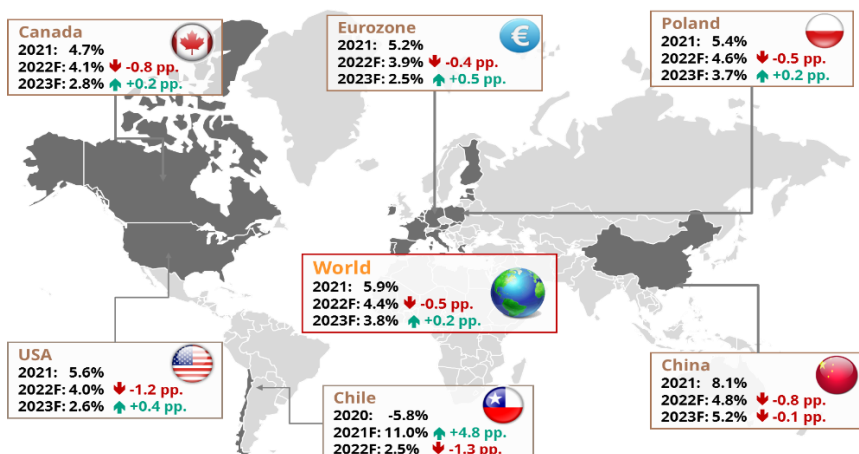


# Market Overview

- **Copper:** Rio Tinto has reached an agreement with the Mongolian government on disputes regarding the mine it manages. Rio Tinto announced that work at Oyu Tolgoi is expected to start without delay, with first production expected in the first half of 2023 (*page 2*).
- **Precious metals:** Omicron and the change in the labor law in Mexico are indicated by Fresnillo as the main reasons for the reduction of production assumptions for 2022. The reform of the labor law significantly limits the possibility of using the services of external contractors (*page 5*).
- **IMF:** The global economy enters 2022 in a weaker position than previously expected. As the new Omicron COVID-19 variant spreads, countries have reimposed mobility restrictions. Rising energy prices and supply disruptions have resulted in higher and more broad-based inflation than anticipated, notably in the United States and many emerging market and developing economies. The ongoing retrenchment of China's real estate sector and slower-than-expected recovery of private consumption also have limited growth prospects (*page 6*).

## IMF World Economic Outlook – January 2022



Source: IMF, KGHM Polska Miedź S.A.






as of: 31<sup>st</sup> January 2022

### Key market prices

	Close price	2w chng.
<b>LME (USD/t)</b>		
▼ Copper	9 678.00	-2.2%
▼ Nickel	22 750.00	-0.4%
<b>LBMA (USD/troz)</b>		
▼ Silver	22.50	-2.6%
▼ Gold (PM)	1 788.15	-1.9%
<b>FX</b>		
▼ EURUSD	1.1138	-2.7%
▲ EURPLN	4.5697	0.7%
▲ USDPLN	4.1048	3.7%
▲ USDCAD	1.2772	1.8%
▼ USDCPL	799.15	-2.8%
<b>Stocks</b>		
▼ KGHM	142.20	-5.9%

Source: Bloomberg, KGHM Polska Miedź S.A.; (*more on page 10*)

### Important macroeconomic data

Release	For	
 GDP (annlzd., qoq)	4Q	6.9% ▲
 GDP (yoy)	4Q	4.0% ▼
 CPI (yoy)	Dec	5.0% ▲
 Industrial prod. (yoy)	Dec	16.7% ▲
 Manufacturing PMI	Jan	59.0 ▲

Source: Bloomberg, KGHM Polska Miedź S.A.; (*more on page 8*)

## Market Risk Unit

marketrisk@kgm.com

## Base and precious metals | Other commodities

### Copper

#### Rio Tinto, Mongolia Settle Dispute About Oyu Tolgoi Mine

**Rio Tinto has reached an agreement with the Mongolian government on disputes regarding the mine it manages. Rio Tinto announced that work at Oyu Tolgoi is expected to start without delay, with first production expected in the first half of 2023.**

**Oyu Tolgoi is expected to produce on average around 500,000 mt/year from 2028 to 2036 from the open pit and underground**

