

# Market Overview

- **Copper:** The US president has issued an executive order to streamline the process of obtaining mining permits, which is supposed to shorten the current average of 29 years from the discovery of a deposit to the launch of a mine. However, this will still be a multi-year process. An alternative is the so-called "urban mining", i.e. processing scrap, of which the US is the world's largest producer (*page 2*).
- **Precious metals:** Concerns about tariffs and the desire to take advantage of higher prices in New York have fueled the movement of silver into the US, which could lead to a drop in supply in London. One-month silver lease rates reached over 6% in March (*page 5*).
- **USA:** Fed officials lowered their growth expectations for this year while raising their inflation forecasts. Jerome Powell said the outlook for monetary policy didn't change because the forecasts for lower growth and higher inflation balance each other out (*page 7*).

## FOMC members median in March 2025



Source: Bloomberg, KGHM Polska Miedź S.A.

as of: 1<sup>st</sup> April 2025

## Key market prices

	Price	1m chng.
<b>LME (USD/t)</b>		
▲ Copper	9 673.00	3.3%
▲ Nickel	15 715.00	1.6%
<b>LBMA (USD/troz)</b>		
▲ Silver	34.06	9.4%
▲ Gold (PM)	3 115.10	9.9%
<b>FX</b>		
▲ EURUSD	1.0815	3.9%
▲ EURPLN	4.1839	0.6%
▼ USDPLN	3.8643	-3.4%
▼ USDCAD	1.4376	-0.4%
▼ USDCPL	946.10	-0.5%
<b>Stocks</b>		
▼ KGHM	125.45	-3.1%

Source: Bloomberg, KGHM Polska Miedź S.A.; (*more on page 9*)

## Important macroeconomic data

Release	For	
🇨🇳 Official manuf. PMI	Feb	50.2 ▲
🇺🇸 Manufacturing PMI	Feb	52.7 ▲
🇩🇪 Manufacturing PMI	Feb	50.6 ▲
🇩🇪 Manufacturing PMI	Feb	46.5 ▲
🇵🇹 Econom. activity (yoy)	Jan	3% ▼

Source: Bloomberg, KGHM Polska Miedź S.A.; (*more on Bład!*)

## Market Risk Unit

marketrisk@kgbm.com

## Base and precious metals | Other commodities

### Copper

#### Can Trump's Critical Minerals Drive Pass the Copper Test?

**The US president has issued an executive order to streamline the process of obtaining mining permits, which is supposed to shorten the current average of 29 years from the discovery of a deposit to the launch of a mine. However, this will still be a multi-year process. An alternative is the so-called "urban mining", i.e. processing scrap, of which the US is the world's largest producer.**

U.S. President Donald Trump's executive order on boosting domestic minerals production is intended to blast a path through the thicket of mine permitting in the United States. It takes an average of nearly 29 years for a new mine to go from discovery to production in the United States, the second-longest lead time in the world after Zambia, according to S&P Global. Permitting on Federal Land in particular is a big problem and one that the U.S. government is uniquely qualified to solve. The Joe Biden administration struggled to reconcile its ambition to produce more "green" metals for the energy transition with its environmental and social credentials. Trump has no such qualms. The Secretary of the Interior is instructed to "prioritize mineral production activities over other types of activities on Federal lands". But there is a danger that the political pendulum will swing too far the other way. There is also the problem that new mines still take many years to build and the U.S. lacks the processing capacity to convert raw materials to metal. Copper is a case in point.

Copper is not on the U.S. critical minerals list but gets a special mention in Trump's executive order, along with gold, uranium and potash. Copper has come to epitomise the problem of getting new mines up and running in the United States. Big copper projects such as Resolution in Arizona, Pebble in Alaska and Twin Metals in Minnesota have been stalled for years at the federal permitting stage. All three could benefit from the change of political wind in Washington. But opposition from Native Americans and environmental protection groups is not going to magically disappear at the stroke of a presidential pen. Big mining companies such as Rio Tinto, which owns a majority stake in Resolution, have learnt the hard way that mining without community consent is highly problematic.

