



**THE MANAGEMENT BOARD'S REPORT ON THE  
ACTIVITIES OF KGHM POLSKA MIEDŹ S.A. AND  
OF THE KGHM POLSKA MIEDŹ S.A. GROUP  
IN 2019**

Lubin, March 2020

**TABLE OF CONTENTS**

<b>Useful terms and abbreviations .....</b>	<b>4</b>
<b>Aggregated data of the Company and Group for the years 2012-2019 .....</b>	<b>6</b>
<b>Significant events in 2019 and to the date of preparation of this report .....</b>	<b>7</b>
<b>1. Introduction .....</b>	<b>8</b>
<b>2. Group structure .....</b>	<b>9</b>
2.1. Group structure .....	9
2.2. Organisational structure of Kghm Polska Miedz S.A.....	10
2.3. Major assets.....	11
2.4. Production process .....	16
2.5. Changes in Group structure, equity investments and their financing.....	18
<b>3. Primary Group products .....</b>	<b>20</b>
<b>4. macroeconomic conditions and Analysis of the market .....</b>	<b>22</b>
4.1. macroeconomic environment.....	22
4.2. analysis of the global market for the group's basic products.....	27
<b>5. Strategy of KGHM Polska Miedz S.A. ....</b>	<b>30</b>
5.1. Basic elements and realisation of the Strategy of KGHM Polska Miedz S.A.....	30
5.2. Advancement of the strategy in 2019.....	31
<b>6. Economic performance of the Group.....</b>	<b>37</b>
6.1. Production.....	37
6.2. Structure of consolidated sales revenue.....	38
6.3. C1 cost in the Group.....	38
6.4. Financial results.....	38
6.5. 2019 targets versus achievements and targets for 2020 .....	43
6.6. Financing in the Group.....	44
<b>7. Economic results of KGHM Polska Miedz S.A. ....</b>	<b>48</b>
7.1. Production.....	48
7.2. Sales.....	51
7.3. costs.....	52
7.4. Financial results.....	54
7.5. Capital expenditures.....	59
<b>8. Economic results of KGHM INTERNATIONAL LTD. ....</b>	<b>61</b>
8.1. production.....	61
8.2. Sales revenue.....	61
8.3. Costs .....	62
8.4. Financial performance .....	62
8.5. Cash expenditures.....	63
<b>9. Economic results of Sierra Gorda S.C.M. ....</b>	<b>64</b>
9.1. production.....	64
9.2. Sales.....	64
9.3. Costs .....	65
9.4. Financial results.....	65
9.5. Cash expenditures.....	67
<b>10. Financial results of other segments.....</b>	<b>68</b>
<b>11. shareholders and the capital market .....</b>	<b>69</b>
11.1. shareholder structure of KGHM Polska Miedz S.A. ....	69
11.2. KGHM Polska Miedz S.A. on the stock exchange .....	70
allocation of profit.....	71
11.3. Investor relations.....	71
<b>12. Risk management in the Group.....</b>	<b>73</b>
12.1. Comprehensive Risk Management System in the KGHM Polska Miedz S.A. Group.....	73
12.2. Corporate risk – key risk factors and their mitigation .....	74
12.3. Market, credit and liquidity risk .....	80
12.4. Market risk management .....	81

<b>13. Human resources in the Company and Group.....</b>	<b>84</b>
13.1. Employment.....	84
13.2. Human Resources projects .....	85
13.3. Relations with the trade unions .....	86
13.4. Occupational health and safety .....	88
<b>14. Significant contracts for the Company and Group.....</b>	<b>90</b>
14.1. Information on transactions entered into between related parties, under other than arm's length conditions.....	91
14.2. Information on contracts with the entity entitled to audit the financial statements .....	91
14.3. Information about suppliers and customers.....	91
<b>15. Litigation and claims.....</b>	<b>92</b>
<b>16. Environmental protection.....</b>	<b>93</b>
16.1. KGHM Polska Miedź S.A. ....	93
16.2. KGHM INTERNATIONAL LTD. group .....	94
16.3. Other Group companies in Poland.....	94
<b>17. The Management Board and the Supervisory Board of the Parent Entity.....</b>	<b>96</b>
17.1. Bios and responsibilities of members of the Management Board .....	96
17.2. Biograms of members of the Supervisory Board.....	99
17.3. Changes in the Parent Entity's bodies .....	101
17.4. Remuneration of the Parent Entity's bodies and of other key managers of the Group .....	102
<b>18. Ethics and Corporate Governance.....</b>	<b>105</b>
<b>19. Regulatory filings published after the balance sheet date .....</b>	<b>107</b>
<b>Appendix 1 Corporate Governance Statement .....</b>	<b>108</b>
<b>Appendix 2 KGHM Polska Miedź S.A. Group structure .....</b>	<b>119</b>
<b>Appendix 3 KGHM INTERNATIONAL LTD. Group structure.....</b>	<b>120</b>
<b>Appendix 4 Activities of subsidiaries and joint ventures of KGHM Polska Miedź S.A. ....</b>	<b>121</b>
Companies in Poland .....	121
International companies (and Future 1 Sp. z o.o.) .....	122
<b>List of tables, charts and diagrams .....</b>	<b>124</b>
Tables.....	124
charts.....	124
diagrams.....	125

*In accordance with Art. 49b point 9 of the Accounting Act, „The Management Board's Report on the activities of KGHM Polska Miedź S.A. and of the KGHM Polska Miedź S.A. Group in 2019” does not contain a declaration on non-financial information, due to the fact that a separate non-financial report is being prepared and published.*