As Platts informs, global miner Rio Tinto has reached a new agreement with the government of Mongolia, with Canada's Turquoise Hill waiving the government's \$2.4 billion shareholder loan and paving the way for the start of underground operations at the Oyu Tolgoi copper-gold mine. The Oyu Tolgoi mine is jointly owned by the government of Mongolia with a 34% stake and Turquoise Hill with 66%. Rio Tinto owns 50.8% of Turquoise Hill and manages the operation on behalf of the owners. Rio Tinto said Jan. 25 underground operations at Oyu Tolgoi are expected to begin in the coming days, with first production expected in the first half of 2023. The undercut is scheduled to be initiated imminently, and project manager Rio Tinto has maintained guidance of first production in H1 2023. "Until sustainable underground production is achieved, OT will be funded by cash on hand and rescheduling of existing debt repayments, together with a pre-paid copper concentrate sales agreement with TRQ [Turquoise Hill]," Rio Tinto said in a statement. The Oyu Tolgoi mine, located in southern Mongolia, is one of the world's largest known copper and gold deposits. It produced 163,000 mt of copper in 2021, in line with a guidance range of 150,000-180,000 mt. Oyu Tolgoi is expected to produce on average around 500,000 mt/year from 2028 to 2036 from the open pit and underground, and an average of around 350,000 mt for a further five years. The company said by 2030, Oyu Tolgoi is expected to be the fourth largest copper mine in the world. Development of the underground mine expansion was significantly delayed in 2019 when the Darkhan Mongol Nagoon Negdel Non-Governmental Organization filed a lawsuit against Rio Tinto and Turquoise Hill, challenging the legality of the Mongolian government's process in finalizing Oyu Tolgoi's development and financing plan. Rio said it will also provide a colending project finance facility to Oyu Tolgoi of up to \$750 million to be made available after sustainable underground production is achieved, with Turquoise Hill agreeing to conduct equity or rights offerings of up to \$1.5 billion. "In our view, the new partnership agreement and funding solution strikes a balanced approach to reduced risk, greater confidence in completion of underground construction, and certainty over funding. Rio said the Oyu Tolgoi board had approved the signing of an electricity deal to provide OT with a long-term source of power from the Mongolian grid, once capacity is consistent in meeting OT's requirements. OT will continue to import power from Inner Mongolia, China. In terms of power supply, there is the approval of an electricity supply agreement with the Inner

Mongolia Power International Cooperation Co. (China) beyond July 2023, RBC Capital Markets analysts said in a note. "OT has secured a three-year, fixed-term extension to 2026, with an option to extend this to 2030 if required, although terms are still being finalized," RBC said.

### China 2021 Refined Copper Imports 3.44M mt, Down 23.9% YoY

**The fall was attributable to multiple factors, such as the absence of an import arbitrage window, container shortages, China's stock release and a higher base in 2020. China's imports are unlikely to see any significant increase at least in the first half of 2022, as freight rates remain high.**

China's refined copper imports reached 3.44 million mt in 2021, down 23.9% from a year earlier, according to China's General Administration of Customs. The fall was attributable to multiple factors, such as the absence of an import arbitrage window, container shortages, China's stock release, a production jump and a higher base in 2020, market sources said. China's imports of refined copper are unlikely to see any significant increase at least in the first half of 2022, as freight rates remain high. China's refined copper imports reached 400 kt in December, up 22.8% month on month and 30.1% higher year on year, the customs data showed. Imports saw a month-on-month increase for a fourth straight month. Import arbitrage opportunities for copper cathode were absent in early January and this is expected to remain ahead of China's Lunar New Year holidays. The copper cathode import premium to China continued to inch down due to muted demand ahead of the Lunar New Year. S&P Global Platts assessed Chinese copper import premiums at \$62/mt plus London Metal Exchange cash, CIF China, on Jan. 19, for LME-registered normal brands of electrolytically-refined cathode. China's refined copper exports reached 266,264 mt in 2021, up 26% from a year earlier, according to customs data. Recovering demand from other countries and lower domestic prices in China that lasted for few months encouraged Chinese smelters to export in 2021, market sources said. Meanwhile, China's imports of copper concentrates -- raw material for copper cathode production -- rose 7.6% from a year earlier, to 23.4 million mt in 2021, customs data showed.

### Other important information on copper market:

- Chile's Codelco has completed \$1.4 billion overhaul of its Andina copper mine that will help to maintain production for another three decades. Completed after more than eight years of construction, the Andina Transfer project includes one of the world's largest primary crushing system and a 4 kilometer underground conveyor system to move ore from the mine to the process plant. Located 3,500 meters above sea level in the Andes Mountains, Codelco's Andina division produced 184,437 mt of copper in 2020. State-owned Codelco, the world's largest copper producer, is in the middle of massive investment program to update and expand its aging mines some of which have been in production for more than a century. It is currently ramping up a new underground operation at its

Chuquicamata division and building a new mine level at its El Teniente mine. Thanks to high copper prices, Codelco earned \$3.7 billion in profits in the first nine months of 2021, a ten-fold increase from 2020.