The Resolution mine has the potential to become the biggest copper producer in North America, capable of meeting up to 25% of the United States' annual copper demand. The copper will come with by-products such as bismuth, indium and tellurium, all of which are on the critical minerals list. But even assuming accelerated permitting, the mine will still take around 10 years to construct, meaning the first copper concentrates would be produced only around the middle of the next decade. Resolution is located in Arizona, which has a long history of mining and associated infrastructure. The Pebble and Twin Metals

projects face extra challenges in the form of physical remoteness and potential impact on salmon spawning grounds and the Boundary Waters Wilderness respectively. Fast-tracking permitting for such projects doesn't mean they'll be ready to generate copper any time soon.

Rio's Resolution mine could be integrated into the company's existing Kennecott smelting and refining operations in Utah. Kennecott, however, is only one of two active primary copper smelters in the United States. The other one is Miami in Arizona operated by Freeport-McMoRan. There has been speculation but so far no confirmation that Grupo Mexico might re-open its Hayden smelter in the same state. The United States is already a net exporter of copper concentrates for want of sufficient processing capacity. Some 320,000 tons of contained metal in concentrates were shipped overseas last year, according to the U.S. Geological Survey. The three main destinations were Mexico, China and Canada. Clearly there is enough North American smelting capacity to absorb extra U.S. mine production but the Biden administration's policy of "friend-shoring" has been replaced with Trump's tariff threats against the United States' two neighbours. Moreover, every copper smelter is currently competing with China, where smelting and refining capacity is huge and still growing. Smelter margins are being squeezed in the form of historically low treatment charges for converting raw material into metal at historic lows. Building sufficient domestic capacity to process extra U.S. mine production could be a thornier problem than building the new mines in the first place.

The fixation on headline-grabbing mega mine projects to reduce U.S. import dependency misses a far easier and lower-cost solution. U.S. processing capacity for recycling copper is growing. Germany's Aurubis AG has invested \$800 million in a new smelter in Georgia for treating up to 180,000 metric tons of complex recyclables such as circuit-boards. The United States is the world's largest exporter of copper scrap to the tune of almost a million tons each year. Much of it is sent to China for processing.

Recycling all that lost metal at domestic facilities wouldn't eliminate U.S. copper import dependency but it would significantly close the gap. Recycling comes with the benefits of an existing resource, low capital expenditure relative to new mines, shorter lead-times to production and lower carbon footprint.

The Trump administration's rush to ditch anything associated with Biden's green agenda risks overlooking the one part of the domestic copper supply chain that is already attracting investment and increasing capacity. Channelling more federal funds into "urban mining" is going to reap faster rewards than any big new conventional mine.

## Copper's Long-Term Scarcity Makes Aluminum a Possible Substitute

**From an economic point of view, switching to aluminum or copper-aluminum conductors is more profitable when copper is 3.5 or more times more expensive than aluminum. Although aluminum is one of the best conducting materials, its electrical conductivity is about 60% of that of copper.**

Aluminum is emerging as a substitute for copper, which is 3.5x more expensive. Though copper's price might come down this year, scarcity remains a long-term concern. Companies are exploring technology that may make aluminum an option. Aluminum has replaced just 1.4% of global copper use. While copper scarcity has been a long-term concern, more companies in Asia and Europe are starting to turn to cheaper aluminum and the trend is likely to continue. Aluminum can be a substitute because of its good electric and thermal conductivity and cost efficiency. It is also at least 1,000x more abundant than copper, but is just one-third the weight. China gets more than 70% of its copper (and 60% of its aluminum) from overseas. Chinese companies have access to more than 8 billion tons of bauxite abroad, more than 25% of overseas reserves. That means promoting the use of aluminum in place of copper could be a long-term strategy for China amid national security concerns.

