

# **Market Overview**

- Copper: Despite less impressive data from recent months, the Middle Kingdom recorded last year copper imports at 6.68 million tonnes. This was mainly due to the accumulation of state reserves, as well as China's rapid economic rebound after the coronavirus pandemic and the possibility of arbitrage between copper prices in London and Shanghai (page 2).
- Precious metals: In an internal combustion engine there is 0.5 to 0.9 ounces (15-28 grams) of silver, in the case of hybrid and electric cars the consumption is correspondingly higher. It may not seem much, but it is worth noting that global production of light vehicles (LV) is expected to reach around 85 million in 2021. This, in turn, suggests that automotive demand for silver this year will be around 61 million ounces (1,900 t) (page 4).
- USA: The aid package includes \$415 billion to bolster the response to the virus and the rollout of COVID-19 vaccines, some \$1 trillion in direct relief to households, and roughly \$440 billion for small businesses and communities particularly hard hit by the pandemic (page 6).
- China: For the full year, the trade surplus reached \$535 billion, a 27% increase from 2019 and the highest since 2015. Exports to the U.S. surged 34.5% in December from a year earlier, while imports of American goods rose 47.7%, the most since January 2013 (page 7).

## Commodity performance in 2020 ■ PRECIOUS METAL 50% 40% 30% 20% 10% 0% -10% -20% -30%

Source: Reuters, KGHM Polska Miedź S.A.



### Key market prices

		Close price	2w chng.						
	LME (USD/t)								
	Copper	7 979.50	3.1%						
	Nickel	17 970.00	8.6%						
	LBMA (USD/troz)								
•	Silver	25.25	-4.7%						
•	Gold (PM)	1 839.00	-2.8%						
	FX								
•	EURUSD	1.2123	-1.2%						
•	EURPLN	4.5480	-1.4%						
•	USDPLN	3.7466	-0.3%						
•	USDCAD	1.2727	0.0%						
	USDCLP	735.35	3.4%						
	Stocks								
	KGHM	198.05	8.2%						
Source:	Source: Bloomberg, KGHM Polska Miedź S.A.; (more on page 11								

#### Important macroeconomic data Release For ISM Manufacturing Dec 60.7 Trade balance (\$) Dec 78.2 Trade balance Nov 1 756 -2.9% **V** Retail sales (yoy) Nov Factory orders (wda, yoy) Nov 6.3% 🔺 Source: Bloomberg, KGHM Polska Miedź S.A.; (more on page 9)

## Market Risk Unit

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## **Base and precious metals | Other commodities**

## Copper

## **China's 2020 Copper Imports Hit Record High**

Despite less impressive data from recent months, the Middle Kingdom recorded last year copper imports at 6.68 million tonnes. This was mainly due to the accumulation of state reserves, as well as China's rapid economic rebound after the coronavirus pandemic and the possibility of arbitrage between copper prices in London and Shanghai.

China imported record volumes of unwrought copper and copper products on an annual basis in 2020. Imports of unwrought copper and copper products for the year came in at 6.68 million tonnes, customs data showed, up a third from 2019 and extending the annual record notched well before the end of the year, on the back of a quick recovery from the coronavirus epidemic. December imports, however, slumped for a third consecutive month to 512,332 tonnes, as construction and manufacturing demand was not enough to offset the closure of an arbitrage window that made 2020 a record year for shipments into China, the world's top consumer of the metal. That was down 8.7% from 561,310.7 tonnes in November and its lowest monthly level since May. "December imports were within expectations, I think it will continue decreasing in January from a high base," said He Tianyu, China copper demand analyst at CRU Group. He said the record 2020 imports were due to state reserve stockpiling as well as China's quick recovery from the coronavirus epidemic that opened up an arbitrage between London and Shanghai copper prices. "COVID-19 also transferred some overseas orders of home appliances and medical products to China, which pushed up the China imports." The arbitrage between Shanghai and London copper prices that made imports so favourable in mid-2020 remained closed, reducing the incentive to ship metal. China's General Administration of Customs also said that imports of copper concentrate, or partially processed ore, were 1.89 million tonnes last month, up 3% from 1.831 million tonnes in November, but down from 1.928 million tonnes a year earlier. On a full-year basis, concentrate imports missed a new record, with shipments totalling 21.77 million tonnes amid tight mine supply due to coronavirus-related curbs.