- Mining giant BHP is expecting its fiscal 2021-22 (July-June) copper production to be in the low end of its 1.59 million-1.76 million mt guidance range due to issues at its Chilean Pampa Norte operation which consists of two copper mines, Spence and Cerro Colorado, the company said. BHP's total copper production for the October-December quarter was 365,500 mt, which is down 15% year on year and 3% weaker quarter on quarter. Pampa Norte guidance for fiscal 2021-22 was lowered to 260,000-300,000 mt from 330,000-370,000 mt. The downgrade was due to "a fatality at the third party desalination plant which impacted Spence operations, operational uncertainty related to Cerro Colorado water access and licensing. Pampa Norte's production in the December quarter was 68,500 mt, which rose 26% year on year and is up 1% on the quarter, it said.
- Peru's November copper and zinc shipments rose on the year, while tin and molybdenum deliveries fell, the government said Jan. 26. Copper deliveries climbed 7.6% to 220 kt from 204 kt a year earlier. Zinc shipments rebounded 15.5% to 110,600 mt from 95,700 mt a year earlier. Minsur saw tin shipments drop 22.6% to 1,500 mt. Molybdenum deliveries fell 2.3% to 2,700 mt from 2,800 mt. Lead exports were little changed at 62,700 mt.

## Precious Metals

**Fresnillo cuts production targets on Omicron labour shortage**  
**Omicron and the change in the labor law in Mexico are indicated by Fresnillo as the main reasons for the reduction of production assumptions for 2022. The reform of the labor law significantly limits the possibility of using the services of external contractors.**

Shares in Fresnillo fell more than 14% on Wednesday (Jan 26) after the Mexico-focused miner cut its silver production forecast for 2022, saying that labour absences fuelled by the Omicron variant were expected to have a greater impact in the earlier part of the year than anticipated. The precious metals producer, which operates seven mines in Mexico, now expects to churn out between 50.5 million and 56.5 million ounces of silver this year. Attributable gold production for 2022 is also expected to decrease, staying in the range of 600,000 to 650,000 ounces, driven mainly by the Noche Buena mine coming to the end of its productive life. The new guidance was provided alongside an update on 2021 production, with silver output falling “marginally short” of forecast figures, but gold production topping expectations. Silver output in 2021 reached 53.1 million ounces, slightly below the 53.5 to 59.5 million ounces previously anticipated, but flat when compared to 2020. Attributable gold production for the full year came in ahead of expectations, but was still down 2.4% year-on-year at 751,200 ounces. The main obstacle, has been the lack of qualified workers, Fresnillo said. “As reported in the third quarter of 2021, the labour reform in Mexico restricting the ability to subcontract labour came into effect from September 1, resulting in the requirement to internalize a high proportion of our contractor workforce,” the company said. “This in turn has affected equipment availability (equipment previously provided by contractors) and its utilization rates” it added. “We must continue to navigate the challenges presented by both covid-19, which regrettably is again accelerating in Mexico (...) as well as continue to adapt to the new labour reform,” chief executive officer Octavio Alvidrez said the media statement. “The safety of our people is our priority, as is ensuring we continue to roll-out our performance improvement measures across our portfolio.” Fresnillo said it has taken action to address these issues, including recruitment campaigns, training and investment in new equipment, which would continue.

## Global economies | Foreign exchange markets

### IMF: Rising caseloads, a disrupted recovery, and higher inflation

**The global economy enters 2022 in a weaker position than previously expected. As the new Omicron COVID-19 variant spreads, countries have reimposed mobility restrictions. Rising energy prices and supply disruptions have resulted in higher and more broad-based inflation than anticipated, notably in the United States and many emerging market and developing economies. The ongoing retrenchment of China's real estate sector and slower-than-expected recovery of private consumption also have limited growth prospects.**

#### Global growth is expected to moderate from 5.9 in 2021 to 4.4 percent in 2022

Global growth is expected to moderate from 5.9 in 2021 to 4.4 percent in 2022—half a percentage point lower for 2022 than in the October World Economic Outlook (WEO), largely reflecting forecast markdowns in the two largest economies. A revised assumption removing the Build Back Better fiscal policy package from the baseline, earlier withdrawal of monetary accommodation, and continued supply shortages produced a downward 1.2 percentage-points revision for the United States. In China, pandemic-induced disruptions related to the zero-tolerance COVID-19 policy and protracted financial stress among property developers have induced a 0.8 percentage-point downgrade. Global growth is expected to slow to 3.8 percent in 2023. Although this is 0.2 percentage point higher than in the previous forecast, the upgrade largely reflects a mechanical pickup after current drags on growth dissipate in the second half of 2022. The forecast is conditional on adverse health outcomes declining to low levels in most countries by end-2022, assuming vaccination rates improve worldwide and therapies become more effective.





