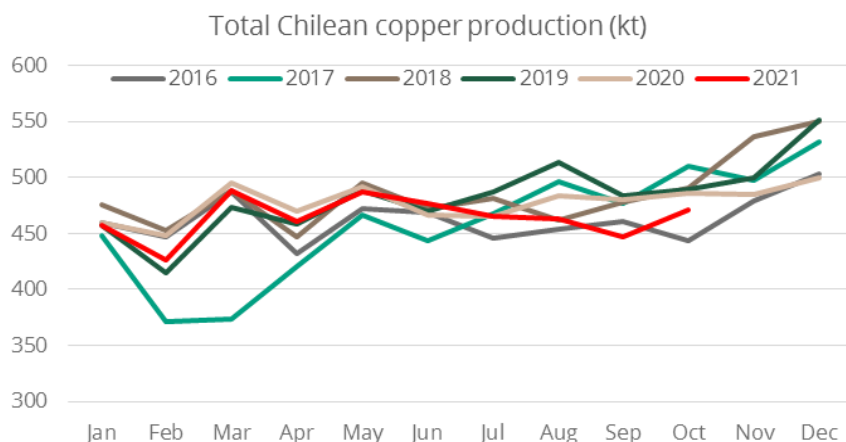


# Market Overview

- Copper:** For India's recycling industry, Malaysia's ban represents a "golden chance" to win new business and establish itself as a global leader in scrap processing. Already around 50% of steel, 40% on average of all non-ferrous metals, and almost all stainless steel output in India coming from secondary sources (*page 2*).
- Precious metals:** China's net gold imports via Hong Kong stood at 54.26 tonnes in October compared with 34.79 tonnes in September. Total gold imports via Hong Kong rose to 57.80 tonnes (*page 4*).
- USA:** Re-nomination is Powell's reward for helping rescue the U.S. economy from the pandemic and tasks him with protecting that recovery from a surge in consumer prices. Brainard would replace Richard Clarida in the vice chair slot (*page 6*).

## Chile's copper production remains under pressure from the consequences of Covid-19



Source: Cochilco, KGHM Polska Miedź S.A.

as of: 6<sup>th</sup> December 2021

### Key market prices

	Close price	2w chng.
<b>LME (USD/t)</b>		
▼ Copper	9 513.00	-1.1%
▲ Nickel	20 290.00	1.6%
<b>LBMA (USD/troz)</b>		
▼ Silver	22.35	-9.8%
▼ Gold (PM)	1 767.55	-5.0%
<b>FX</b>		
▲ EURUSD	1.1291	0.2%
▼ EURPLN	4.5934	-1.9%
▼ USDPLN	4.0653	-1.9%
▲ USDCAD	1.2812	1.4%
▲ USDCLP	837.72	0.4%
<b>Stocks</b>		
▼ KGHM	139.20	-2.6%

Source: Bloomberg, KGHM Polska Miedź S.A.; (*more on page 11*)

### Important macroeconomic data

Release	For	
 Copper production (mt)	Oct	474 881 ▲
 Manufacturing PMI	Nov	58.3 ▼
 Official manuf. PMI	Nov	50.1 ▲
 Manufacturing PMI	Nov	54.4 ▲
 Manufacturing PMI (sa)	Nov	58.1 ▼

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

## Market Risk Unit

marketrisk@kg hm.com

## Base and precious metals | Other commodities

### Copper

#### Malaysia's Scrap Metal U-Turn A Golden Opportunity For India

**For India's recycling industry, Malaysia's ban represents a "golden chance" to win new business and establish itself as a global leader in scrap processing. Already around 50% of steel, 40% on average of all non-ferrous metals, and almost all stainless steel output in India coming from secondary sources.**

**Presently roughly 60% of scrap processed in India comes from overseas**

Restrictions on scrap metal imports into China, Malaysia and other countries present a golden opportunity for recyclers in India. The global scrap and waste-handling industry has been in a state of disruption since 2017 when previous top scrap importer China announced a ban on most plastic, metal and paper scrap imports as part of a pollution crackdown. Malaysia then emerged as a top destination for the world's metal scrap and plastic waste, but it too recently raised purity thresholds on scrap imports that have left global metal recyclers reeling. For India's recycling industry, Malaysia's ban represents a "golden chance" to win new business and establish itself as a global leader in scrap processing, said Dhawal Shah, senior vice-president of the Material Recycling Association of India (MRAI). "We are very frugal-minded here. Anything which has a certain value will be extracted, and it will be recycled," said Shah. The scrap import restrictions imposed by China and Malaysia were designed to prevent the countries from becoming the dumping grounds for the world's trash. Shah said India's recycling sector was well positioned to benefit from their step back, as long as government regulations were well thought out, with clear policies in place to ensure scrap is processed in an environmentally friendly way. "It's not fair to have anybody else's waste dumped into any other country," he said. But, he added, there is a lot of "credible movement of goods, value addition that needs to be done, that can actually help our economy". He said regulations should not be overly restrictive. "The most vibrant recycling economy is when you have complex materials that can be treated in the right way." India is already a major metals recycler, with around 50% of its steel, 40% on average of all non-ferrous metals, and almost all stainless steel output coming from secondary sources, Shah said. Roughly 60% of scrap supply comes from overseas. As India's consumption grows in the next 10 to 15 years, recycling volumes and rates are also expected to grow, especially in aluminium, Shah said. Shah said India's expected jump in renewable energy output, mainly from solar, will also provide a large supply of recyclable material as photovoltaic panels are replaced. He said the country's 1.4 billion population provided a huge labour force for the industry.

