

Friday, November 22, 2019 | special comment

KGHM - October 2019 Production and Sales Update

Rating: hold | target price: PLN 96.13 | current price: PLN 89.88

KGH PW; KGH.WA | Mining & Metals, Poland

Analyst: Jakub Szkopek +48 22 438 24 03

Total monthly copper production by KGHM in October 2019 at 56,300 tonnes was only 1% lower than in October 2018, as well as narrowly missing the ytd monthly average of 58,800t. Geographically, production in Poland came out relatively well while KGHM International generated a lower output for the month than the average for the year through October. The Polish operations produced the highest monthly quantities of copper and silver in concentrate since October 2017.

The total silver volume was up 3% y/y in October, marking the third consecutive month of rising volumes after a slower period due to smelter maintenance. The same is true for gold, with higher production driven by a 24% y/y boost in Poland, offsetting a 4% decline at Sierra Gorda. Molybdenum production is lower this year due to lower molybdenum content in the ores currently processed by the Sierra Gorda mine.

When it comes to sales, October saw slight contraction in volumes compared to a strong September, with copper shipments down across the board vis-à-vis October 2018 and to the ytd averages.

The simultaneous 18% y/y fall in silver sales was due primarily to negative base effects; relative to the monthly average for the year to date, the October volume was actually 10% higher. Gold was the biggest disappointment of the month in terms of sales, which fell 89% in Poland and 14% at KGHM International.

Summing up, we have a neutral view on the October data, with good production of copper and silver concentrates offset by weaker sales.

October 2019 Production & Sales Volumes By Segment

Production Volumes	YTD/ FY2019E	Oct. '19	Oct.'18	YoY
Copper (kt)	84%	56.3	56.7	-1%
KGHM Polska Miedź	84%	45.2	45.3	0%
own concentr. inputs	85%	32.9	35.6	-8%
third-party concentr.	82%	12.3	9.7	27%
KGHM International	84%	6.3	5.9	7%
Sierra Gorda	84%	4.8	5.5	-13%
Metallic Silver (t)	85%	124.7	120.8	3%
KGHM Polska Miedź	85%	123.5	119.3	4%
TPM (koz t)	84%	18.7	15.8	18%
KGHM Polska Miedź	70%	9.4	7.6	24%
(metallic gold)	70 70	J. -	7.0	24 /0
KGHM International	98%	6.8	5.6	21%
Sierra Gorda	108%	2.5	2.6	-4%
Molybdenum (mmlbs)	78%	0.7	1.5	-53%

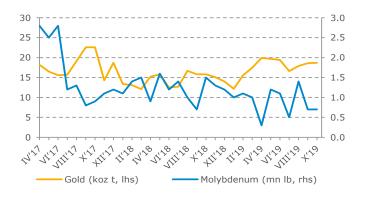
Source: KGHM, Dom Maklerski mBanku

Oct. '19 Sales Volumes Oct. '18 Yol FY2019E KGHM Polska Miedź 76% 42.6 50.0 -15% Copper (kt) Silver (t) 80% 123.3 149.8 -18% Gold (koz t) 60% 0.3 2.7 -89% **KGHM International** Copper (kt) 76% 5.1 7.5 -32% Gold (koz t) 83% 5.7 6.6 -14% Sierra Gorda Copper (kt) 83% 3.0 -32% Molybdenum 85% 0.7 1.3 -46% (mmlbs)

Monthly production volumes of KGHM



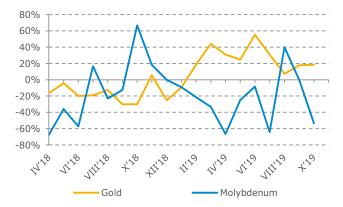
Source: KGHM, Dom Maklerski mBanku





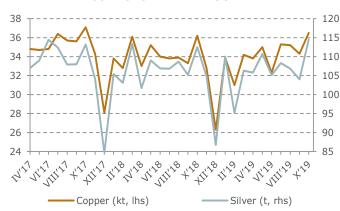
YoY pct. change in monthly production volumes





Source: KGHM, Dom Maklerski mBanku

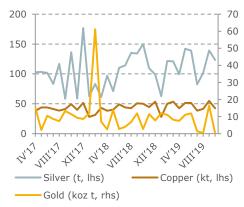
Production of copper (kt) and silver (t) in concentrate and oY volume change at KGHM Polska Miedź