Elevated inflation is expected to persist for longer than envisioned in the October WEO, with ongoing supply chain disruptions and high energy prices continuing in 2022. Assuming inflation expectations stay well anchored, inflation should gradually decrease as supply-demand imbalances wane in 2022 and monetary policy in major economies responds.

Risks to the global baseline are tilted to the downside. The emergence of new COVID-19 variants could prolong the pandemic and induce renewed economic disruptions. Moreover, supply chain disruptions, energy price volatility, and localized wage pressures mean uncertainty around inflation and policy paths is high. As advanced economies lift policy rates, risks to financial stability and emerging market and developing economies' capital flows, currencies, and fiscal positions—especially with debt levels having increased significantly in the past two years—may emerge. Other global risks may crystallize as geopolitical tensions remain high, and the ongoing climate emergency means that the probability of major natural disasters remains elevated.








With the pandemic continuing to maintain its grip, the emphasis on an effective global health strategy is more salient than ever. Worldwide access to vaccines, tests, and treatments is essential to reduce the risk of further dangerous COVID-19 variants. This requires increased production of supplies, as well as better in-country delivery systems and fairer international distribution. Monetary policy in many countries will need to continue on a tightening path to curb inflation pressures, while fiscal policy—operating with more limited space than earlier in the pandemic—will need to prioritize health and social spending while focusing support on the worst affected. In this context, international cooperation will be essential to preserve access to liquidity and expedite orderly debt restructurings where needed. Investing in climate policies remains imperative to reduce the risk of catastrophic climate change.

# Macroeconomic calendar

## Important macroeconomic data releases

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>
<b>China</b> 						
*****	17-Jan	GDP (yoy)	4Q	4.0% ▼	4.9%	3.3% ▲
*****	17-Jan	GDP (sa, qoq)	4Q	1.6% ▲	0.2%	1.2% ▲
****	17-Jan	Industrial production (yoy)	Dec	4.3% ▲	3.8%	3.7% ▲
**	17-Jan	Fixed assets investments (ytd, yoy)	Dec	4.9% ▼	5.2%	4.8% ▲
*	17-Jan	Retail sales (yoy)	Dec	1.7% ▼	3.9%	3.8% ▼
**	27-Jan	Industrial profits (yoy)	Dec	4.2% ▼	9.0%	--
<b>Poland</b> 						
****	17-Jan	Core CPI (excluding food and energy, yoy)	Dec	5.3% ▲	4.7%	5.2% ▲
****	21-Jan	Sold industrial production (yoy)	Dec	16.7% ▲	15.2%	13.1% ▲
**	21-Jan	Average gross salary (yoy)	Dec	11.2% ▲	9.8%	9.3% ▲
**	21-Jan	Producer inflation PPI (yoy)‡	Dec	14.2% ▲	13.6%	13.5% ▲
*	21-Jan	Employment (yoy)	Dec	0.5% ▼	0.7%	0.7% ▼
***	24-Jan	Retail sales (yoy)	Dec	16.9% ▼	21.2%	18.7% ▼
**	26-Jan	Unemployment rate	Dec	5.4% -	5.4%	5.4% ○
*	26-Jan	M3 money supply (yoy)	Dec	8.9% ▼	10.1%	9.9% ▼
<b>US</b> 						
**	20-Jan	Philadelphia Fed business outlook	Jan	23.2 ▲	15.4	19.0 ▲
***	24-Jan	Composite PMI - preliminary data	Jan	50.8 ▼	57.0	--
***	24-Jan	Manufacturing PMI - preliminary data	Jan	55.0 ▼	57.7	56.7 ▼
***	24-Jan	PMI services - preliminary data	Jan	50.9 ▼	57.6	55.4 ▼
*	25-Jan	Richmond Fed manufacturing index	Jan	8.0 ▼	16.0	14.0 ▼
*****	26-Jan	FOMC base rate decision - upper bound (Fed)	Jan	0.25% -	0.25%	0.25% ○
*****	26-Jan	FOMC base rate decision - lower bound (Fed)	Jan	0.00% -	0.00%	0.00% ○
*****	27-Jan	GDP (annualized, qoq) - estimation	4Q	6.9% ▲	2.3%	5.5% ▲
**	27-Jan	Durable goods orders - preliminary data‡	Dec	-0.9% ▼	3.2%	-0.6% ▼
****	28-Jan	Consumer spending inflation PCE (mom)	Dec	0.5% -	0.5%	0.5% ○
****	28-Jan	Consumer spending inflation PCE (yoy)	Dec	4.9% ▲	4.7%	4.8% ▲
**	28-Jan	Personal income (sa, mom)‡	Dec	0.3% ▼	0.5%	0.5% ▼
**	28-Jan	Personal spending (sa, mom)‡	Dec	-0.6% ▼	0.4%	-0.6% ○
**	28-Jan	University of Michigan confidence index - final data	Jan	67.2 ▼	68.8	68.8 ▼
<b>Eurozone</b> 						
*	18-Jan	ZEW survey expectations	Jan	49.4 ▲	26.8	--
****	20-Jan	Consumer inflation CPI (yoy) - final data	Dec	5.0% ▲	4.9%	5.0% ○
****	20-Jan	Core CPI (yoy) - final data	Dec	2.6% -	2.6%	2.6% ○
*	21-Jan	Consumer confidence - estimation‡	Jan	- 8.5 ▼	- 8.4	- 9.0 ▲
**	24-Jan	Composite PMI - preliminary data	Jan	52.4 ▼	53.3	52.6 ▼
**	24-Jan	Manufacturing PMI - preliminary data	Jan	59.0 ▲	58.0	57.5 ▲
**	24-Jan	Services PMI - preliminary data	Jan	51.2 ▼	53.1	52.0 ▼
*	28-Jan	M3 money supply (yoy)‡	Dec	6.9% ▼	7.4%	6.8% ▲
*	28-Jan	Economic confidence‡	Jan	113 ▼	114	115 ▼
*	28-Jan	Industrial confidence‡	Jan	13.9 ▼	14.6	15.0 ▼
*	28-Jan	Consumer confidence - final data	Jan	- 8.5 -	- 8.5	--



Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
<b>Germany</b> 							
🔔🔔🔔	19-Jan	Harmonized consumer inflation HICP (yoy) - final data	Dec	5.7% -	5.7%	5.7%	🟡
🔔🔔🔔	19-Jan	Consumer inflation CPI (yoy) - final data	Dec	5.3% -	5.3%	5.3%	🟡
🔔🔔🔔	24-Jan	Composite PMI - preliminary data	Jan	54.3 ▲	49.9	49.4	🟢
🔔🔔🔔	24-Jan	Manufacturing PMI - preliminary data	Jan	60.5 ▲	57.4	57.0	🟢
🔔🔔	25-Jan	IFO business climate‡	Jan	95.7 ▲	94.8	94.5	🟢
🔔🔔	27-Jan	GfK consumer confidence‡	Feb	-6.7 ▲	-6.9	-8.0	🟢
🔔🔔🔔🔔	28-Jan	GDP (yoy) - preliminary data‡	4Q	1.4% ▼	2.8%	1.8%	🔴
🔔🔔🔔🔔	28-Jan	GDP (sa, qoq) - preliminary data	4Q	-0.7% ▼	1.7%	-0.3%	🔴
<b>France</b> 							
🔔🔔🔔	24-Jan	Composite PMI - preliminary data	Jan	52.7 ▼	55.8	54.7	🔴
🔔🔔🔔	24-Jan	Manufacturing PMI - preliminary data	Jan	55.5 ▼	55.6	55.3	🟢
🔔🔔🔔🔔	28-Jan	GDP (yoy) - preliminary data‡	4Q	5.4% ▲	3.5%	4.9%	🟢
🔔🔔🔔🔔	28-Jan	GDP (qoq) - preliminary data‡	4Q	0.7% ▼	3.1%	0.5%	🟢
<b>Italy</b> 							
🔔🔔🔔	17-Jan	Harmonized consumer inflation HICP (yoy) - final data	Dec	4.2% -	4.2%	4.2%	🟡
<b>UK</b> 							
🔔🔔	18-Jan	Unemployment rate (ILO, 3-months)	Nov	4.1% ▼	4.2%	4.2%	🔴
🔔🔔🔔	19-Jan	Consumer inflation CPI (yoy)	Dec	5.4% ▲	5.1%	5.2%	🟢
🔔🔔🔔	24-Jan	Manufacturing PMI (sa) - preliminary data	Jan	56.9 ▼	57.9	57.6	🔴
🔔🔔🔔	24-Jan	Composite PMI - preliminary data	Jan	53.4 ▼	53.6	54.0	🔴
<b>Japan</b> 							
🔔🔔🔔	18-Jan	Industrial production (yoy) - final data	Nov	5.1% ▼	5.4%	--	
🔔🔔🔔	21-Jan	Consumer inflation CPI (yoy)	Dec	0.8% ▲	0.6%	0.9%	🔴
🔔🔔🔔	24-Jan	Composite PMI - preliminary data	Jan	48.8 ▼	52.5	--	
🔔🔔🔔	24-Jan	Manufacturing PMI - preliminary data	Jan	54.6 ▲	54.3	--	
<b>Chile</b> 							
🔔🔔🔔🔔	26-Jan	BCCh overnight rate target	Jan	5.50% ▲	4.00%	5.25%	🟢
<b>Canada</b> 							
🔔🔔🔔	19-Jan	Consumer inflation CPI (yoy)	Dec	4.8% ▲	4.7%	4.8%	🟡
🔔🔔🔔🔔	26-Jan	BoC base rate decision	Jan	0.25% -	0.25%	0.25%	🟡

