentrated, with approximately 74% coming from South Africa, and the rest mainly from Russia, Zimbabwe, Canada, and the United States.

This concentration makes the platinum market more vulnerable to mining disruptions or geopolitical risks in these countries.

- Throughout most of 2025, the supply & demand landscape for platinum has shifted significantly. Years of low prices placed considerable pressure on the mining sector, forcing companies to cut output, delay investments, or shut down operations with low profit margins. This led to a tightening of supply just as inventories declined after nearly three consecutive years of being drawn down by automakers to cover shortages.
- Platinum demand in the automotive sector has recovered after the pandemic, rising from 2.77 million oz in 2022 to 3.21 million oz in 2023 (WPIC), supported by the diesel and heavy-duty vehicle segment. The tightening of emission standards in Europe, China, and India also contributes to stronger demand. Hybrid vehicles and hydrogen-powered vehicles still require platinum for exhaust treatment systems or fuel cells.
- Platinum is also the primary catalyst material used in PEM fuel cells and PEM electrolysers, both of which are key technologies in the clean-energy strategies of the United States, Europe, and China. According to estimates from WPIC and the IEA, if hydrogen projects progress on schedule, global electrolyser capacity could expand significantly in the second half of this decade, driving platinum demand related to hydrogen higher than current levels. Although still a small component of total demand, the hydrogen segment is viewed as one of the long-term growth drivers for platinum.
- In South Africa (the country responsible for the majority of global output) electricity shortages, rising mining costs, and aging ore bodies continue to weigh on production. Meanwhile, industrial demand has recovered across multiple segments, from automotive and jewellery to hydrogen fuel cells. Additionally, as other precious metals like gold have entered high valuation territory, investors have tended to diversify into undervalued precious-metal assets, making platinum one of the beneficiaries of this capital rotation.

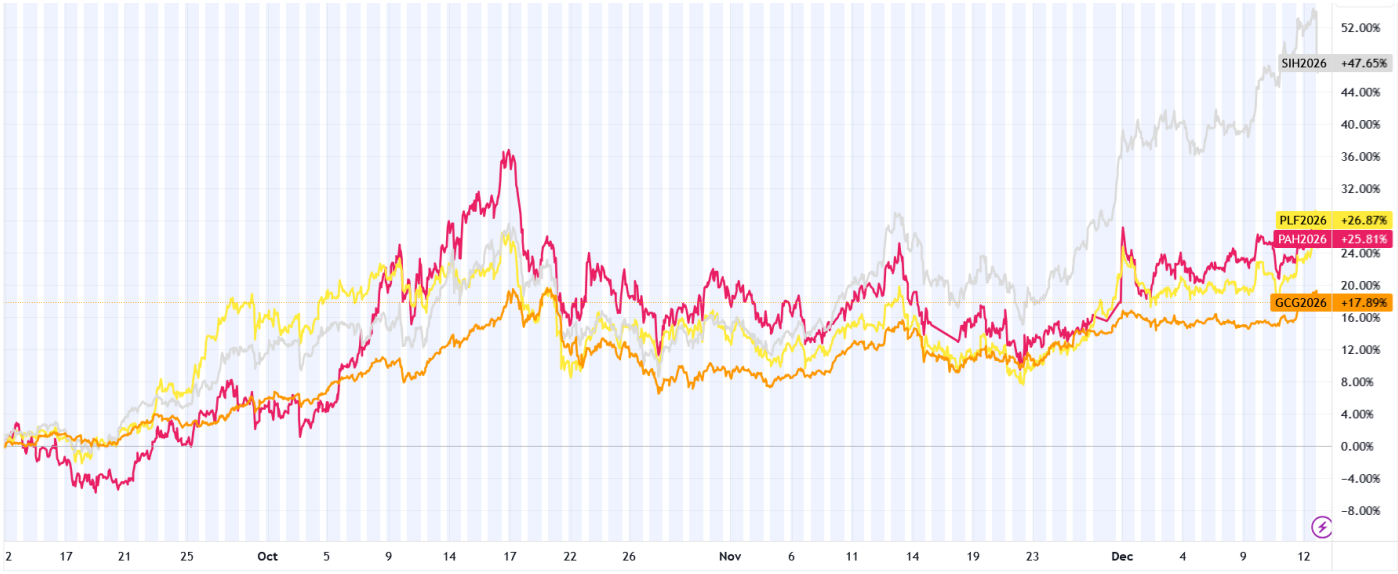

Figure 3: Graphic showing the relative performance of key precious metals over the course of the past 3 months – silver (up 48%), platinum (up 27%), palladium (up 26%), and gold (up 18%).