Economic efficiency is a key driver for looking for copper substitutes, especially when it's 3.5x or more of the price of aluminum. That's when a switch to aluminum conductors or copper-aluminum conductors will be more economical than pure copper. The ratio has been above 3.5x since November 2023,. Copper substitution increased in 2021 on the back of rising costs, but net substitution was still low at 1.3% of total use in 2021. While aluminum is one of the best conductor materials, its electric conductivity is around 60% of copper. A wide range of downstream uses of copper can be replaced by aluminum, ranging from high-voltage power lines wires to home appliances and electric vehicles. Many home-appliance makers including Haier and Midea are developing products to replace the copper used in some parts such as the connection pipe and evaporators to save costs. Daikin Industries, Japan's top air-conditioner maker, aimed to halve its global copper consumption in 2021-24. Gree Electric, however, said it won't replace the metal until the technology develops and shows improved durability and stability. Home appliances are now the third-largest downstream users of copper, at around 13%. One of the biggest home use -- in refrigerators -- have made a big move to aluminum for heat exchangers.

### Other important information on copper market:

- China's imports of unwrought copper and copper products in January and February declined 7.2% year-on-year to 837,000 metric tons, data from the General Administration of Customs. China combines import data for January and February into one release to smooth out the impact of the Lunar New Year holidays, which can fall in either of those months each year.
- China plans to add to its strategic reserves of key industrial metals this year, an effort to boost the resilience of critical minerals supply at time when energy-transition demand is increasing and geopolitical tensions are running high. Cobalt, copper, nickel and lithium are among the metals the government plans to purchase, according to people familiar with the discussion.
- Indonesia will issue Freeport Indonesia a six-month permit to export copper concentrate, which will also ensure the government continues to receive royalty payments. Freeport has been seeking the permit after it was forced to stop copper cathode production at its new smelter in Gresik, after a fire damaged the plant last October. Freeport has not exported copper concentrate since its last permit expired at the end of 2024. It has said its mining operation was running at 40% capacity due to a rising stockpile of copper concentrate, which has reached 400,000 metric tons.

## Precious Metals

### Global silver market faces strains as Trump's tariffs hit

**Concerns about tariffs and the desire to take advantage of higher prices in New York have fueled the movement of silver into the US, which could lead to a drop in supply in London. One-month silver lease rates reached over 6% in March.**

The silver market faces mounting stress as trade-war concerns intensify, with higher rates to borrow metal adding to signs of global dislocation. A surge in lease rates for the precious metal, which in March exceeded 6%, has become the latest sign of alarm, with anxiety building over the impact of further tariffs from US President Donald Trump. That's sparked a dash to ship silver into the US in a bid to capture premium prices in New York, possibly causing a squeeze in London.

Precious metals — gold as well as silver — have been upended this year, as Trump challenges the global trade order. That's spurred demand for havens, and also opened up rare pricing dislocations between key markets. While spot silver has gained about 17% this year — making it one of the best performing commodities — futures in New York have done even better.

On a physical level, the tariff concerns — especially levies against Canada and Mexico, as well as wider reciprocal curbs that may kick in— have drawn vast quantities of both gold and silver out of London into US vaults. But given their

relative value and density, gold tends to be air-freighted, with silver often taking far longer voyages, typically by ship.

Lease rates — the cost of borrowing metal, generally for a short period — have jumped. One-month rates for silver topped 6% this month after a larger spike in February. That partly reflects concerns about fast-depleting stockpiles in the UK capital, with holdings hitting a record low. In addition, not all of what remains is available given it's tied to exchange-traded products. "I expect the lease rate in London to remain high for about two to three months," said Cao Shanshan, an analyst at COFCO Futures Co.

Exchange-reported totals in the US reflect the turmoil. Comex-tallied inventories of silver have expanded to the highest level ever in data going back to 1992 after surging by 40% so far this quarter, a record rise. While New York is still drawing in metal at present, there are also concerns the flows may be thrown into a drawn-out reverse if silver faces a shortage in London vaults.

The US imports about 70% of its silver from Canada and Mexico, which have borne the brunt of the Trump administration's moves on trade so far. "The market may be underpricing the scale and impact of the upcoming April 2 US reciprocal tariffs," Citigroup Inc. analysts including Max Layton said in a note, highlighting the pricing dislocation.

TD Securities also signaled its concern. "If reciprocal tariffs are really like-for-like, you would expect retaliatory tariffs on Canadian silver and that's about 20% of US imports — so there is a higher risk associated with silver," said Daniel Ghali, senior commodity strategist at TD. "Even if the disruptions were to completely resolve overnight, we can't go back to the prior world because you'd never know what will happen the next day."