# Codelco to ratchet up precautionary measures as COVID-19 cases rise in Chile

The threat of another wave of coronavirus forced Codelco to re-introduce precautionary measures in the mines. The company notes that the number of infections in the company is low, but it pays attention to external factors and does not want to take risks. Precautionary measures will not affect either production or ongoing projects.



Chile's state-owned Codelco, the world's largest copper producer would once again ratchet up precautionary measures against the coronavirus at its mines amid a recent uptick in infections in the South American nation. The measures, which include a reduction in personnel, come several months after the miner had resumed normal operations following the peak of contagion in May and June. Codelco, like many Chilean miners, emerged largely unscathed from the first wave of COVID-19, maintaining output throughout the pandemic. "The number of infections remains low among our own and collaborating personnel," the company said, adding it had nonetheless chosen to boost sanitary precautions at its mines on a case-by-case basis. Besides staffing reductions, the company said it would re-implement telecommuting, focus on jobs handled by its own staff and suspend some visits from contractors and suppliers to its operations. The company said it would also negotiate with unions returning to a seven-day on, seven-day off schedule that was used to good effect in 2020. Codelco told Reuters in a statement that the measures would "have no impact on production," and said that "for now, we will not stop projects." Chile has reported more than 656,000 cases of coronavirus and 17,000 deaths from the disease. A recent spike in cases in the northern mining region of Antofagasta has prompted new restrictions and lockdowns.

## Other important information on copper market:

- Global miner BHP will be forced to suspend operations at its Cerro Colorado copper mine in water-parched northern Chile after the country's Supreme Court upheld local indigenous communities' complaint about the project's water use. It now faces a lengthy suspension of its operations while a fresh environmental review already underway is completed. Lorenzo Soto, a lawyer for the indigenous group, told Reuters that water pumping to feed Cerro Colorado's operations had almost entirely dried out high-altitude wetlands around its operations in the Tarapaca region.
- China's major copper smelters lifted cathode production by 9.3% in December from the previous month, while full-year output held steady in a 2020, research house Antaike said. The 22 smelters in Antaike's monthly production survey churned out 803,900 tonnes of cathodes in December, which was also up 6% year-on-year, as maintenance had little impact and producers raced to meet annual output targets. Full-year production came in at 8.54 million tonnes, up 0.02% from 2019, as smelters quickly restored normal operations after a coronavirus-dominated first quarter, Antaike said. While large producers like Jinchuan Group recorded strong output growth in 2020, smaller smelters saw declines amid tight mine supply and low treatment charges, which are currently at an eight-year low of \$48.50 a tonne. Most smelters have no maintenance plans in January but operating rates are expected to decline ahead of the weeklong Lunar New Year holiday in February, said Antaike, which sees this month's output falling to around 760,000 tonnes.
- Jiangxi Copper Corporation has signed a long-term contract with Zambia's Chambishi mine, which is owned by China Nonferrrous Metal Mining, that sets



the blister copper, or anode copper, refining charge (RC) for 2021 at \$145/mt CIF China, up by \$17/mt or 13.3% compared to \$128/mt in 2020. Expectation of increasing scrap copper supply in 2021 has provided confidence to buyers to negotiate RC at a higher level. Supply of scrap copper is set to increase this year after the government eased import restrictions from Nov. 1, 2020, which will reduce China's dependency on imported anode copper to some extent. In addition, from this year smelters now have to pay 13% VAT on any gold that is produced from anode copper, compared to zero tax in the past. "This will reduce smelters' profit margins," a Shanghai-based trader said, explaining why smelters were increasing RC for the year. Chambishi is a major provider of anode copper, an intermediate copper product and material for refined copper smelting. China's anode copper imports totaled 921,287 mt in the first 11 months of 2020, up by 37.4% on the year, according to S&P Global Platts calculations based on customs data.