## Chile Copper Production To Return To Pre-Pandemic Levels In 2022

**Cochilco forecast Chile, the world's largest copper exporter, will produce 5.818 million mt in 2022, up 2.5% to its highest level in four years.**

Copper production in Chile will return to pre-pandemic levels in 2022, the Chilean Copper Commission (Cochilco) said Nov. 30 in an outlook on the global copper market. The government body forecast Chile, the world's largest copper exporter, will produce 5.818 million mt in 2022, up 2.5% to its highest level in four years. In 2019, output was hit by flash-flooding and maintenance shutdowns while last year, measures to slow the spread of the COVID-19 disease impacted production. Cochilco had originally predicted production to hit record levels of almost 6 million mt this year but falling ore grades, technical stoppages, and a crippling strike at the state-owned Andina mine mean that output will actually fall 1.0% to 5.676 million mt, a four-year low. Increased production will help boost global copper production by 4.7% in 2022 to 21.9 million mt with higher output also expected in China, the Democratic Republic of Congo and Peru as new mines are brought online. Meanwhile, demand was expected to rise 2.3% to 25.0 million mt as demand rises in Europe, India, and the US. As a result, the global copper deficit is expected to shrink to 49,000 mt, down from almost 200,000 mt in 2021, Cochilco analyst Victor Garay said. Cochilco also said it expected copper prices to average \$3.95/lb in 2022, down from \$4.23/lb this year. Although the Chinese economy has slowed significantly -- with copper demand forecast to grow just 1% in 2022 -- and inflation set to cool global growth, Cochilco said low inventory levels at the world's metals exchanges and possible disruptions to mine production would support prices.

### Other important information on copper market:

- Chile produced 474,881 mt of copper in October, down 3.6% year on year, government data showed. Statistics agency INE attributed the fall to lower ore grades and throughput. However, the figure marked an increase of 5.3% from September, reflecting the end of a strike at the state-owned Andina which halted production from mid-August. Production of copper during the first 10 months of the year reached 4.696 million mt, down 2.1% from the same period of 2020. Mining companies in Chile have struggled to maintain production in the face of lower ore grades, strikes and water shortages as well as restrictions imposed by the continuing COVID-19 pandemic.
- Chile's state-owned Codelco, the world's largest copper producer, told Reuters on Tuesday that it would carry out a 90-day maintenance project on a furnace at its Chuquicamata smelter during the second half of 2022. The miner did not specify whether the stoppage will reduce production capacity. "In the second half of 2022 the scheduled general maintenance of the flash oven will be carried out, for an approximate period of 90 days," Codelco said in an e-mailed response to a question from Reuters. The "Chuqui" smelter was stopped in December 2018

to make adjustments to meet new pollutant emission standards. Work at the time included adding two new acid plants and repowering their flash furnace.

- The global world refined copper market showed a 52,000 tonnes surplus in August, compared with a 39,000 tonnes deficit in July, the International Copper Study Group (ICSG) said in its latest monthly bulletin. For the first 8 months of the year, the market was in a 107,000 tonnes deficit compared with a 97,000 tonnes deficit in the same period a year earlier, the ICSG said. World refined copper output in August was 2.09 million tonnes, while consumption was 2.04 million tonnes.
- Peru's copper, zinc, tin, and silver shipments fell in September, while gold, lead, and molybdenum deliveries rose, the government said Nov. 23. September copper deliveries totaled 215,500 mt, down 5.6% from 228,400 mt a year earlier, the central bank said in a statement. Zinc shipments dropped 22.8% to 78,900 mt from 102,200 mt a year earlier as protests shut mines, including El Brocal, Atacocha, and Santa Luisa. Shipments from Peru's lone tin producer, Minsur, fell 14.4% to 2,300 mt. Lead exports climbed 4.2% to 61,700 mt from 59,200 mt. Molybdenum deliveries rose 58.6% to 3,900 mt from 2,500 mt.
- Russia's State Development Corporation will finance supply of Russian equipment for the largest copper processing plant in Uzbekistan. A 712 million Euro loan agreement was signed between and Almalyk mining and metallurgical complex ahead of visit of President of Uzbekistan Shavkat Mirziyoyev to Russia. The loan will be spent for construction of the copper processing plant in Almalyk. The project will support development of Yoshlik mine and its prospective consolidation with Kalmakyr mine. The united mine will become one of the world's biggest copper mines. The loan funds will be used for procurement Russian equipment and services under the project, financing of a part of project expenditures. Almalyk mining and metallurgical complex (AMMC) intends to achieve production of copper cathodes up to 400,000 tons a year by 2028. AMMC intends to produce around 270 tons of silver and 50 tons of gold a year by 2028. Construction of the plant will require \$2 billion. Gazprom Bank and Export Insurance Agency of Russia will be involved in financing of the project. earlier provided loans to AMMC for purchase of quarry trucks and mining equipment.