## Global economies | Foreign exchange markets

### Fed Holds Rates Steady, Sees Slower Growth and Higher Inflation

**Fed officials lowered their growth expectations for this year while raising their inflation forecasts. Jerome Powell said the outlook for monetary policy didn't change because the forecasts for lower growth and higher inflation balance each other out.**

Federal Reserve officials held their benchmark interest rate steady for a second straight meeting, caught between mounting concerns that the economy is slowing and inflation could remain stubbornly high.

Chair Jerome Powell acknowledged the high degree of uncertainty from President Donald Trump's significant policy changes, but repeated the central bank is not in a hurry to adjust borrowing costs. He said officials can wait for greater clarity on the impact of those policies on the economy before acting.

The Federal Open Market Committee voted on Wednesday [March 19] to keep the benchmark federal funds rate in a range of 4.25%-4.5%, and said it would further slow the pace at which it is reducing its balance sheet. Governor Christopher Waller, who supported holding rates steady, dissented from the decision over the balance sheet move.

The decision to hold rates steady comes as Trump's ambitious and frequently erratic policy agenda has placed the economy, and the Fed's ability to keep it on track, under increasing pressure. Trump's ever-changing plans to levy tariffs on US trading partners have stoked fears of an economic slowdown and raised fresh worries over inflation — a combination that could pull policymakers in opposite directions.

"Inflation has started to move up," Powell said, "we think partly in response to tariffs. And there may be a delay in further progress over the course of this year." Powell said his base case is that any tariff-driven bump in inflation will be "transitory," but later added it will be very challenging to say with confidence how much inflation stems from tariffs versus other factors.

New economic projections showed Fed officials marked down their forecasts for growth this year, while boosting estimates of inflation. It also showed officials continued to pencil in a half percentage point of rate cuts this year, according to the median estimate, implying two quarter-point rate reductions. That said, eight officials saw one reduction or fewer this year, underscoring policymakers' resolve — at least for now — to suppress inflation even if growth slows.

Powell said the outlook for monetary policy didn't change because the forecasts for lower growth and higher inflation balance each other out. "Uncertainty around the economic outlook has increased," the committee said in a post-meeting statement. Officials also removed prior language stating that risks to

achieving their employment and inflation goals were roughly in balance. Officials raised the median estimate for so-called core inflation, which strips out volatile food and energy prices, at the end of this year to 2.8% from 2.5%. Their outlook for 2025 economic growth cooled to 1.7% from 2.1%.

They raised their estimate for unemployment to 4.4% by the end of this year, from the 4.3% they saw in December. Fed officials have kept rates steady this year after cutting them by a percentage point in the closing months of 2024. Since December, they've signaled a desire to see more progress on inflation, and more clarity on the impact of Trump's policies, before they consider another move.

In that time, inflation has remained elevated while consumers' expectations for future price growth have climbed amid an escalating trade war. Spending has softened, and consumer confidence has deteriorated sharply.

Powell said recession odds have moved up, but are not high. He pointed to so-called soft data specifically, like sentiment, as flashing concern, but underscored the Fed's emphasis is on hard data. He pushed back against data from the University of Michigan showing a sharp increase in long-term inflation expectations, calling it an "outlier."

"We do understand that sentiment has fallen off pretty sharply, but economic activity has not yet and so we are watching carefully," Powell said. "I would tell people the economy seems to be healthy." The Fed also said that, beginning in April, it will lower the monthly cap on the amount of Treasuries on its balance sheet that it allows to mature without being reinvested, to \$5 billion from \$25 billion. It will leave the cap on mortgage-backed securities unchanged at \$35 billion. Waller preferred to continue the current pace.

Various officials noted during the committee's January meeting that it might be appropriate to consider pausing or slowing the Fed's balance-sheet runoff until the federal government is no longer up against the debt ceiling, the statutory limit for outstanding Treasury debt. The US hit that limit in January. The Fed first started slowing the pace at which it shrinks its portfolio of assets in June — a bid to ease potential strain on money market rates.