The Government of Mongolia is considering terminating and replacing the development and financial plan for the Oyu Tolgoi copper mine in the country, Rio Tinto-controlled Turquoise Hill Resources said. The government has advised Rio Tinto it is dissatisfied with the miner's plans to achieve production from the Oyu Tolgoi copper mine in the country for development capital of \$6.75 billion. Oyu Tolgoi is one of the world's largest-known copper and gold deposits, located in the South Gobi region of Mongolia. The Mongolian government holds a 34% stake in the project and Rio-controlled Turquoise Hill owns the rest.

## **Precious Metals**

## Silver's growing role in the automotive industry

In an internal combustion engine there is 0.5 to 0.9 ounces (15-28 grams) of silver, in the case of hybrid and electric cars the consumption is correspondingly higher. It may not seem much, but it is worth noting that global production of light vehicles (LV) is expected to reach around 85 million in 2021. This, in turn, suggests that automotive demand for silver this year will be around 61 million ounces (1,900 t).

The use of silver in the automotive industry is an area of demand that has gone almost unnoticed until quite recently. What comes through in research is how silver bearing components have become woven into an increasingly diverse range of applications in light vehicles. This in turn reflects two key characteristics of silver, its unique properties of having the highest thermal and electrical conductivity of any metal and its widespread availability. Another key factor behind silver's growing use in this segment lies in the relatively modest amounts of silver used in each car. While highly variable across different vehicle types and markets, our research suggests a range of 0.5 to 0.9 ounces (15-28 grams) is consumed in one internal combustion engine (ICE) vehicle, with higher loadings estimated for hybrid and then electric cars. It is worth noting that in 2021 global



light vehicle (LV) production is expected to be around 85m units. This in turn suggests that silver auto demand this year will be in the region of 61Moz (1,900t). To offer some perspective, this compares with the forecast 98Moz (3,000t) of silver that Metals Focus expects to be consumed in the photovoltaic industry in 2021. It is important to note that these figures are estimates. Looking further ahead, this total could approach 88Moz (2,700t) by 2025. Silver's unique properties make it essential and hard to replace across a wide and growing array of automotive applications. Therefore silver's ability to perform in critical applications, is the first of four key elements, which is important in helping to boost silver auto demand. The second key element relates to the growing use of automotive applications that require silver and, related to this, the fact that many of these end-uses can be found in mass market, rather than just luxury, models. This helps explain why we frequently see the growth in silver auto demand outpace gains in vehicle production. The third point relates to the changing nature of the vehicle fleet as the drive towards vehicle electrification, in the face of the climate crisis and the urgent need to cut CO2 emissions. For example, at least 15 countries have announced timelines to ban new ICE sales. Furthermore, while the VW emissions scandal in 2015 may have kick-started the drive to electrification, further impetus is likely to come from the world's post-COVID recovery measures and the US returning to the Paris Agreement which is again set to play a role in the war against climate change. Hybrid and EVs sales are symptomatic of this impetus. Last year, hybrid vehicle sales accounted for an estimated 8% of global light vehicle production, compared with barely 1% in 2010. The next stage relates to the growth in battery electric vehicles (BEVs). These accounted for less than 3% in 2020 of total production, but the increasing commitment of countries to promoting BEVs will have a net positive effect on silver demand. By 2025, global BEV output could account for around 9% of global light vehicle production. Beyond this, there is the prospect of autonomous driving. This should be net positive for silver offtake. The final element, concerns the growth in ancillary silver demand. This covers a range of supporting infrastructure, such as roadside and domestic charging stations, additional electrical power generation and distribution and induction charging. To put this into perspective, according to IDTechEx (a consultancy that specializes in emerging technology), by 2029, there will be 10m public charges and 50m private charging points. Looking further ahead, the infrastructure needed for artificial intelligence (AI) and the internet-of-things (IoT) will also be supportive of higher silver industrial demand.



## **Global economies | Foreign exchange markets**

# Biden unveils plan to pump \$1.9 trillion into pandemic-hit economy

The aid package includes \$415 billion to bolster the response to the virus and the rollout of COVID-19 vaccines, some \$1 trillion in direct relief to households, and roughly \$440 billion for small businesses and communities particularly hard hit by the pandemic.