Palladium

- Is nearing 2025 highs again and is attempting to solidify above $1500 per ounce, extending a rally that has steadily rebuilt momentum over the past two months. Palladium movements seem to reflect a rare alignment of supportive demand signals from Germany and China, softer EV adoption trends that ease substitution risk, and persistent concerns about Russian supply reliability.

- Palladium's latest advance has been underpinned by improving signals from Germany and China, two markets that typically anchor global auto demand. Germany's factory orders rose 1.5% in October, and industrial production climbed 1.8%, a combination that points to stabilizing industrial activity even as domestic car registrations continue to cool chronically.
- This divergence is important because it suggests the manufacturing base is recovering faster than consumer vehicle demand, often an early sign of production-led restocking that tends to support auto catalyst metals such as palladium.
- According to the China Passenger Car Association, China presented a similarly nuanced picture. Retail vehicle sales declined 8.1% in November and slipped 1.1% month-over-month, but exports hit a record, rising 52% to 601,000 units. New-energy vehicle sales grew only 4.2% year-over-year, undershooting expectations and reinforcing the theme that the domestic EV momentum is cooling faster than previously assumed.
- The export boom, however, keeps Chinese production elevated and sustains global palladium demand through foreign-market supply chains. China's broader trade performance strengthens the outlook further. According to the General Administration of Customs, the country's goods trade surplus surpassed 1 trillion dollars for the first time, driven by a 5.4% surge in exports.
- This milestone underscores China's industrial dominance and helps maintain high utilization rates across sectors that indirectly support auto parts and catalytic materials. The sustained export machine also gives Chinese vehicle manufacturers the financial buffer to keep production levels firm even when domestic demand softens, an environment that historically increases palladium pull-through.
- EV dynamics remain another bullish layer. According to Reuters and BMI, global EV sales growth in November rose only 6%, the slowest since February 2024 as China plateaued and North America suffered a 42% collapse following the end of US tax credits. Europe remained the only bright spot with registrations up a third, but the global trend is clearly decelerating.
- The supply story is no less critical. Russia controls nearly a quarter of global palladium exports, and according to recent reporting on Ukraine's strikes against Russia's shadow fleet, geopolitical risks continue to rise. While the impact on metal shipments remains uncertain, the probability of disruptions is increasing.

Industrial Metals

Cobalt

- Is far and away the best-performing commodity in 2025, with prices driven by supply issues out of the DRC - the world's biggest producer that accounts for ~70% of global production. In February the DRC halted cobalt exports, then replaced the ban in October with a quota system. However, exports have not yet resumed. As a result, cobalt metal futures have risen by ~120% over the past 12 months.
- In order to try and fix the problem, cobalt miners in the DRC will be allowed to keep their allotted export quotas for this year as delays in implementing new procedures have prevented shipments.
- The country is testing the new procedures now, and is guaranteeing that companies can keep the right to ship volumes that had been allotted through Dec. 31, the Authority for the Regulation and Control of Strategic Mineral Substances' Markets, known as ARECOMS, said on Thursday. That indicates that allowed volumes could be transferred into 2026.
- The comments come almost two months after exports were expected to resume after Congo banned cobalt shipments in February and instituted the new quota system. The government enacted strict controls to rein in oversupply and support prices.

- Since Congo first suspended exports in February - when prices were languishing at historically low levels - a benchmark measure of the metal has more than doubled. Prices of cobalt hydroxide, the main product exported from Congo, have quadrupled.
- The new quota system has confused miners, who were expecting to begin shipping their stockpiles in mid-October. ARECOMS said in September that miners would be allowed to ship just over 18,000 tons of the metal during the remainder of this year, and up to 96,600 tons a year in 2026 and 2027. However, the volumes permitted for each of the next two years are less than half the country's production in 2024.