## Precious Metals

### China's October net gold imports via Hong Kong hit 3-year high

**China's net gold imports via Hong Kong stood at 54.26 tonnes in October compared with 34.79 tonnes in September. Total gold imports via Hong Kong rose to 57.80 tonnes.**

China's net gold imports via Hong Kong jumped 56% in October from the previous month to the highest since June 2018, as buyers in the top consumer stocked up on the metal as a cushion against rising inflation. Net imports stood

at 54.26 tonnes in October compared with 34.79 tonnes in September. Total gold imports via Hong Kong rose to 57.80 tonnes from 41.88 tonnes. "The healthy figures reflect what we're seeing in the spot market, which is to say loco Shanghai gold's been trading at a significant premium over loco London spot," independent analyst Ross Norman said. Gold imports from Switzerland to mainland China in October were also higher than in any month since June 2018, customs data showed. "The data seems to reflect healthy demand from that region. While demand from other key physical buyers has been weak or sporadic, China is beginning to show increasing strength, and I suspect this is being driven by the inflationary numbers we're seeing," Norman added. China's October factory gate prices, an indicator for inflation, rose at the fastest pace since 1995, beating forecasts and further squeezing profit margins for producers grappling with soaring coal prices and other commodity costs due to the power crunch. Net imports via Hong Kong also rose in September to hit a five-month high. The Hong Kong data does not provide a complete picture of Chinese purchases because gold is also imported via Shanghai and Beijing.

### **Newmont forecasts higher gold output in 2022**

**Total gold output is estimated to be 7.5 million gold equivalent ounces in 2022. It forecast 2022 attributable capital expenditure of about \$2.13 billion. The miner expects all-in sustaining cost (AISC) of \$1,050 per ounce in 2022, with the figure set to reduce to between \$920 and \$1,020 per ounce by 2024.**

Dec 2 (Reuters) - Newmont Corp projected a jump in gold production for 2022 as its operations recover from a pandemic-driven hit and investments to boost output at its Boddington mine in Australia and Ahafo in Ghana pay-off. The world's top gold producer forecast output of 6.2 million ounces for next year, up from the 6 million ounces it expects to produce in 2021. Total gold output combined with other metals is estimated to be 7.5 million gold equivalent ounces in 2022. While gold prices have declined this year due to the economic recovery and winding down of pandemic-era stimulus, the detection of the new Omicron coronavirus variant has recently boosted appeal of safer assets. Newmont said it expected full-year gold production to rise to between 6.2 million and 6.8 million ounces over the next five years. It forecast 2022 attributable capital expenditure of about \$2.13 billion. The miner expects all-in sustaining cost (AISC) of \$1,050 per ounce in 2022, with the figure set to reduce to between \$920 and \$1,020 per ounce by 2024. AISC is a key metric used by miners to measure overall cost of producing gold. The pandemic's impact on its operations had forced Newmont to cut its 2021 production outlook and hike its AISC forecast in October. The miner said on Thursday it was on track to return more than \$2 billion to shareholders in 2021.

## Global economies | Foreign exchange markets

**Biden Keeps Powell as Fed Chief, Names Brainard Vice Chair**  
**Re-nomination is Powell's reward for helping rescue the U.S. economy from the pandemic and tasks him with protecting that recovery from a surge in consumer prices. Brainard would replace Richard Clarida in the vice chair slot.**

President Joe Biden preserved continuity at the Federal Reserve by selecting Jerome Powell for a second term as chair and elevating Lael Brainard to vice chair. The decision rewards Powell for helping rescue the U.S. economy from the pandemic and tasks him with protecting that recovery from a surge in consumer prices. It also restores the tradition of the president sticking with the chair he inherited from his predecessor. Powell, a Republican, will likely win a smooth confirmation in the Senate, although progressive Democrats may be disappointed by the choice. Brainard would replace Richard Clarida in the vice chair slot and may face opposition from Senate Republicans for her confirmation given her tough line on bank regulation. She was interviewed by Biden for the chair position and was seen as a possible candidate for the separate job of vice chair for supervision, which remains vacant. U.S. equities rose after the news, likely welcoming continuity at the Fed, while Treasuries sold off. Powell has enjoyed bipartisan support, including from Treasury Secretary Janet Yellen and other Democrats, although progressive Democrats such as Massachusetts Senator Elizabeth Warren lobbied Biden to choose someone more aligned with them on overseeing banks and battling climate change. Powell, 68, was picked to run the Fed in 2017 by then-President Donald Trump and he secured Senate confirmation in an 84-13 vote. Trump, who passed over then-Fed Chair Yellen in naming Powell, later publicly turned on his choice for tightening monetary policy. Powell in turn worked hard to woo lawmakers to protect himself against the president's Twitter attacks. Powell won plaudits for his aggressive response to the fallout from the coronavirus. As the economy plunged into recession, his Fed slashed rates to near zero in March 2020 and began buying a wide range of assets. Brainard and Powell have similar views on monetary policy, but differ over bank regulation with Brainard opposing at nearly every step Powell's modest rollbacks of some of the tough curbs imposed on banks after the financial crisis. Her support for the Fed to do more fighting climate change may also draw Republican opposition to her promotion. If confirmed, she would likely have a bigger say at the Fed. Its vice chair is traditionally the central bank's No. 2 official, playing a key role in supporting the chair and sending policy signals. Brainard, 59, was appointed a Fed governor in 2014 by President Barack Obama. In 2020, Biden considered picking her as Treasury Secretary, before he chose Yellen. A graduate of Harvard University, Brainard served in Bill Clinton's White House as deputy national economic adviser. In 2009, under Obama, she joined the Treasury and became undersecretary for international affairs in 2010. Powell's second term is going to be very different from his first. While the economy is rebounding, inflation is running hot, Covid-19 cases remain elevated