President-elect Joe Biden outlined a \$1.9 trillion stimulus package proposal on Thursday (14 Jan), saying bold investment was needed to jump-start the economy and accelerate the distribution of vaccines to bring the coronavirus under control. Biden campaigned last year on a promise to take the pandemic more seriously than President Donald Trump, and the package aims to put that pledge into action. The aid package includes \$415 billion to bolster the response to the virus and the rollout of COVID-19 vaccines, some \$1 trillion in direct relief to households, and roughly \$440 billion for small businesses and communities particularly hard hit by the pandemic. Stimulus payment checks would be issued for \$1,400 - on top of the \$600 checks delivered by the last congressional stimulus legislation. Supplemental unemployment insurance would also increase to \$400 a week from \$300 a week now and would be extended to September. Biden's plan is meant to kick off his time in office with a large bill that sets his short-term agenda into motion quickly: helping the economy and getting a handle on a virus that has killed more than 385,000 people in the United States as of Thursday (14 Jan). Trump, who leaves office on Wednesday (20 Jan), did support \$2,000 payments to Americans but many Republicans in Congress balked at the price tag for such payments. Biden will face similar hurdles with his proposals, which come on the heels of a \$900 billion aid package Congress passed in December. But he will be helped by the fact that his fellow Democrats will control both the House and the Senate. Chuck Schumer, who is about to lead a narrow Democratic majority in the U.S. Senate, and House Speaker Nancy Pelosi said that Biden's package was "the right approach" and pledged to begin working on legislation. The incoming president will seek to pass the legislation even as his predecessor faces an impeachment trial. The Democratic-led House of Representatives voted to impeach Trump, making him the first president in U.S. history to be impeached twice. Transition officials said Biden's plan will be a rescue package that will be followed up with another recovery package in the coming weeks. The plan would extend moratoriums on foreclosures and evictions until September and include funding for rental and utility assistance. The president-elect also called on Congress to increase the minimum wage to \$15 an hour, and the package will include assistance to fight hunger. The coronavirus relief-related funds will go also toward a national vaccine program, testing, investments for workers to do vaccine outreach, and money for states. Biden said that he will set out his plan to vaccinate 100 million Americans in 100 days after taking office. "This will be one of the most challenging operations efforts we've ever undertaken as a nation. We'll have to move heaven



and earth to get more people vaccinated." The Biden plan - if enacted - would buy more time for the economy to bridge the period until the distribution of vaccines allows for a wider resumption of economic activity. U.S. equity index futures were little changed after Biden's speech.

## **China Ends 2020 With Record Trade Surplus**

For the full year, the trade surplus reached \$535 billion, a 27% increase from 2019 and the highest since 2015. Exports to the U.S. surged 34.5% in December from a year earlier, while imports of American goods rose 47.7%, the most since January 2013.

China's export boom continued into December, pushing the trade surplus to a record high in the month and bolstering what is already the world's bestperforming major economy. Fueling the shipments surge is insatiable global appetite for work-from-home technology and health care equipment as Covid-19 continues to surge in many places around the world. Demand is so strong that's it's contributing to a bottleneck at ports as manufacturers complain of a shortage of shipping containers and surging costs. Early control of virus cases last year allowed China's factories to capitalize on global demand while its trading rivals were hobbled. That export momentum is expected to keep going even as vaccines are rolled out to tame the virus spread and allow industrial production to recover in the U.S. and Europe. The bumper year also underscores China's role as the fulcrum of global supply chains even as political tensions with the U.S. and other trading rivals simmered. "The biggest takeaway is that China's exports have remained surprisingly resilient despite the return of the second wave in major economies," said Michelle Lam, Greater China economist at Societe Generale SA in Hong Kong. The trade data showed surging demand across the board. Exports grew 18.1% in dollar terms in December from a year earlier while imports rose 6.5%, both beating economists' expectations. The trade surplus of \$78.2 billion for December was higher than the \$72 billion median estimate in a Bloomberg survey of economists. For the full year, the trade surplus reached \$535 billion, a 27% increase from 2019 and the highest since 2015. Exports to the U.S. surged 34.5% in December from a year earlier, while imports of American goods rose 47.7%, the most since January 2013. For the full year, the trade surplus with the U.S. was \$317 billion, 7% higher than in 2019 on face masks alone, factories exported the equivalent of almost 40 masks for every person in the world outside of China, according to the customs agency. "Demand for China's goods may remain strong in the next few months with the recent surge of Covid infections in the U.S. and Europe," said Ding Shuang, chief economist for Greater China and North Asia at Standard Chartered Plc in Hong Kong. That outperformance will inevitably wane as the virus is controlled in big markets including the U.S. and Europe and industrial production recovers, he added. Li Kuiwen, an official at China's General Administration of Customs, said the trade surplus may keep growing this year, supported by an expected recovery in the global economy and stable domestic growth. Jian Chang, chief China economist at Barclays Plc in Hong Kong, said the data supports regional