Copper

- Is closing in on the $12,000 a metric ton mark, as expectations of soaring demand from data centres that power artificial intelligence and tight supplies collide with shortages outside the United States. Valued for its exceptional electrical conductivity, copper wiring is vital in power grids that feed data centres, electric vehicles and the infrastructure needed for the energy transition.
- Copper prices are up 35% so far this year and heading for their largest gain since 2009, due to mining disruptions and stockpiling in the US – and on Friday, they touched $11,952 a ton.
- Canada's Sprott Asset Management launched the world's first physically backed exchange-traded copper fund in mid-2024. The fund, which holds nearly 10,000 tons of physical copper, has shot up by almost 46% this year to nearly 14 Canadian dollars per unit.
- Copper demand growth is being driven by billions of dollars being invested worldwide to modernize and expand power grids. Data centres and clean energy require vast amounts of electricity. The energy transition, which includes renewable energy technology such as wind and solar, is also expected to boost demand.
- A recent *Reuters* survey of analysts' forecasts shows the copper market will see a deficit of 124,000 tons this year and 150,000 tons next year. Macquarie expects global copper demand at 27 million tons this year, up 2.7% from 2024, with demand in top metals consumer China rising 3.7%. It forecasts global demand growth outside China at 3% next year.

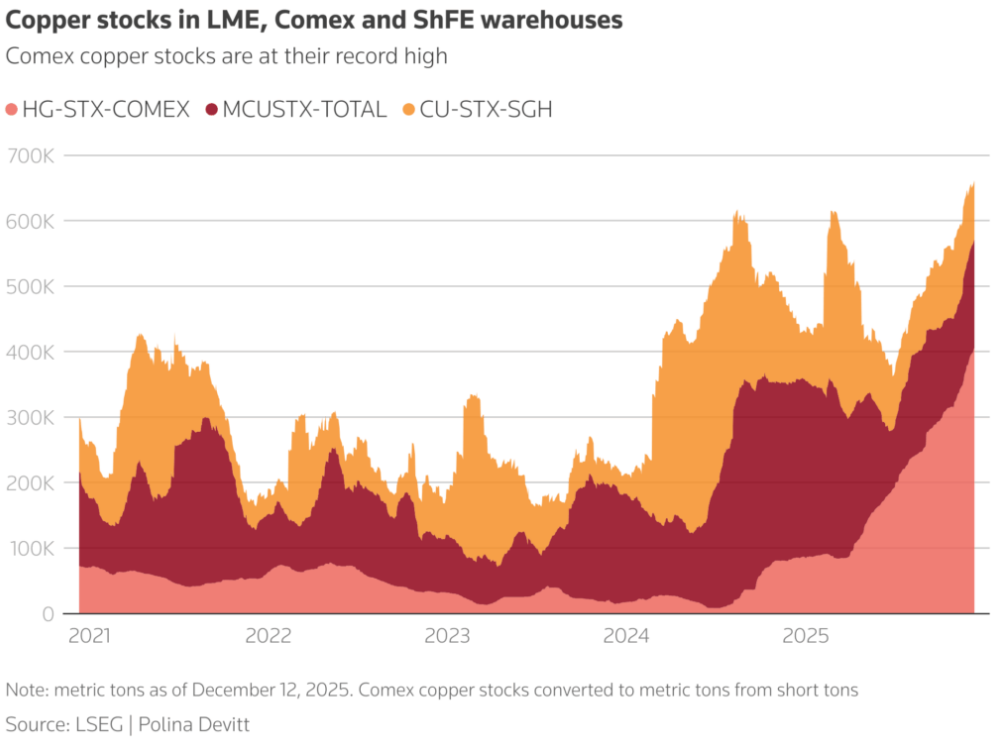

Figure 4: Graphic showing the level of copper inventories in various world exchange warehouses over recent years.