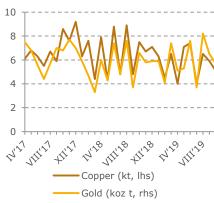


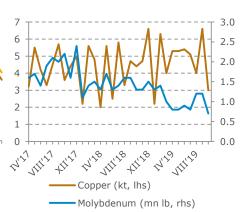


Source: KGHM, Dom Maklerski mBanku

2017-19 monthly sales volumes by geographic area: KGHM Poland (left), KGHM International (center), and Sierra Gorda (right)







Source: KGHM, Dom Maklerski mBanku

List of abbreviations and ratios contained in the report:

EV - net debt + market value (EV - economic value)
EBIT - Earnings Before Interest and Taxes
EBITDA - EBIT + Depreciation and Amortisation PBA - Profit on Banking Activity P/CE – price to earnings with amortisation MC/S – market capitalisation to sales

MC/S - market capitalisation to sales

EBIT/EV - operating profit to economic value

P/E - (Price/Earnings) - price divided by annual net profit per share

ROE - (Return on Equity) - annual net profit divided by average equity

P/BV - (Price/Book Value) - price divided by book value per share

Net debt - credits + debt papers + interest bearing loans - cash and cash equivalents

EBITDA margin - EBITDA/Sales

OVERWEIGHT (OW) – a rating which indicates that we expect a stock to outperform the broad market **NEUTRAL (N)** – a rating which indicates that we expect the stock to perform in line with the broad market **UNDERWEIGHT (UW)** – a rating which indicates that we expect the stock to underperform the broad market

Recommendations of Dom Maklerski mBanku:

A recommendation is valid for a period of 9 months, unless a subsequent recommendation is issued within this period. Expected returns from individual recommendations are as follows:
BUY – we expect that the rate of return from an investment will be at least 15%

ACCUMULATE – we expect that the rate of return from an investment will range from 5% to 15%

HOLD – we expect that the rate of return from an investment will range from -5% to +5%

REDUCE – we expect that the rate of return from an investment will range from -5% to -15%

SELL – we expect that an investment will bear a loss greater than 15%

Recommendations are updated at least once every nine months.

mBank S.A. with its registered office in Warsaw at Senatorska 18 renders brokerage services in the form of derived organisational unit - Brokerage Office which uses name Dom Maklerski mBanku.

mBank S.A. as part of the Exchange's Analytical Coverage Support Programme ("Programme", https://www.gpw.pl/eacsp) prepares analytical reports for the following companies: Cognor Holding, Comarch, VRG. These documents are prepared at the request of Gielda Papierów Wartościowych w Warszawie S.A. ("WSE"), which is entitled to copyrights to these materials. mBank S.A. receives remuneration from the WSE for the preparation of the reports. All documents prepared for the Programme are available at: https://www.mdm.pl/ui-pub/site/market_and_analysis/analysis_and_recommendations/analytical_coverage_support_programme

This document has been created and published by Dom Maklerski mBanku. The present report expresses the knowledge as well as opinions of the authors on day the report was prepared. The opinions and estimates contained herein constitute our best judgment at this date and time, and are subject to change without notice. The present report was prepared with due care and attention, observing principles of methodological correctness and objectivity, on the basis of sources available to the public, which Dom Maklerski mBanku considers reliable, including information published by issuers, shares of which are subject to renmendations. However, Dom Maklerski mBanku, in no case, guarantees the accuracy and completeness of the report, in particular should sources on the basis of which the report was prepared prove to be inaccurate, incomplete or not fully consistent with the facts. mBank S.A. bears no responsibility for investment decisions taken on the basis of the present report or for any damages incurred as a result of investment decisions taken on the basis of the present report.

This document does not constitute an offer or invitation to subscribe for or purchase any financial instruments and neither this document nor anything contained herein shall form the basis of any contract or commitment whatsoever. It is being furnished to you solely for your information and may not be reproduced or redistributed to any other person This document does not constitute investment, legal, accounting or other advice, and mBank is not liable for damages resulting from or related to the use of data provided in the documents. This document may not be copied, duplicated and/or be directly or indirectly distributed in the United States, Canada, Australia or Japan, nor transferred to citizens or residents of a state where its distribution may be legally restricted, which does not limit the possibility of publishing materials prepared for the Programme on Cognor Holding, Comarch, VRG, mBank or WSE websites. Persons who disseminate this document should be aware of the need to comply with such restrictions.