and strained supply chains present big uncertainties. That poses a challenge to the Powell-led revamp of the Fed's strategy, unveiled in 2020. It indicated the central bank would let the economy run faster than it did historically, in the hope that would boost and broaden employment and wages. Part of the thinking was that should particularly benefit marginalized workers and minorities. But the surge in prices has led to criticism that the Fed is behind the curve in tightening policy. Powell said for most of this year that the inflation pressures would prove "transitory" and the Fed wouldn't consider hiking rates until the labor market shows greater signs of healing. But he also he "will not hesitate" to act if inflation became unanchored, signaling the Fed isn't tone-deaf to the anxiety that higher prices are causing ordinary Americans.

### Supply Shortages Are Easing in U.S. and Worsening in Europe

**The US president loses confidence in his constituents due to the high price environment. However, he claims that his administration has made a contribution to solving delivery problems at California ports. The supply bottlenecks in the U.S. are easing.**

The supply crunch that's helped drive inflation to multi-decade highs shows some signs of easing in the U.S., but it's still getting worse in Europe. That's the takeaway from the latest readings on Bloomberg Economics' new set of supply indicators. The U.S. measure declined in October, while remaining at a historically elevated level, suggesting shortages are becoming less severe. If the trend continues into 2022, sticker-shock for U.S. consumers should begin to fade. That could make life at least a bit easier for newly reappointed Federal Reserve Chair Jerome Powell, who's under pressure to tighten monetary policy as prices surge. The improvement in the U.S.'s supply crunch backs up President Joe Biden's view that bottlenecks are easing after his administration moved to smooth operations at West Coast ports. His popularity has fallen recently amid economic concerns like inflation, with just 43% of voters approving of his job performance, according to an analysis of polls by FiveThirtyEight. "More goods are moving more quickly and more cheaply out of our ports, onto your doorsteps, and onto store shelves," Biden said. Major retailers "have confirmed that their shelves will be well-stocked in stores this holiday season". The U.S. measure shows that supply shortages peaked in the summer and have been trending modestly lower since then. That's helped by declines in the backlog of orders and prices for manufacturing firms, both of which have edged down from summer highs. So have prices for industrial materials, and the order-to-inventory ratio for retailers. Not all components of the U.S. gauge are improving. Supply constraints in the services sector continue to worsen, and the shortage of workers doesn't appear to be easing. With the country's inflation rate at 6.2% and expected to climb higher in the coming months, one concern for the Fed will be if temporary drivers of high prices -- linked to the supply crunch -- give way to more lasting ones as wages pick up. There's one shred of relief for inflation hawks at the European Central Bank: The pace of deterioration appears to be slowing. Still, the orders-to-inventory ratio at Europe's factories and shops continues to rise. And in Germany, the continent's economic powerhouse, the number of









openings for every job seeker is also increasing -- a labor deficit that could start to drive wages higher.



# Macroeconomic calendar

## Important macroeconomic data releases

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>
<b>China</b> 						
☆☆	27-Nov	Industrial profits (yoy)	Oct	24.6% ▲	16.3%	--
☆☆☆	30-Nov	Official manufacturing PMI	Nov	50.1 ▲	49.2	49.7 ▲
☆☆☆	01-Dec	Caixin's manufacturing PMI	Nov	49.9 ▼	50.6	50.6 ▼
<b>Poland</b> 						
☆☆☆☆	22-Nov	Sold industrial production (yoy)	Oct	7.8% ▼	8.8%	5.3% ▲
☆☆	22-Nov	Producer inflation PPI (yoy)‡	Oct	11.8% ▲	10.3%	11.0% ▲
☆☆☆	23-Nov	Retail sales (yoy)	Oct	14.4% ▲	11.1%	12.5% ▲
☆	24-Nov	M3 money supply (yoy)	Oct	8.6% -	8.6%	8.4% ▲
☆☆	25-Nov	Unemployment rate	Oct	5.5% ▼	5.6%	5.5% ○
☆☆☆☆☆	30-Nov	GDP (yoy) - final data	3Q	5.3% ▲	5.1%	--
☆☆☆☆☆	30-Nov	GDP (qoq) - final data	3Q	2.3% ▲	2.1%	--
☆☆☆☆	30-Nov	Consumer inflation CPI (yoy) - preliminary data	Nov	7.7% ▲	6.8%	7.3% ▲
☆☆☆	01-Dec	Manufacturing PMI	Nov	54.4 ▲	53.8	53.9 ▲
<b>US</b> 						
☆☆☆	23-Nov	Composite PMI - preliminary data	Nov	--	57.6	--
☆☆☆	23-Nov	Manufacturing PMI - preliminary data	Nov	--	58.4	59.1
☆☆☆	23-Nov	PMI services - preliminary data	Nov	57.0 ▼	58.7	59.0 ▼
☆	23-Nov	Richmond Fed manufacturing index	Nov	11.0 ▼	12.0	11.0 ○
☆☆☆☆☆	24-Nov	GDP (annualized, qoq) -	3Q	2.1% ▲	2.0%	2.2% ▼
☆☆☆☆	24-Nov	Consumer spending inflation PCE (mom)	Oct	0.4% ▲	0.2%	0.4% ○
☆☆☆☆	24-Nov	Consumer spending inflation PCE (yoy)‡	Oct	4.1% ▲	3.7%	4.1% ○
☆☆	24-Nov	Durable goods orders - preliminary data‡	Oct	-0.5% ▼	-0.4%	0.2% ▼
☆☆	24-Nov	Personal income (sa, mom)	Oct	0.5% ▲	-1.0%	0.2% ▲
☆☆	24-Nov	Personal spending (sa, mom)	Oct	1.3% ▲	0.6%	1.0% ▲
☆☆	24-Nov	University of Michigan confidence index - final data	Nov	67.4 ▲	66.8	66.9 ▲
☆	29-Nov	Dallas Fed manufacturing activity	Nov	11.8 ▼	14.6	15.0 ▼
☆☆☆	01-Dec	Manufacturing PMI - final data	Nov	58.3 ▼	59.1	59.1 ▼
☆☆	01-Dec	ISM Manufacturing	Nov	61.1 ▲	60.8	61.2 ▼
☆☆☆	03-Dec	PMI services - final data	Nov	58.0 ▲	57.0	57.0 ▲
☆☆	03-Dec	Change in non-farm payrolls (ths)‡	Nov	210 ▼	546	550 ▼
☆☆	03-Dec	Underemployment rate (U6)	Nov	7.8% ▼	8.3%	--
☆☆	03-Dec	Unemployment rate	Nov	4.2% ▼	4.6%	4.5% ▼
☆	03-Dec	Average hourly earnings (yoy)‡	Nov	4.8% -	4.8%	5.0% ▼