<sup>1</sup> Reading difference to previous release: ▲ = higher than previous; ▼ = lower than previous; == = equal to previous.

<sup>2</sup> Reading difference to consensus: 🟢 = higher than consensus; 🔴 = lower than consensus; 🟡 = equal to consensus.

mom = month-on-month; yoy = year-on-year; qoq = quarter on quarter; ytd year-to-date; sa = seasonally adjusted; wda = working days adjusted; ‡ = previous data after revision.

Source: Bloomberg, KGHM Polska Miedź

## Key market data

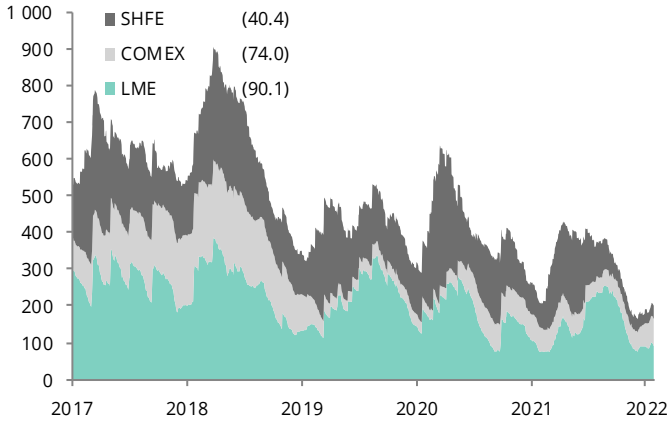
### Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 28-Jan-22)</i>		Price change <sup>1</sup>					From year beginning <sup>2</sup>		
	Price	2W	QTD	YTD	1Y	Average	Min	Max	
<b>LME (USD/t; Mo in USD/lbs)</b>									
Copper	9 678.00	▼ -2.2%	▼ -0.1%	▼ -0.1%	▲ 24.4%	9 784.13	9 565.00	9 972.00	
Molybdenum	19.05	▲ 0.1%	▲ 2.0%	▲ 2.0%	▲	18.98	18.70	19.07	
Nickel	22 750.00	▼ -0.4%	▲ 8.7%	▲ 8.7%	▲ 28.8%	22 301.05	20 480.00	24 000.00	
Aluminum	3 110.00	▲ 4.5%	▲ 10.8%	▲ 10.8%	▲ 57.2%	2 999.24	2 815.50	3 110.00	
Tin	42 450.00	▲ 3.9%	▲ 7.1%	▲ 7.1%	▲ 82.6%	41 767.89	39 400.00	44 195.00	
Zinc	3 644.00	▲ 2.4%	▲ 0.4%	▲ 0.4%	▲ 43.1%	3 606.53	3 535.00	3 686.00	
Lead	2 302.00	▼ -3.4%	▼ -1.1%	▼ -1.1%	▲ 14.6%	2 345.53	2 291.00	2 393.50	
<b>LBMA (USD/troz)</b>									
Silver	22.50	▼ -2.6%	▼ -2.5%	▼ -2.5%	▼ -10.7%	23.16	22.24	24.32	
Gold <sup>2</sup>	1 788.15	▼ -1.9%	▼ -1.8%	▼ -1.8%	▼ -3.5%	1 817.90	1 788.15	1 847.30	
<b>LPPM (USD/troz)</b>									
Platinum <sup>2</sup>	1 003.00	▲ 2.5%	▲ 4.3%	▲ 4.3%	▼ -8.0%	994.11	931.00	1 055.00	
Palladium <sup>2</sup>	2 328.00	▲ 24.5%	▲ 20.7%	▲ 20.7%	▲ 0.6%	2 012.11	1 854.00	2 328.00	