- Supply disruptions include an accident at Freeport McMoRan's giant Grasberg mine in Indonesia in September, while miners such as Glencore have cut production guidance for 2026, reinforcing expectations of tight supplies. The overall amount of copper stored in exchange warehouses – the London Metal Exchange, US-based Comex and the Shanghai Futures Exchange – is up 54% so far this year at 661,021 tons.
- Traders have been shipping copper to the United States since March due to higher prices on Comex ahead of US President Donald Trump's planned import tariffs. Higher prices are needed to cover the import tariff. Stocks on Comex are at a record high of 405,782 tons and amount to 61% of total exchange stocks versus 20% at the start of 2025.
- Rising prices are beginning to negatively impact Chinese demand. Official data released on Monday showed that China's imports of copper fell for the second consecutive month during November, due to rising prices for the metal. The General Administration of Customs reported that imports fell 2.51% in November, from 438,000 metric tons the month before to 427,000 tons.
- China is the largest consumer of copper, and imports unwrought copper, as well as copper products. This includes anodes and refined metals, alloys, and semi-finished products. The London Metal Exchange benchmark three-month price of copper rose 2.77% in November, reaching a record high of $11,210.50 per ton. However, supply concerns led to a break-through this level in December.

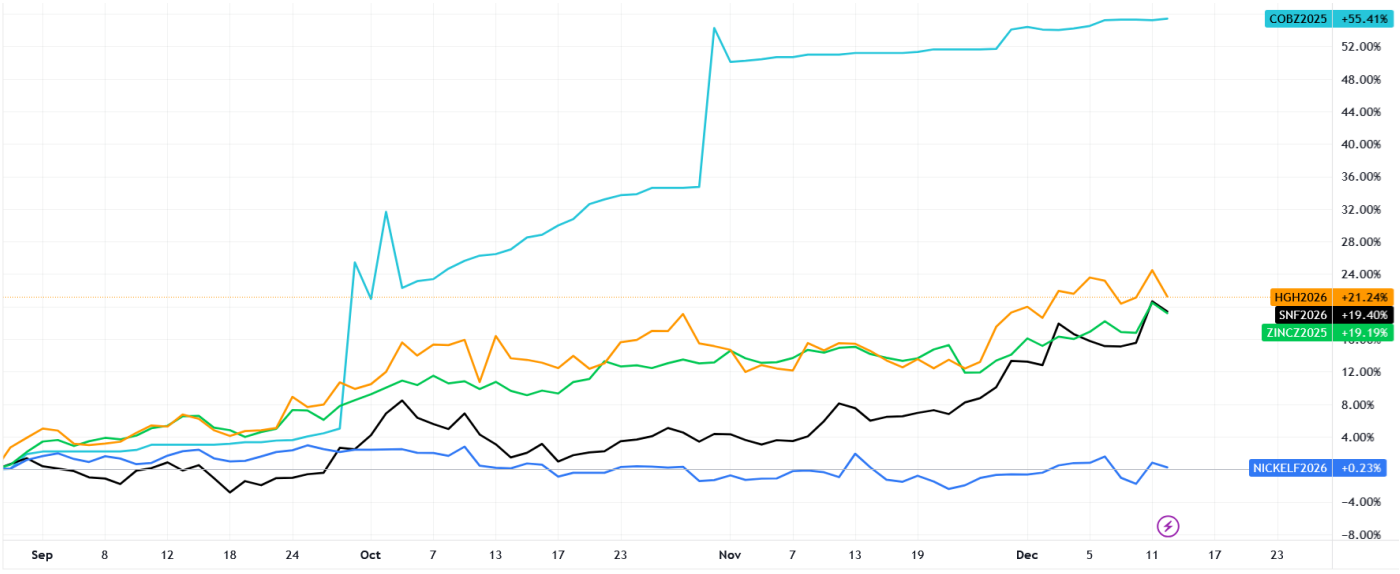

Figure 5: Graphic showing the relative performance of key industrial metals over the course of the past 3 months – cobalt (up 55%), copper (up 21%), tin (up 19%), zinc (up 19%), and nickel (steady).

- China's leading smelters have agreed to reduce output by 10% in 2026, to combat negative processing charges. This has fueled expectations of a tighter supply for refined copper next year. The price of copper in China, which is a measure of the appetite of Chinese buyers for imported products, was $32 per ton at the end November. This compares with $36 at the end of October and $58 a month earlier, reflecting a shrinking demand for imports.
- According to official data, China imported 4.88 million tons (down from 5.12 million) of copper in the period January through November. This is down from the 5.12 million tonnes in the same period in 2024. Imports of copper concentrate, used in smelters to produce metal, increased from 2.45 million tons a month ago to 2,53 million tons in November. China imported 27.61 million tons (up from 25.57 million) of copper concentrate between January and November.