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>
<b>Eurozone</b> 						
🗳️	22-Nov	Consumer confidence - estimation	Nov	-6.8 ▼	-4.8	-5.5 📉
🗳️🗳️🗳️	23-Nov	Composite PMI - preliminary data	Nov	55.8 ▲	54.2	53.0 📈
🗳️🗳️🗳️	23-Nov	Manufacturing PMI - preliminary data	Nov	--	58.3	57.4 📈
🗳️🗳️🗳️	23-Nov	Services PMI - preliminary data	Nov	--	54.6	53.5 📈
🗳️	26-Nov	M3 money supply (yoy)‡	Oct	7.7% ▲	7.5%	7.4% 📈
🗳️	29-Nov	Economic confidence	Nov	118 ▼	119	118 📊
🗳️	29-Nov	Industrial confidence	Nov	14.1 ▼	14.2	14.0 📈
🗳️	29-Nov	Consumer confidence - final data	Nov	-6.8 =	-6.8	--
🗳️🗳️🗳️🗳️	30-Nov	Core CPI (yoy) - preliminary data	Nov	2.6% ▲	2.0%	2.3% 📈
🗳️🗳️🗳️🗳️	30-Nov	CPI estimate (yoy)	Nov	4.9% ▲	4.1%	4.5% 📈
🗳️🗳️🗳️	01-Dec	Manufacturing PMI - final data	Nov	58.4 ▼	58.6	58.6 📉
🗳️🗳️	02-Dec	Unemployment rate	Oct	7.3% ▼	7.4%	7.3% 📊
🗳️🗳️	02-Dec	Producer inflation PPI (yoy)‡	Oct	21.9% ▲	16.1%	19.0% 📈
🗳️🗳️🗳️	03-Dec	Composite PMI - final data	Nov	55.4 ▼	55.8	55.8 📉
🗳️🗳️🗳️	03-Dec	Services PMI - final data	Nov	55.9 ▼	56.6	56.6 📉
🗳️🗳️	03-Dec	Retail sales (yoy)‡	Oct	1.4% ▼	2.6%	1.4% 📊
<b>Germany</b> 						
🗳️🗳️🗳️	23-Nov	Composite PMI - preliminary data	Nov	--	52.0	51.0 📈
🗳️🗳️🗳️	23-Nov	Manufacturing PMI - preliminary data	Nov	--	57.8	56.9 📈
🗳️🗳️	24-Nov	IFO business climate	Nov	96.5 ▼	97.7	96.7 📉
🗳️🗳️🗳️🗳️🗳️	25-Nov	GDP (yoy) - final data	3Q	2.5% =	2.5%	2.5% 📊
🗳️🗳️🗳️🗳️🗳️	25-Nov	GDP (sa, qoq) - final data	3Q	1.7% ▼	1.8%	1.8% 📉
🗳️🗳️	25-Nov	GfK consumer confidence‡	Dec	-1.6 ▼	1.0	-1.0 📉
🗳️🗳️🗳️🗳️	29-Nov	Harmonized consumer inflation HICP (yoy) - preliminary data	Nov	6.0% ▲	4.6%	5.5% 📈
🗳️🗳️🗳️🗳️	29-Nov	Consumer inflation CPI (yoy) - preliminary data	Nov	5.2% ▲	4.5%	5.0% 📈
🗳️🗳️	30-Nov	Unemployment rate	Nov	5.3% ▼	5.4%	5.4% 📉
🗳️🗳️🗳️	01-Dec	Manufacturing PMI - final data	Nov	57.4 ▼	57.6	57.6 📉
🗳️🗳️🗳️	01-Dec	Retail sales (yoy)‡	Oct	-4.1% ▼	-0.6%	-1.7% 📉
🗳️🗳️🗳️	03-Dec	Composite PMI - final data	Nov	52.2 ▼	52.8	52.8 📉
<b>France</b> 						
🗳️🗳️🗳️	23-Nov	Composite PMI - preliminary data	Nov	--	54.7	53.9 📈
🗳️🗳️🗳️	23-Nov	Manufacturing PMI - preliminary data	Nov	--	53.6	53.1 📈
🗳️🗳️🗳️🗳️🗳️	30-Nov	GDP (yoy) - final data	3Q	3.3% =	3.3%	3.3% 📊
🗳️🗳️🗳️🗳️🗳️	30-Nov	GDP (qoq) - final data	3Q	3.0% =	3.0%	3.0% 📊
🗳️🗳️🗳️🗳️	30-Nov	Harmonized consumer inflation HICP (yoy) - preliminary data	Nov	3.4% ▲	3.2%	3.2% 📈
🗳️🗳️🗳️🗳️	30-Nov	Consumer inflation CPI (yoy) - preliminary data	Nov	2.8% ▲	2.6%	2.6% 📈
🗳️🗳️🗳️	01-Dec	Manufacturing PMI - final data	Nov	55.9 ▲	54.6	54.6 📈
🗳️🗳️🗳️🗳️	03-Dec	Industrial production (yoy)‡	Oct	-0.5% ▼	0.5%	-0.4% 📉
🗳️🗳️🗳️	03-Dec	Composite PMI - final data	Nov	56.1 ▼	56.3	56.3 📉
<b>Italy</b> 						
🗳️🗳️🗳️🗳️🗳️	30-Nov	GDP (wda, yoy) - final data	3Q	3.9% ▲	3.8%	3.8% 📈
🗳️🗳️🗳️🗳️🗳️	30-Nov	GDP (wda, qoq) - final data	3Q	2.6% =	2.6%	2.6% 📊
🗳️🗳️🗳️🗳️	30-Nov	Harmonized consumer inflation HICP (yoy) - preliminary data	Nov	4.0% ▲	3.2%	3.3% 📈
🗳️🗳️🗳️	01-Dec	Manufacturing PMI	Nov	62.8 ▲	61.1	61.1 📈
🗳️🗳️	02-Dec	Unemployment rate	Oct	9.4% ▲	9.2%	9.1% 📈
🗳️🗳️🗳️	03-Dec	Composite PMI	Nov	57.6 ▲	54.2	55.9 📈
<b>UK</b> 						
🗳️🗳️🗳️	23-Nov	Manufacturing PMI (sa) - preliminary data	Nov	--	57.8	57.3 📈
🗳️🗳️🗳️	23-Nov	Composite PMI - preliminary data	Nov	--	57.8	57.5 📈
🗳️🗳️🗳️	01-Dec	Manufacturing PMI (sa) - final data	Nov	58.1 ▼	58.2	58.2 📉