<b>FX <sup>3</sup></b>									
EURUSD	1.1138	▼ -2.7%	▼ -1.7%	▼ -1.7%	▼ -7.9%	1.1321	1.1138	1.1463	
EURPLN	4.5697	▲ 0.7%	▼ -0.6%	▼ -0.6%	▲ 0.5%	4.5475	4.5201	4.5920	
USDPLN	4.1048	▲ 3.7%	▲ 1.1%	▲ 1.1%	▲ 9.3%	4.0137	3.9463	4.1048	
USDCAD	1.2772	▲ 1.8%	▲ 0.7%	▲ 0.7%	▼ -0.3%	1.2610	1.2474	1.2772	
USDCNY	6.3612	▲ 0.1%	▲ 0.1%	▲ 0.1%	▼ -1.4%	6.3554	6.3209	6.3830	
USDCLP	799.15	▼ -2.8%	▼ -5.4%	▼ -5.4%	▲ 8.5%	821.49	798.86	852.03	
<b>Money market</b>									
3m LIBOR USD	0.317	▲ 0.08	▲ 0.11	▲ 0.11	▲ 0.11	0.253	0.216	0.317	
3m EURIBOR	-0.550	▲ 0.02	▲ 0.02	▲ 0.02	▼ -0.01	-0.560	-0.576	-0.543	
3m WIBOR	2.990	▲ 0.22	▲ 0.45	▲ 0.45	▲ 2.78	2.793	2.590	2.990	
5y USD interest rate swap	1.686	▲ 0.04	▲ 0.32	▲ 0.32	▲ 1.17	1.633	1.445	1.754	
5y EUR interest rate swap	0.168	▲ 0.07	▲ 0.15	▲ 0.15	▲ 0.62	0.096	0.031	0.168	
5y PLN interest rate swap	4.150	▲ 0.30	▲ 0.41	▲ 0.41	▲ 3.48	3.938	3.780	4.150	
<b>Fuel</b>									
WTI Cushing	86.82	▲ 3.6%	▲ 12.8%	▲ 12.8%	▲ 65.9%	83.23	76.99	87.35	
Brent	90.43	▲ 4.7%	▲ 16.7%	▲ 16.7%	▲ 65.1%	85.62	79.83	90.43	
Diesel NY (ULSD)	278.30	▲ 5.3%	▲ 16.2%	▲ 16.2%	▲ 73.9%	262.14	241.70	280.08	
<b>Others</b>									
VIX	27.66	▲ 8.47	▲ 10.44	▲ 10.44	▼ -2.55	23.46	16.91	31.96	
BBG Commodity Index	107.15	▲ 3.5%	▲ 8.0%	▲ 8.0%	▲ 33.9%	103.85	100.58	107.15	
S&P500	4 431.85	▼ -5.0%	▼ -7.0%	▼ -7.0%	▲ 17.0%	4 564.68	4 326.51	4 793.54	
DAX	15 318.95	▼ -3.6%	▼ -3.6%	▼ -3.6%	▲ 12.1%	15 764.69	15 011.13	16 271.75	
Shanghai Composite	3 361.44	▼ -4.5%	▼ -7.6%	▼ -7.6%	▼ -4.1%	3 533.89	3 361.44	3 632.33	
WIG 20	2 183.70	▼ -8.4%	▼ -3.7%	▼ -3.7%	▲ 9.9%	2 298.04	2 170.36	2 411.11	
KGHM	142.20	▼ -5.9%	▲ 2.0%	▲ 2.0%	▼ -23.2%	145.76	135.05	155.30	