Crude Oil & Gas

- Crude oil prices are still struggling after a torrid 2025 that's seen a 21% price fall. WTI prices ended the week hovering around the US$57.50 level, which reflected an overall weekly price fall of 4%.
- The market could remain under pressure against a bearish medium-term outlook. The bigger driver remains oversupply expectations into 2026. While the IEA trimmed its surplus projections, it still sees an oversupply of 3.84 million bpd in 2026, a gap that keeps sentiment bearish and rebounds under pressure.
- The lack of concrete progress in peace talks between the United States and Russia regarding the conflict in Ukraine has provided some support to the oil market, potentially preventing even larger falls. The stalemate reduces the likelihood that large volumes of Russian crude oil will return to the global market anytime soon, keeping supply uncertainty elevated. The persistence of the conflict remains a key factor shaping expectations for a normalization of international energy flows.

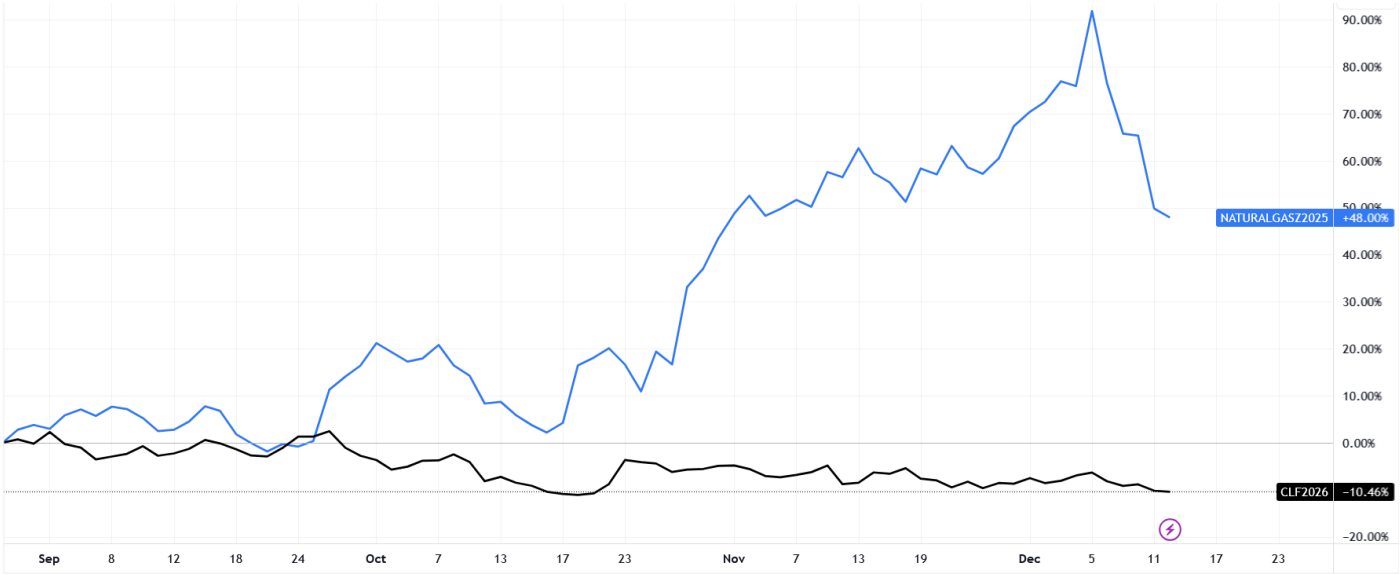

Figure 6: Graphic showing the relative performance over the past 3 months of NYMEX crude oil (down 10%) and Henry Hub US natural gas (up 48%).