evidence from South Korea and Vietnam of booming demand. Both pandemic and non-pandemic related goods are growing strongly. The data probably won't shift the central bank from its stance of gradually withdrawing monetary stimulus but without any sharp turn in policy, there's unlikely to be an interest-rate cut or hike this year. The figures also showed shifts in China's trading partners last year, with the 10-member bloc of Southeast Asian nations rising to the No. 1 spot, followed by the European Union and the U.S.



# **Macroeconomic calendar**

## Important macroeconomic data releases

Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>	
		China				*1	
000	04-Jan	Caixin's manufacturing PMI	Dec	53.0	54.9	54.7	
٥	07-Jan	Foreign reserves (USD bn)	Dec	3 2 17 🛕	3 178	3 200	
0000	11-Jan	Consumer inflation CPI (yoy)	Dec	0.2%	-0.5%	0.0%	
00	11-Jan	Producer inflation PPI (yoy)	Dec	-0.4%	-1.5%	-0.7%	
0	12-Jan	New yuan loans (CNY bn)	Dec	1 260 🔻	1 430	1 250	
00	14-Jan	Trade balance (USD bn)‡	Dec	78.2	75.5	72.0	
00	14-Jan	Exports (yoy)‡	Dec	18.1%	20.6%	15.0%	
		Poland					
000	04-Jan	Manufacturing PMI	Dec	51.7	50.8	51.3	
0000	07-Jan	Consumer inflation CPI (yoy) - preliminary data	Dec	2.3%	3.0%	2.6%	
00000	13-Jan	NBP base rate decision	Jan	0.10% =	0.10%	0.10%	
00	13-Jan	Trade balance (EUR mn)‡	Nov	1 756 🔺	1 755	1 563	
00	13-Jan	Exports (EUR mn)‡	Nov	22 965	22 988	22 400	
00	13-Jan	Current account balance (EUR mn)‡	Nov	1 725	2 356	1 846 👅	
0000	15-Jan	Consumer inflation CPI (yoy) - final data	Dec	2.4%	2.3%		
		US					
000	04-Jan	Manufacturing PMI - final data	Dec	57.1	56.5	56.3	
00	05-Jan	ISM Manufacturing	Dec	60.7	57.5	56.8	
000	06-Jan	Composite PMI - final data	Dec	55.3	55.7		
000	06-Jan	PMI services - final data	Dec	54.8	55.3	55.2	
00	06-Jan	Durable goods orders - final data	Nov	1.0%	0.9%	0.9%	
00	08-Jan	Change in non-farm payrolls (ths)‡	Dec	- 140 🔻	336	50.0	
00	08-Jan	Underemployment rate (U6)	Dec	11.7%	12.0%		
00	08-Jan	Unemployment rate	Dec	6.7% =	6.7%	6.8%	
٥	08-Jan	Average hourly earnings (yoy)	Dec	5.1%	4.4%	4.5%	
0000	13-Jan	Consumer inflation CPI (mom)	Dec	0.4%	0.2%	0.4%	
0000	13-Jan	Consumer inflation CPI (yoy)	Dec	1.4%	1.2%	1.3%	
0000	15-Jan	Industrial production (mom)‡	Dec	1.6%	0.5%	0.5%	
00	15-Jan	Retail sales (excluding autos, mom)‡	Dec	-1.4% <b>V</b>	-1.3%	-0.2%	
00	15-Jan	University of Michigan confidence index - preliminary data	Jan	79.2	80.7	79.5	
٥	15-Jan	Capacity utilization‡	Dec	74.5%	73.4%	73.6%	