<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

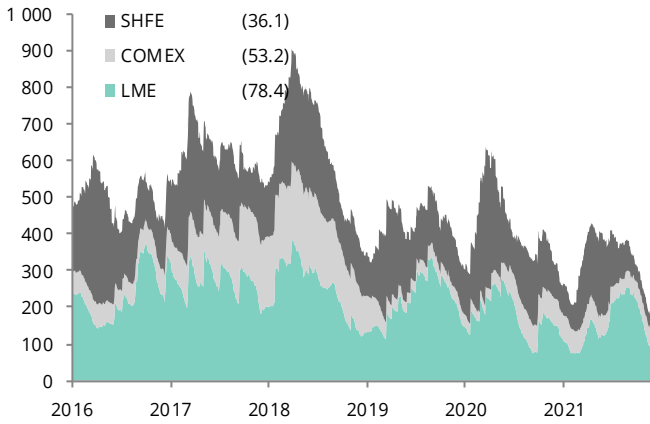
### Key base & precious metal prices, exchange rates and other important market factors

<i>(as of: 03-Dec-21)</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	9 513.00	▼ -1.1%	▲ 5.2%	▲ 22.9%	▲ 23.9%	9 299.46	7 755.50	10 724.50	
Molybdenum	18.66	▼ -0.9%	▼ -0.4%	▲ 86.0%	▲	15.74	9.95	20.05	
Nickel	20 290.00	▲ 1.6%	▲ 11.6%	▲ 22.7%	▲ 27.3%	18 369.46	15 907.00	21 135.00	
Aluminum	2 648.00	▼ -0.5%	▼ -7.1%	▲ 33.9%	▲ 30.6%	2 462.61	1 951.50	3 180.00	
Tin	40 200.00	▲ 1.1%	▲ 9.8%	▲ 95.7%	▲ 113.3%	32 153.94	20 965.00	41 000.00	
Zinc	3 324.00	▲ 3.4%	▲ 10.2%	▲ 22.0%	▲ 21.0%	2 975.38	2 539.00	3 815.00	
Lead	2 231.00	▲ 0.0%	▲ 5.5%	▲ 13.1%	▲ 9.0%	2 198.47	1 896.00	2 504.00	
<b>LBMA (USD/troz)</b>									
Silver	22.35	▼ -9.8%	▲ 3.8%	▼ -15.6%	▼ -7.5%	25.34	21.53	29.59	
Gold <sup>2</sup>	1 767.55	▼ -5.0%	▲ 1.4%	▼ -6.5%	▼ -3.5%	1 799.27	1 683.95	1 943.20	
<b>LPPM (USD/troz)</b>									
Platinum <sup>2</sup>	940.00	▼ -9.3%	▼ -2.4%	▼ -12.6%	▼ -8.1%	1 100.45	931.00	1 294.00	
Palladium <sup>2</sup>	1 812.00	▼ -12.8%	▼ -4.6%	▼ -23.5%	▼ -24.4%	2 439.38	1 722.00	3 000.00	
<b>FX <sup>3</sup></b>									
EURUSD	1.1291	▲ 0.2%	▼ -2.5%	▼ -8.0%	▼ -7.1%	1.1872	1.1206	1.2338	
EURPLN	4.5934	▼ -1.9%	▼ -0.9%	▼ -0.5%	▲ 2.6%	4.5627	4.4541	4.7210	
USDPLN	4.0653	▼ -1.9%	▲ 1.8%	▲ 8.2%	▲ 9.9%	3.8458	3.6545	4.1893	
USDCAD	1.2812	▲ 1.4%	▲ 0.6%	▲ 0.6%	▼ -0.5%	1.2515	1.2040	1.2856	
USDCNY	6.3764	▼ -0.2%	▼ -1.1%	▼ -2.3%	▼ -2.5%	6.4570	6.3645	6.5718	
USDCLP	837.72	▲ 0.4%	▲ 4.2%	▲ 17.8%	▲ 10.9%	752.49	693.74	837.72	