- There remains a clear divergence between US crude and natural gas prices. While crude oil markets are faced with oversupply and an opaque demand outlook, it is the opposite in the natural gas space. US gas prices have climbed sharply since late October, fuelled by record LNG exports, growing electricity demand from AI data centres, and seasonal heating needs.
- The primary driver behind this price rally is the rapid expansion of LNG exports. In October, US LNG shipments exceeded 10.1 million tons for the first time, making it the first country in history to export more than 10 million tons in a single month. November shipments climbed further to 10.9 million tons, setting another record. Notably, European markets absorbed roughly 70% of US LNG shipments. With the EU planning to fully phase out Russian LNG by 2027, its reliance on US supplies is set to deepen, reinforcing the US market's "supply shortage" dynamic.
- The export surge has directly tightened domestic supply-demand balance. While U.S. production remains high, growth has not accelerated significantly, and exports increasingly divert gas away from power generation and industrial users, reducing available domestic supply. Combined with colder-than-expected early winter temperatures in the Northern Hemisphere, inventories have been drawn down faster than anticipated, amplifying the market gap. Late November saw US utilities withdraw significantly more gas from storage than expected, confirming mounting winter replenishment pressure.

- Beyond limited supply growth and accelerated exports, rising electricity demand from AI data centres is another key factor driving the current natural gas rally. As data centre electricity consumption grows at double-digit rates and natural gas accounts for over 40% of U.S. power generation, its flexibility makes it the most reliable source to complement intermittent renewable energy. In other words, the hotter the AI trend, the stronger the U.S. natural gas demand.

LITHIUM

- Spot spodumene prices have risen by 45% so far in 2025, driven by supply disruptions (CATL's Jianxiawo mining halt) in China and strong demand from EV (electric vehicle) and ESS (energy storage system) sectors.
- China lithium carbonate and hydroxide prices have also risen from 3% - 9%, reflecting a tightening market.
- Lithium bulls are betting on energy storage systems as the next meaningful pillar of demand for the battery metal, nudging the global market back toward balance after years of oversupply.
- Giant utility-scale batteries, which absorb and store electricity for controlled release, are an increasingly important consumer of lithium. Whilst electric vehicles remain by far the biggest user of the metal, we may see demand from these storage systems rising at a faster rate than EV growth in 2026.

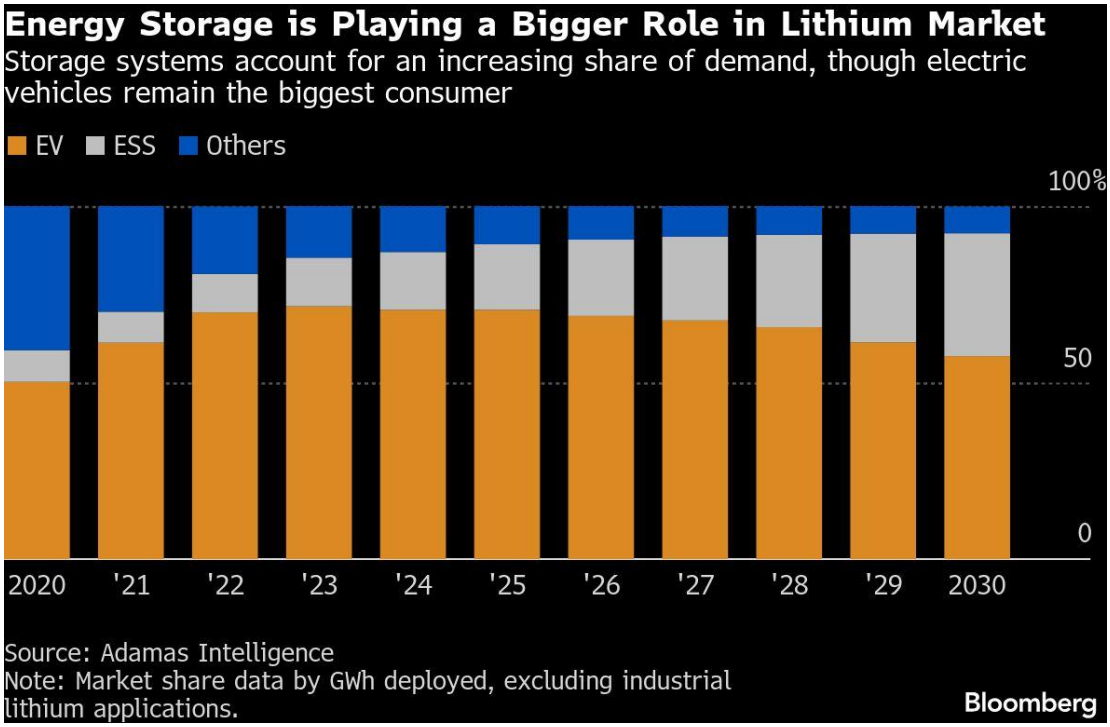

Figure 7: Graphic showing the major applications for lithium over a decade.