Recommendations are based on essential data from the entire history of a company being the subject of a recommendation, with particular emphasis on the period since the previous recommendation. Investing in shares is connected with a number of risks including, but not limited to, the macroeconomic situation of the country, changes in legal regulations as well as changes on commodity markets. Full elimination of these risks is virtually impossible.

nendations are based on essential data from the entire history of a company being the subject of a recommendation, with particular emphasis on the period since the previous recommendation.

Investing in shares is connected with a number of risks including, but not limited to, the macroeconomic situation of the country, changes in legal regulations as well as changes on commodity markets. Full elimination

mBank S.A. bears no responsibility for investment decisions taken on the basis of the present report or for any damages incurred as a result of investment decisions taken on the basis of the present report.

It is possible that mBank S.A. in its brokerage activity renders, will render or in the past has rendered services for companies and other entities mentioned in the present report.

mBank S.A. does not rule out offering brokerage services to an issuer of securities being the subject of a recommendation. Information about any conflicts of interest that may arise in connection with the issuance of recommendations (should such a conflict exist) is provided below, and it is valid as of the date of the most recent Monthly Report published by Dom Maklerski mBanku or as of the date of the most recent recommendation issued for an Issuer, as applicable.

This document was not transferred to the issuers prior to its publication.

mBank S.A. may have received compensation from the following companies in the last 12 months: ABC Data, Alchemia, Alior Bank, Ambra, Amica, Bank Handlowy, Bank Millennium, Bank Pekao, BGŽ BNP Paribas, BoomBIT, Boryszew, Capital Park, CD Projekt, Centrum Nowoczesnych Technologii, Ceramika Nowa Gala, CI Games, Echo Investment, Elemental Holding, Elzab, Enea, Energoaparatura, Erbud, Ergis, Erste Bank, Famur, Ferrum, GetBack, Getin Holding, Getin Noble Bank, Globalworth Poland, Groclin, Helio SA, Impexmetal, INDATA, ING BSK, Kopex, Kruk, LW Bogdanka, Mangata, MCI Capital, Mennica Polska, Mostostal Warszawa, Netia, Neuca, NWAI Dom Maklerski, Oponeo.pl, Orbis, OTP Bank, PA Nova, PBKM, PEKABEX, Pfleiderer Group, PGNIG, PKO BP, Polenergia, Polimex-Mostostal, Polnord, Polwax, Prime Car Management, Primetech, Prochem, Projorzem, PZU, Raiffeisen Bank International, Rawlplug, Santander Bank Polska, Seco/Warwick, Skarbiec Holding, Solar Company, Sygnity, Tarczyński, Trakcja, Unibep, Vistal Gdynia, Wittchen, Work Service, YOLO, Zastal, ZUE.

the last 12 months mBank S.A. has acted as dealer-manager for tender or exchange offers for the shares of: ABC Data, BoomBIT, Centrum Nowoczesnych Technologii, Ceramika Nowa Gala, CI Games, Globalworth pland, Helio SA, MCI Capital, Mostostal Warszawa, NWAI Dom Maklerski, Orbis, Pfleiderer Group, Polenergia, Prime Car Management, Primetech.

Asseco Poland provides IT services to mBank S.A.

mBank S.A. has a cash service agreement in place with Pekao and a phone subscription agreement in place with Orange Polska S.A.

mBank S.A., its shareholders and employees may hold long or short positions in the issuers' shares or other financial instruments related to the issuers' shares. mBank, its affiliates and/or clients may conduct or may have conducted transactions for their own account or for account of another with respect to the financial instruments mentioned in this report or related investments before the recipient has received this report.

Copying or publishing the present report, in full or in part, or disseminating in any way information contained in the present report requires the prior written agreement of mBank S.A. Recommendations are addressed to all Clients of Dom Maklerski mBanku

Recommendations are addressed to all Clients of Dom Maklerski mBanku.

All investment recommendations and strategies issued by mBank S.A. over the last 12 months are available at:

http://www.mdm.pl/ui-pub/site/market_and_analysis/analysis/anal_recommendations/fundamental_analysis/recommendations?recent_filter_active=true&lang=en

The activity of mBank S.A. is subject to the supervision of the Polish Financial Supervision Commission

Individuals who did not participate in the preparation of recommendations, but had or could have had access to recommendations prior to their publication, are employees of Dom Maklerski mBanku authorised to access the premises in which recommendations are prepared and/or individuals having to access to recommendations based on their corporate roles, other than the analysts mentioned as the authors of the present recommendations.