<b>Money market</b>									
3m LIBOR USD	0.188	▲ 0.02	▲ 0.06	▼ -0.05	▼ -0.04	0.158	0.114	0.241	
3m EURIBOR	-0.563	▼ 0.00	▼ -0.02	▼ -0.02	▼ -0.04	-0.546	-0.583	-0.529	
3m WIBOR	2.210	▲ 0.52	▲ 1.98	▲ 2.00	▲ 1.99	0.392	0.210	2.210	
5y USD interest rate swap	1.245	▼ -0.09	▲ 0.19	▲ 0.82	▲ 0.79	0.916	0.416	1.459	
5y EUR interest rate swap	-0.147	▼ 0.00	▲ 0.05	▲ 0.31	▲ 0.31	-0.280	-0.485	0.043	
5y PLN interest rate swap	3.175	▲ 0.06	▲ 1.30	▲ 2.56	▲ 2.50	1.564	0.583	3.370	
<b>Fuel</b>									
WTI Cushing	66.26	▼ -12.9%	▼ -11.7%	▲ 36.6%	▲ 45.2%	67.76	47.62	84.65	
Brent	69.77	▼ -12.0%	▼ -11.4%	▲ 36.3%	▲ 43.7%	70.23	50.02	85.70	
Diesel NY (ULSD)	209.84	▼ -8.7%	▼ -10.4%	▲ 42.0%	▲ 51.3%	205.36	146.07	259.61	
<b>Others</b>									
VIX	30.67	▲ 12.76	▲ 7.53	▲ 7.92	▲ 9.39	19.63	15.01	37.21	
BBG Commodity Index	95.79	▼ -6.4%	▼ -4.9%	▲ 22.7%	▲ 29.3%	92.36	78.64	105.84	
S&P500	4 538.43	▼ -3.4%	▲ 5.4%	▲ 20.8%	▲ 23.8%	4 238.98	3 700.65	4 704.54	
DAX	15 169.98	▼ -6.1%	▼ -0.6%	▲ 10.6%	▲ 14.5%	15 177.48	13 432.87	16 251.13	
Shanghai Composite	3 607.43	▲ 1.3%	▲ 1.1%	▲ 3.9%	▲ 4.8%	3 531.27	3 357.74	3 715.37	
WIG 20	2 179.71	▼ -3.0%	▼ -5.7%	▲ 9.9%	▲ 15.3%	2 172.96	1 876.85	2 472.33	
KGHM	139.20	▼ -2.6%	▼ -11.7%	▼ -23.9%	▼ -16.5%	183.45	133.10	223.80	

° 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>

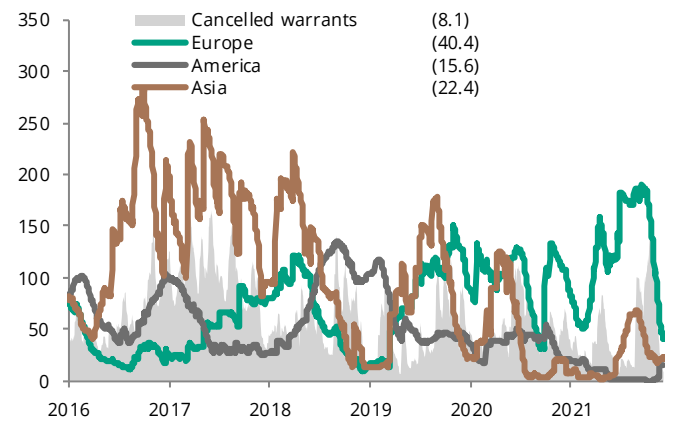
Source: Bloomberg, KGHM Polska Miedź

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



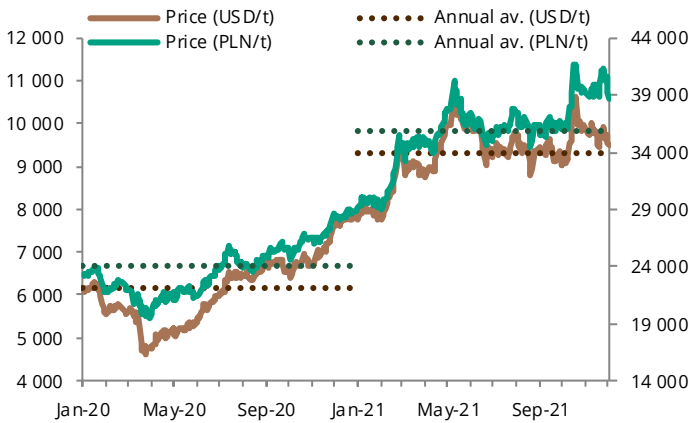
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