- The global lithium market has suffered from a supply glut over the last three years, with EV demand growing at a slower rate than expected and lagging the addition of new mine capacity. Spot prices have swung wildly this year, and despite recovering some 50% from a four-year low in June, they're still less than a sixth of where they were in late 2022.
- The EV sector, while still expanding, has been challenged by a maturing Chinese market and uncertain sales prospects in the US, where President Donald Trump has moved to relax stringent fuel-efficiency standards as part of his plan to wind back incentives for EV production. Western vehicle manufacturers have also been rethinking their strategies.
- Battery storage, meanwhile, is becoming a significant demand driver for lithium. Firstly, the cost of building utility-scale batteries has declined in recent years. These improving economics, as well as policy mandates to

integrate more clean energy, are helping with the scale-up. The construction of massive new data centres is a tailwind too, given their need for stable and plentiful supplies of electricity to smooth out peaks in power demand.

- China is on track to exceed its new target of 180 gigawatts of cumulative energy storage capacity by 2027, while in the US such storage systems are seen as an attractive solution to address growing electricity supply-demand imbalances.

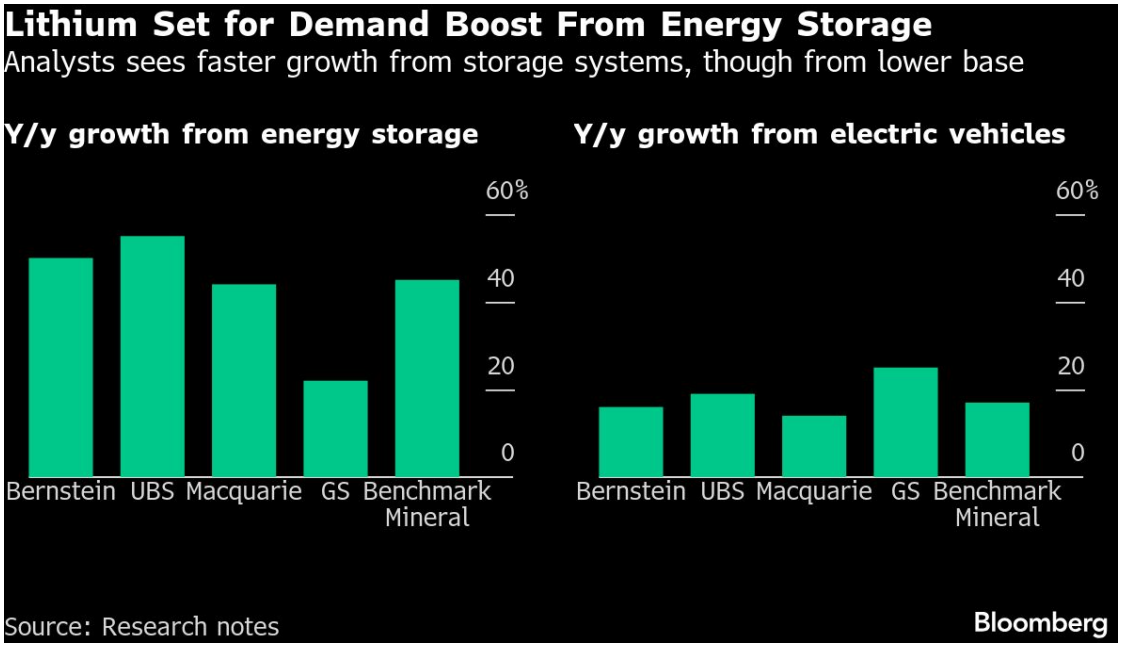

Figure 8: Graphic showing broker trend forecasts for major lithium usage applications.

- Overall, supply curtailments, combined with robust demand, have helped shift the market toward a more balanced situation, with the lithium market tightening through 2026 and 2027.