° 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>

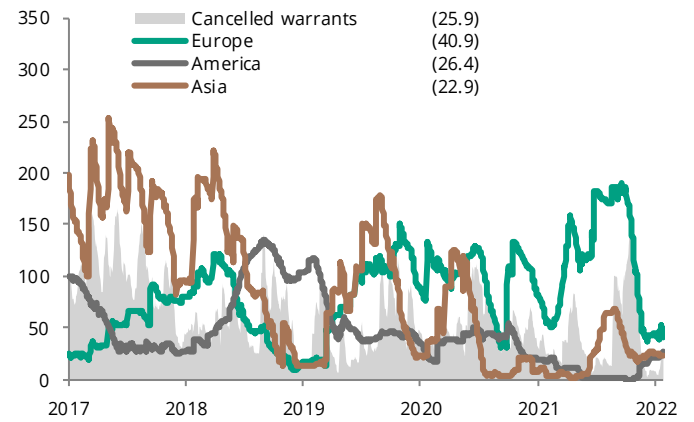
Source: Bloomberg, KGHM Polska Miedź

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



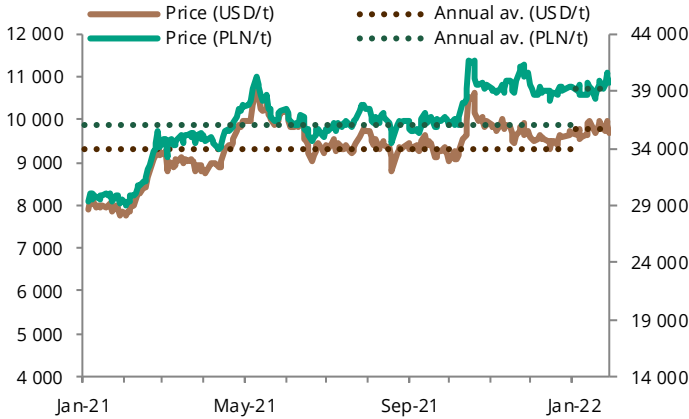
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



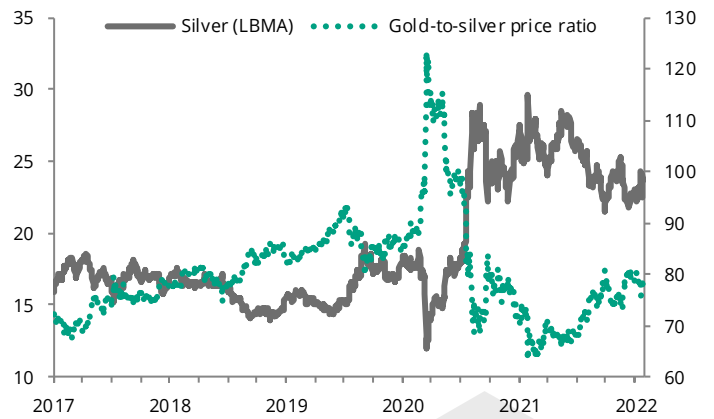
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



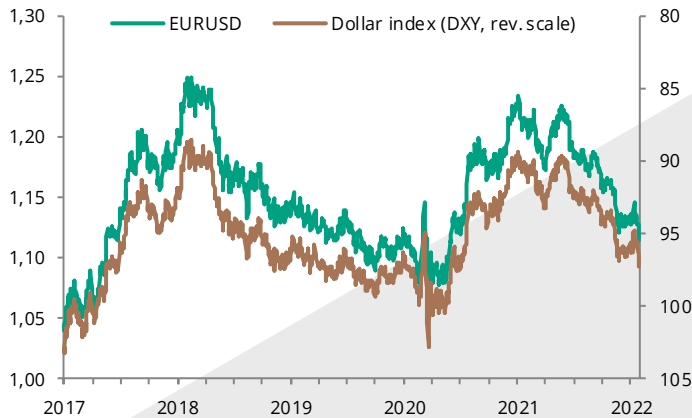
Source: Bloomberg, KGHM Polska Miedź

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



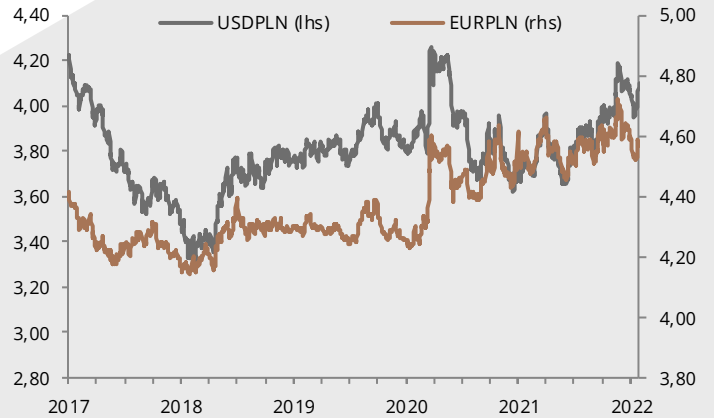
Source: Bloomberg, KGHM Polska Miedź

**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:  
**17 - 30 January 2022.**

- 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/statistics.aspx](http://www.lppm.com/statistics.aspx)

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