## Key market data

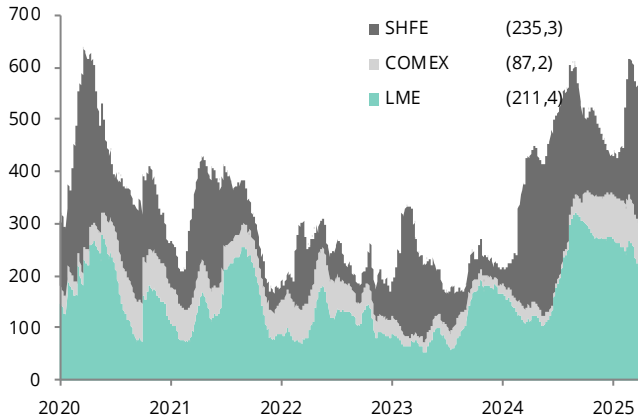
### Key base & precious metal prices, exchange rates and other important market factors

(as of: 31-Mar-25)		Price change <sup>1</sup>					From year beginning <sup>2</sup>		
	Price		1M	QTD	YTD	1Y	Average	Min	Max
<b>LME (USD/t; Mo in USD/lbs)</b>									
Copper	9 673.00	▲	3.3%	▲	11.1%	▲	11.1%	▲	10.8%
Molybdenum	20.13	▼	-2.6%	▼	-5.8%	▼	-5.8%	▲	
Nickel	15 715.00	▲	1.6%	▲	4.1%	▲	4.1%	▼	-4.9%
Aluminum	2 518.50	▼	-4.5%	▲	0.1%	▲	0.1%	▲	10.9%
Tin	35 905.00	▲	14.5%	▲	24.2%	▲	24.2%	▲	29.9%
Zinc	2 829.00	▲	2.2%	▼	-4.9%	▼	-4.9%	▲	18.3%
Lead	2 002.00	▲	1.1%	▲	4.2%	▲	4.2%	▲	1.9%
<b>LBMA (USD/troz)</b>									
Silver	34.06	▲	9.4%	▲	17.8%	▲	17.8%	▲	38.8%
Gold <sup>2</sup>	3 115.10	▲	9.9%	▲	19.3%	▲	19.3%	▲	40.7%
<b>LPPM (USD/troz)</b>									
Platinum <sup>2</sup>	993.00	▲	5.3%	▲	8.6%	▲	8.6%	▲	9.5%
Palladium <sup>2</sup>	986.00	▲	7.4%	▲	8.5%	▲	8.5%	▼	-3.0%
<b>FX <sup>3</sup></b>									
EURUSD	1.0815	▲	3.9%	▲	4.1%	▲	4.1%	▲	0.0%
EURPLN	4.1839	▲	0.6%	▼	-2.1%	▼	-2.1%	▼	-2.7%
USDPLN	3.8643	▼	-3.4%	▼	-5.8%	▼	-5.8%	▼	-3.1%
USDCAD	1.4376	▼	-0.4%	▼	-0.1%	▼	-0.1%	▲	6.1%
USDCNY	7.2570	▼	-0.3%	▼	-0.6%	▼	-0.6%	▲	0.5%
USDCLP	946.10	▼	-0.5%	▼	-4.6%	▼	-4.6%	▼	-3.7%
<b>Money market</b>									
3m SOFR	4.288	▼	-0.03	▼	-0.02	▼	-0.02	▼	-1.01
3m EURIBOR	2.336	▼	-0.13	▼	-0.38	▼	-0.38	▼	-1.56
3m WIBOR	5.840	▼	-0.02	-	0.00	-	0.00	▼	-0.04
5y USD interest rate swap	3.645	▼	-0.09	▼	-0.39	▼	-0.39	▼	-0.34
5y EUR interest rate swap	3.645	▼	-0.09	▼	-0.39	▼	-0.39	▼	-0.34
5y PLN interest rate swap	4.633	▼	-0.12	▼	-0.37	▼	-0.37	▼	-0.29
<b>Fuel</b>									
WTI Cushing	42.15	▲	17.8%	▲	2.9%	▲	2.9%	▼	-9.9%
Brent	44.19	▲	18.1%	▲	1.6%	▲	1.6%	▼	-17.9%
Diesel NY (ULSD)	1.51	▲	12.8%	▲	8.0%	▲	8.0%	▼	-13.4%
<b>Others</b>									
VIX	22.28	▲	2.65	▲	4.93	▲	4.93	▲	9.27
BBG Commodity Index	106.40	▲	3.6%	▲	7.7%	▲	7.7%	▲	6.9%
S&P500	5 611.85	▼	-5.8%	▼	-4.6%	▼	-4.6%	▲	6.8%
DAX	22 163.49	▼	-1.7%	▲	11.3%	▲	11.3%	▲	19.9%
Shanghai Composite	3 335.75	▲	0.4%	▼	-0.5%	▼	-0.5%	▲	9.7%
WIG 20	2 689.05	▲	4.2%	▲	22.7%	▲	22.7%	▲	10.4%
KGHM	125.45	▼	-3.1%	▲	9.1%	▲	9.1%	▲	9.9%