Weight	Date	Event	For	Reading <sup>1</sup>	Previous	Consensus <sup>2</sup>
		Eurozone				(0)
000	04-Jan	Manufacturing PMI - final data	Dec	55.2	55.5	55.5
0	05-Jan	M3 money supply (yoy)	Nov	11.0%	10.5%	10.6%
000	06-Jan	Composite PMI - final data	Dec	49.1	49.8	49.8
000	06-Jan	Services PMI - final data	Dec	46.4	47.3	47.3
00	06-Jan	Producer inflation PPI (yoy)	Nov	-1.9% 🔺	-2.0%	-2.0%
0000	07-Jan	Core CPI (yoy) - preliminary data	Dec	0.2% =	0.2%	0.2%
0000	07-Jan	CPI estimate (yoy)	Dec	-0.3% =	-0.3%	-0.3%
00	07-Jan	Retail sales (yoy)‡	Nov	-2.9%	4.2%	0.9%
0	07-Jan	Economic confidence‡	Dec	90.4	87.7	89.8
٥	07-Jan	Industrial confidence	Dec	- 7.2	- 10.1	- 8.6
٥	07-Jan	Consumer confidence - final data	Dec	- 13.9 =	- 13.9	
00	08-Jan	Unemployment rate	Nov	8.3%	8.4%	8.5%
0000	13-Jan	Industrial production (sa, mom)‡	Nov	2.5%	2.3%	0.2%
0000	13-Jan	Industrial production (wda, yoy)‡	Nov	-0.6%	-3.5%	-3.2%
0	15-Jan	Trade balance (EUR mn)‡	Nov	25.8	29.6	
		Germany				
000	04-Jan	Manufacturing PMI - final data	Dec	58.3 ▼	58.6	58.6
000	05-Jan	Retail sales (yoy)‡	Nov	5.6%	8.9%	4.0%
00	05-Jan	Unemployment rate	Dec	6.1% =	6.1%	6.2%
0000	06-Jan	Harmonized consumer inflation HICP (yoy) - preliminary data	Dec	-0.7% =	-0.7%	-0.6%
0000	06-Jan	Consumer inflation CPI (yoy) - preliminary data	Dec	-0.3% =	-0.3%	-0.2%
000	06-Jan	Composite PMI - final data	Dec	52.0	52.5	52.5
000	07-Jan	Factory orders (wda, yoy)‡	Nov	6.3%	2.3%	2.1%
0000	08-Jan	Industrial production (wda, yoy)‡	Nov	-2.6%	-2.7%	-2.3%
		France				
000	04-Jan	Manufacturing PMI - final data	Dec	51.1 =	51.1	51.1 🔾
0000	06-Jan	Harmonized consumer inflation HICP (yoy) - preliminary data	Dec	0.0%	0.2%	0.2%
0000	06-Jan	Consumer inflation CPI (yoy) - preliminary data	Dec	0.0%	0.2%	0.2%
000	06-Jan	Composite PMI - final data	Dec	49.5	49.6	49.6
0000	08-Jan	Industrial production (yoy)‡	Nov	-4.6% <b>V</b>	-3.9%	-5.0%
0000	15-Jan	Harmonized consumer inflation HICP (yoy) - final data	Dec	0.0% =	0.0%	0.0%
0000	15-Jan	Consumer inflation CPI (yoy) - final data	Dec	0.0% =	0.0%	0.0%
		Italy				
000	04-Jan	Manufacturing PMI	Dec	52.8	51.5	53.5
000	06-Jan	Composite PMI	Dec	43.0	42.7	47.5
0000	07-Jan	Harmonized consumer inflation HICP (yoy) - preliminary data	Dec	-0.3% =	-0.3%	-0.3%
00	08-Jan	Unemployment rate - preliminary data‡	Nov	8.9%	9.5%	10.0%
0000	13-Jan	Industrial production (wda, yoy)‡	Nov	-4.2% <b>V</b>	-1.9%	-2.6%
		UK				
000	04-Jan	Manufacturing PMI (sa) - final data	Dec	57.5	57.3	57.3
000	06-Jan	Composite PMI - final data	Dec	50.4	50.7	50.7
0000	15-Jan	Industrial production (yoy)‡	Nov	-4.7% 🔺	-5.8%	-4.2%
		Japan				
000	04-Jan	Manufacturing PMI - final data	Dec	50.0	49.7	
000	06-Jan	Composite PMI - final data	Dec	48.5	48.0	 *
		Chile				
0000	04-Jan	Economic activity (yoy)	Nov	0.3%	-1.2%	0.2%
000	07-Jan	Copper exports (USD mn)	Dec	3 747	3 572	
00	07-Jan	Nominal wages (yoy)	Nov	4.6%	4.0%	