This publication constitutes investment research within the meaning of Art. 36.1 of Commission Delegated Regulation (EU) 2017/565

The compensation of the research analysts responsible for preparing investment research is determined independently of and without regard to the compensation of or revenue generated by any other employee of the Bank, including but not limited to any employee whose business interests may reasonably be considered to conflict with the interests of the persons to whom the investment research prepared by the Research Department of Dom Maklerski mBanku is disseminated. With that being said, since one of the factors taken into consideration when determining the compensation of research analysts is degree of fulfillment of annual financial targets by customer service functions, there is a risk that the adequacy of compensation offered to persons preparing investment research will be questioned by a competent oversight body.

For U.S. persons only: This research report is a product of mBank SA which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account.

This report is intended for distribution by mBank SA only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor.

In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, mBank SA has entered into an agreement with a U.S. registered broker-dealer, Cabrera Capital Markets. ("Cabrera"). Transactions in securities discussed in this research report should be effected through Cabrera or another U.S. registered broker-dealer, Cabrera or another U.S. registered broker-dealer.

registered broker dealer.

Strong and weak points of valuation methods used in recommendations:

DCF – acknowledged as the most methodologically correct method of valuation; it consists in discounting financial flows generated by a company; its weak point is the significant susceptibility to a change of forecast assumptions in the model.

assumptions in the model.

Relative – based on a comparison of valuation multipliers of companies from a given sector; simple in construction, reflects the current state of the market better than DCF; weak points include substantial variability (fluctuations together with market indices) as well as difficulty in the selection of the group of comparable companies.

Economic profits – discounting of future economic profits; the weak point is high sensitivity to changes in the assumptions made in the valuation model.

Discounted Dividends (DDM) – discounting of future dividends; the weak point is high sensitivity to changes in the assumptions as to future dividends made in the valuation model.

NAV – valuation based on equity value, one of the most frequently used method in case of developing companies; the weak point of the method is that it does not factor in future changes in revenue/profits of a



Dom Maklerski mBanku

Senatorska 18 00-082 Warszawa http://www.mbank.pl/

Research Department

Kamil Kliszcz director +48 22 438 24 02 kamil.kliszcz@mbank.pl energy, power generation

Jakub Szkopek +48 22 438 24 03 jakub.szkopek@mbank.pl industrials, chemicals, metals

Aleksandra Szklarczyk +48 22 438 24 04 aleksandra.szklarczyk@mbank.pl construction, real-estate development Michał Marczak +48 22 438 24 01 michal.marczak@mbank.pl strategy

Paweł Szpigiel +48 22 438 24 06 pawel.szpigiel@mbank.pl media, IT, telco

Piotr Poniatowski +48 22 438 24 09 piotr.poniatowski@mbank.pl industrials Michał Konarski +48 22 438 24 05 michal.konarski@mbank.pl banks, financials

Piotr Bogusz +48 22 438 24 08 piotr.bogusz@mbank.pl retail, gaming

Mikołaj Lemańczyk +48 22 438 24 07 mikolaj.lemanczyk@mbank.pl financials

Sales and Trading

Traders

Piotr Gawron director +48 22 697 48 95 piotr.gawron@mbank.pl

Adam Prokop +48 22 697 47 90 adam.prokop@mbank.pl

Sales, Foreign Markets

Bartosz Orzechowski +48 22 697 48 47 bartosz.orzechowski@mbank.pl Krzysztof Bodek +48 22 697 48 89 krzysztof.bodek@mbank.pl

Magdalena Bernacik +48 22 697 47 35 magdalena.bernacik@mbank.pl

Jędrzej Łukomski +48 22 697 49 85 jedrzej.lukomski@mbank.pl Tomasz Jakubiec +48 22 697 47 31 tomasz.jakubiec@mbank.pl

Andrzej Sychowski +48 22 697 48 46 andrzej.sychowski@mbank.pl

Private Client Sales

Kamil Szymański director +48 22 697 47 06 kamil.szymanski@mbank.pl Jarosław Banasiak deputy director +48 22 697 48 70 jaroslaw.banasiak@mbank.pl