° change over: 2W = two weeks; QTD = quarter-to-day; YTD = year-to-date; 1Y = one year. <sup>1</sup> based on daily closing prices. <sup>2</sup> latest quoted price. <sup>3</sup> central banks' fixing rates (Bank of China HK for USD/CNY). <sup>4</sup>

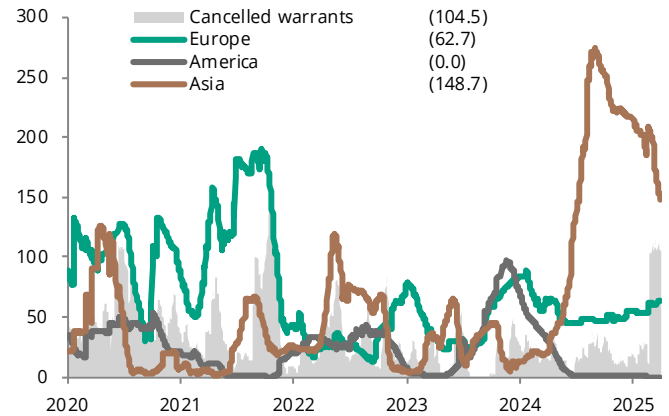
Source: Bloomberg, KGHM Polska Miedź

### Copper: official exchange stocks (thousand tonnes)



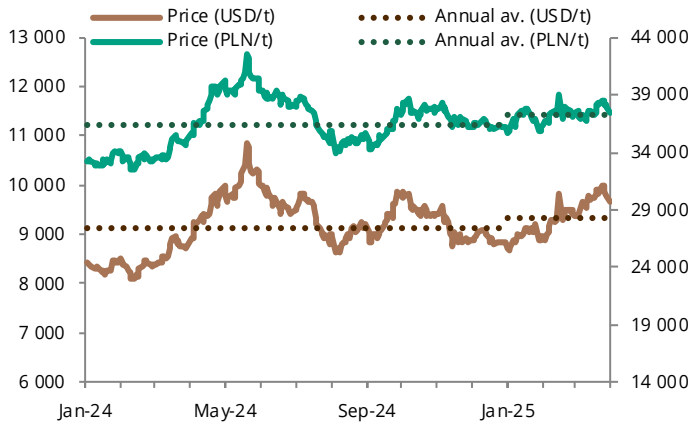
Note: Latest values in brackets. Source: Bloomberg, KGHM

### Copper: official LME stocks (thousand tonnes)



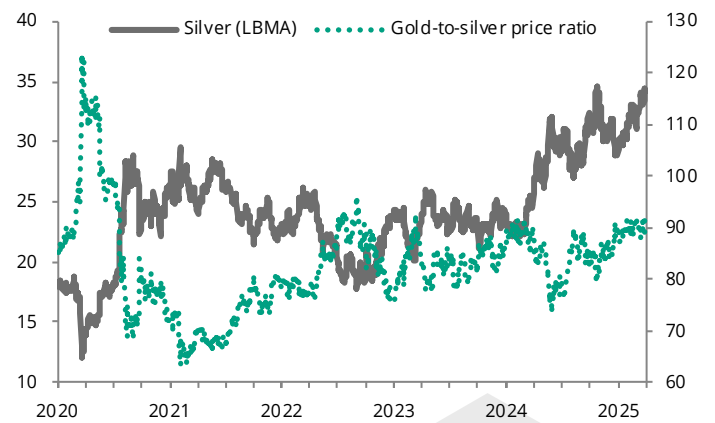
Note: Latest values in brackets. Source: Bloomberg, KGHM