<sup>&</sup>lt;sup>1</sup> Reading difference to previous release:  $\triangle$  = higher than previous;  $\nabla$  = lower than previous;  $\nabla$  = equal to previous.

Source: Bloomberg, KGHM Polska Miedź



# **Key market data**

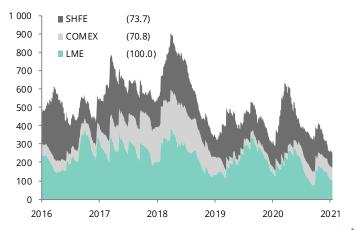
Key base & precious metal prices, exchange rates and other important market factors

(as of: 15-Jan-21)	Price change <sup>1</sup>								From year beginning <sup>2</sup>			
(40 5)	Price		2W		QTD		YTD		1Y	Average	Min	Max
LME (USD/t; Mo in USD/lbs)					~							
Copper	7 979.50		3.1%		3.1%		3.1%		26.6%	8 002.15	7 914.00	8 146.00
Molybdenum	10.19		1.6%		1.6%		1.6%			10.19	10.10	10.25
Nickel	17 970.00		8.6%		8.6%		8.6%		25.8%	17 690.10	17 164.00	17 970.00
Aluminum	2 000.50		1.1%		1.1%		1.1%		11.5%	2 019.50	2 000.50	2 062.50
Tin	21 495.00		4.6%		4.6%		4.6%		21.4%	21 283.50	20 965.00	21 495.00
Zinc	2 698.50	_	-0.9%	•	-0.9%		-0.9%		10.7%	2 775.70	2 698.50	2 838.00
Lead	1 981.00		0.5%		0.5%		0.5%	•	-2.3%	2 013.85	1 963.50	2 068.50
LBMA (USD/troz)												
Silver	25.25	_	-4.7%	$\blacksquare$	-4.7%		-4.7%		40.2%	26.25	25.02	27.53
Gold <sup>2</sup>	1 839.00	_	-2.8%	$\blacksquare$	-2.8%		-2.8%		18.3%	1 882.66	1 839.00	1 943.20
LPPM (USD/troz)												
Platinum²	1 085.00		0.9%		0.9%		0.9%		6.7%	1 084.20	1 016.00	1 118.00
Palladium²	2 423.00		2.2%		2.2%		2.2%		4.3%	2 406.50	2 359.00	2 454.00
FX <sup>3</sup>	_											
EURUSD	1.2123	_	-1.2%	$\blacksquare$	-1.2%	$\blacksquare$	-1.2%		8.5%	1.2217	1.2123	1.2338
EURPLN	4.5480	_	-1.4%	$\blacksquare$	-1.4%	$\blacksquare$	-1.4%		7.4%	4.5312	4.4973	4.5485
USDPLN	3.7466	_	-0.3%	$\blacksquare$	-0.3%		-0.3%	•	-1.3%	3.7110	3.6656	3.7466
USDCAD	1.2727	_	0.0%	$\blacksquare$	0.0%		0.0%	•	-2.4%	1.2718	1.2654	1.2788
USDCNY	6.4809	_	-0.7%	$\blacksquare$	-0.7%		-0.7%	•	-5.8%	6.4702	6.4562	6.4814
USDCLP	735.35		3.4%		3.4%		3.4%	•	-4.7%	715.48	696.18	739.72
Money market	_											
3m LIBOR USD	0.223	•	-0.02	$\blacksquare$	-0.02	$\blacksquare$	-0.02	•	-1.60	0.231	0.223	0.241
3m EURIBOR	-0.552	•	-0.01	$\blacksquare$	-0.01	•	-0.01	•	-0.16	-0.550	-0.556	-0.545