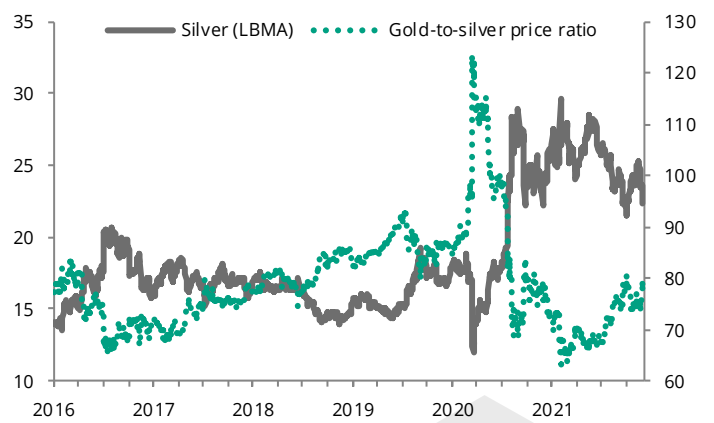
Note: Latest values in brackets. Source: Bloomberg, KGHM

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



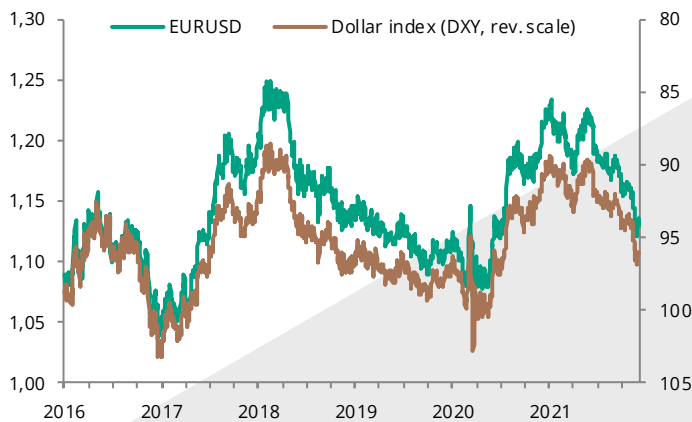
Source: Bloomberg, KGHM Polska Miedź

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



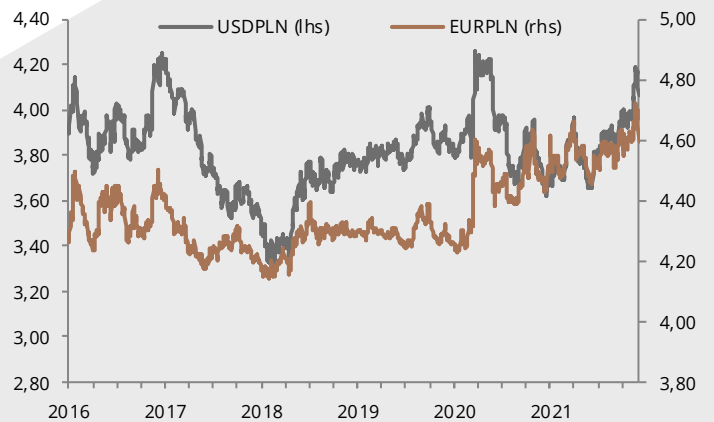
Source: Bloomberg, KGHM Polska Miedź

**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:  
**22 November – 5 December 2021.**

- 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)

### **DISCLAIMER**

This document reflects the market view of the staff of KGHM Polska Miedz (Polish Copper)'s Market Risk Unit employees on the economy, commodity as well as financial markets. Although, according to the our best of our knowledge, all the facts presented in this publication come from or are based on reliable sources, we do not guarantee their correctness. Moreover, they may be incomplete or shortened. All the opinions and forecasts are backed by diligently-performed analyses valid as of the publishing date and may be subject to change. KGHM Polska Miedz (Polish Copper) S.A. is not obligated to announce any subsequent change of these opinions or forecasts. This document's purpose is solely informative and must not be interpreted as an offer or advice with regards to the purchase/sale of any mentioned financial instrument, nor it is part of such offer or advice.

Re-printing or using this publication or its in whole or part requires prior written consent from KGHM. To acquire that such consent please contact the Communication Department KGHM Polska Miedz SA.

In case of questions or comments please contact us:

KGHM Polska Miedz (Polish Copper) S.A.  
Departament Ryzyka Finansowego i Rynkowego (Financial and Market Risk Department)  
Wydział Ryzyka Rynkowego (Market Risk Unit)  
ul. M. Skłodowskiej-Curie 48  
59-301 Lubin, Poland