### Copper: price in USD (lhs) and PLN (rhs) per tonne



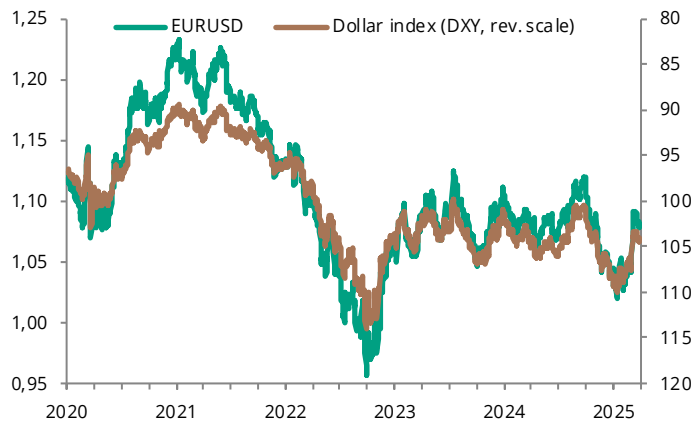
Source: Bloomberg, KGHM Polska Miedź

### Silver: price (lhs) and gold ratio (rhs)



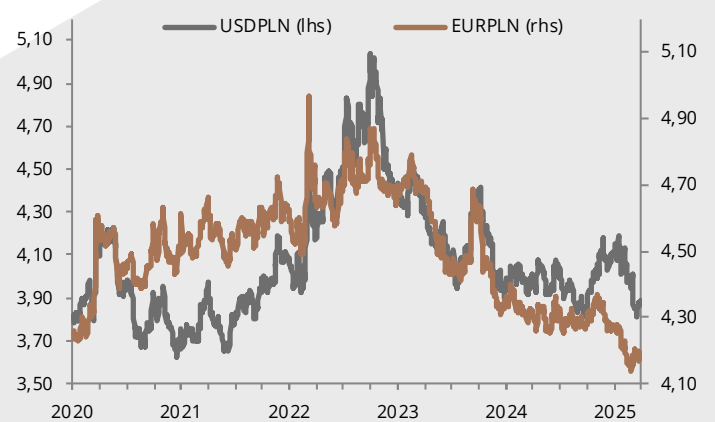
Source: Bloomberg, KGHM Polska Miedź

### USD: dollar index (lhs) and ECB-based EURUSD (rhs)



Source: Bloomberg, KGHM Polska Miedź

### PLN: NBP-fixing based rate vs. USD (lhs) and EUR (rhs)



Source: Bloomberg, KGHM Polska Miedź

## Legal note

This document has been prepared based on the below listed reports, among others, published in the following period:  
**1 – 31 March 2025.**

- Barclays Capital, ▪ BofA Merrill Lynch, ▪ Citi Research, ▪ CRU Group, ▪ Deutsche Bank Markets Research, ▪ GavekalDragonomics, ▪ Goldman Sachs, ▪ JPMorgan, ▪ Macquarie Capital Research, ▪ Mitsui Bussan Commodities, ▪ Morgan Stanley Research, ▪ SMM Information & Technology, ▪ Sharps Pixley.

Moreover, additional information published here was acquired in direct conversations with market dealers, from financial institution reports and from the following websites: ▪ thebulliondesk.com, ▪ lbma.org.uk, ▪ lme.co.uk, ▪ metalbulletin.com, ▪ nbp.pl, also: Bloomberg and Thomson Reuters.

Official metals prices are available on following websites:

- base metals: [www.lme.com/dataprices\\_products.asp](http://www.lme.com/dataprices_products.asp) (charge-free logging)
- silver and gold: [www.lbma.org.uk/pricing-and-statistics](http://www.lbma.org.uk/pricing-and-statistics)
- platinum and palladium: [www.lppm.com/](http://www.lppm.com/)

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