3m WIBOR	0.210	-	0.00	-	0.00	-	0.00	•	-1.50	0.210	0.210	0.210
5y USD interest rate swap	0.523		0.09		0.09		0.09	•	-1.11	0.520	0.416	0.578
5y EUR interest rate swap	-0.458		0.00		0.00		0.00	•	-0.30	-0.455	-0.485	-0.418
5y PLN interest rate swap	0.653		0.04		0.04		0.04	•	-1.32	0.617	0.583	0.668
Fuel	_											
WTI Cushing	52.36		7.9%		7.9%		7.9%	•	-10.5%	51.56	47.62	53.57
Brent	54.50		6.4%		6.5%		6.5%	•	-15.9%	54.34	50.02	56.28
Diesel NY (ULSD)	159.04		7.6%		7.6%		7.6%	•	-13.9%	155.89	146.07	161.57
Others	_											
VIX	24.34		1.59		1.59		1.59		12.02	23.85	21.56	26.97
BBG Commodity Index	80.46		3.1%		3.1%		3.1%		1.1%	80.16	78.64	81.22
S&P500	3 768.25		0.3%		0.3%		0.3%		13.6%	3 777.86	3 700.65	3 824.68
DAX	13 787.73		0.5%		0.5%		0.5%		2.7%	13 886.56	13 651.22	14 049.53
Shanghai Composite	3 566.38		2.7%		2.7%		2.7%		16.0%	3 559.96	3 502.96	3 608.34
WIG 20	1 985.68		0.1%		0.1%		0.1%	•	-8.7%	2 035.13	1 985.68	2 074.11
KGHM	198.05		8.2%		8.2%		8.2%		99.0%	204.21	194.75	215.90

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

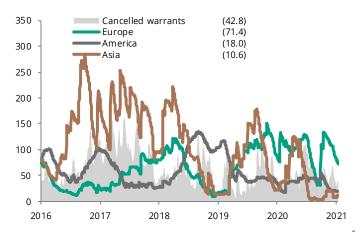


### **Copper: official exchange stocks (thousand tonnes)**



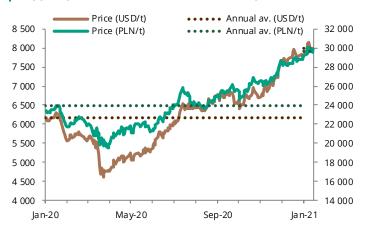
Note: Latest values in brackets. Source: Bloomberg, KGHM

## 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

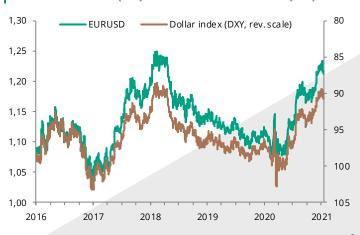
Source: Bloomberg, KGHM Polska Miedź

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



Source: Bloomberg, KGHM Polska Miedź

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



PLN: NBP-fixing based rate vs. USD (lhs) and EUR (rhs) 4,40 5,00 USDPLN (lhs) 4,20 4.80 4,00 4,60 3,80 3,60 4.40 3,40 4,20 3,20 4,00 3,00 2,80 3,80 2016 2017 2018 2019 2020 2021

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: **04-17 January 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 (charge-free logging)

silver and gold: www.lbma.org.uk/pricing-and-statistics

platinum and palladium: www.lppm.com/statistics.aspx

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