## USEFUL TERMS AND ABBREVIATIONS

<b>Adjusted EBITDA</b> (Earnings Before Interest, Taxes, Depreciation and Amortization)	Profit on sales plus depreciation/amortisation recognised in profit or loss and impairment losses on non-current assets
<b>Barren rock</b>	Rock which accompanies the extraction of mineral ore and is not considered as useful.
<b>BAT</b> (Best Available Technique)	Best Available Technique, as defined in Directive 96/61/EC, means the most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole.
<b>BREF</b>	"BAT REference document", the reference document of best available techniques (BAT).
<b>Cash cost of producing copper in concentrate (C1)</b>	Unit cash cost of producing payable copper in concentrate, reflecting ore mining and processing costs, transport costs, the minerals extraction tax, administrative expenses during the mining phase and smelter treatment and refining charges (TC/RC) less by-product value
<b>Copper cathodes</b>	The basic form of electrolytically-refined copper; the product of electrolytic copper refining.
<b>Copper concentrate</b>	The product of enriching low-grade copper ore.
<b>Copper equivalent</b>	Total volume of production of all metals calculated to copper based on market prices.
<b>Copper wire rod</b>	Drawn copper rod, usually with a diameter of 6-12 mm, universally used as a starting material in the cable industry.
<b>Deposit/Orebody</b>	Natural collection of minerals in the earth, arising as a result of various geological processes.
<b>Electrolytic copper</b>	The product of electrolytic copper refining.
<b>Electrolytic copper refining technology</b>	A process involving the electrolytic refining of metal, in this case copper. The periodic removal of portions of the electrolyte is required to maintain the level of contaminants at an acceptable level, which is the one of decisive factors determining the quality of electrolytically-refined copper. The contaminated electrolyte and slimes are used as the raw material in the recovery of some of the metals accompanying the copper, such as silver, gold, selenium and nickel.
<b>Electrorefining</b>	The process of electrolysing dissoluble anodes which are produced from refineable alloys. During this process refined metal is collected on starter sheets under controlled conditions, while contaminants remain in the electrolyte as solids or liquid.
<b>Flotation (ore enrichment)</b>	A stage in the process of breaking down ore into fragments of varying composition of useful elements which exploits differences in the degree of wettability of individual mineral grains. Well-wetted minerals fall to the bottom of the flotation tank, while the poorly-wetted grains (those whose wettability decreases due to the action of so-called collecting agents, e.g. xanthates) collect at the surface of the froth created from froth-inducing agents.
<b>Flotation tailings</b>	Waste remaining after the ore enrichment process; can be utilised or stored.
<b>ISO</b>	International Organization for Standardization.
<b>LTIFR<sub>KGHM</sub></b> (Lost-time injury frequency rate)	Number of accidents at work (as defined in Poland) in the Company KGHM Polska Miedź S.A., standardised to 1 million worked hours
<b>Mine excavation</b>	Open area left after the mining work.
<b>Muck</b>	Rock removed from a mine face. Contains both ore and barren rock.
<b>NBP</b>	National Bank of Poland.
<b>Net debt</b>	Borrowings and debt securities less free cash and cash equivalents. This category includes lease liabilities and excludes reverse factoring liabilities.
<b>OFE rod</b>	Oxygen-free copper wire rod produced at the Cedyňa wire rod plant using UPCAST technology.
<b>Ore</b>	Rock which contains one or more useful elements. Ore can be monometallic (containing a single metal) or polymetallic (containing more than one metal).
<b>Payable copper</b>	Volume of copper produced less the amount corresponding to the loss incurred in further processing to pure metal.
<b>Payable metal</b>	Volume of metal produced less the amount corresponding to the loss incurred in further processing to pure metal.
<b>Pillar (mining)</b>	An unremoved mass of rock in an underground mine used to support the ceiling against collapse.
<b>Pre-precious metals credit unit cost of electrolytic copper production from own concentrate</b>	The sum of costs of mining, flotation, smelter processing per cathode and support functions (the Data Center Division, the Mine-Smelter Emergency Rescue Division and the Head Office), together with cathode selling costs, adjusted by the value of inventories of half-finished products and work in progress, divided by the volume of electrolytic copper production from own concentrate. Used solely in the Parent Entity.

<b>RCR furnace</b>	Revolving Casting-Refining furnace
<b>REACH</b>	Registration, Evaluation, Authorisation and Restriction of Chemicals – regulation of the European Parliament and the European Council on the safe use of chemicals through their registration and evaluation, and in certain cases through the issuance of permits and restrictions in the sale and use of certain chemicals.
<b>Silver smelting and electrolytic refining technology</b>	Comprised of: batch preparation (the mixture of batch elements followed by drying); the smelting of Doré metal and the casting of anodes (melting of the batch in a Kaldo furnace to remove slag or gasify impurities followed by casting of the product [99% silver] into anodes); silver electrorefining (forming into cathodes containing a min. 99.99% silver); melting in an electric induction furnace and the casting of refined silver into commercial form (billets or granules).
<b>SX-EW</b> <i>(solvent extraction and electrowinning)</i>	Copper cathode production technology applied in plants of KGHM INTERNATIONAL LTD. based on solvent extraction (the process of leaching useful minerals using a solvent) of the copper ore heap, with the aid of diluted sulphuric acid, under the atmospheric conditions.
<b>Total unit cost of producing copper from own concentrate</b>	The sum of costs of mining, flotation, smelter processing per cathode and support functions (the Data Center Division, the Mine-Smelter Emergency Rescue Division and the Head Office), together with cathode selling costs, adjusted by the value of inventories of half-finished products and work in progress and less the value of anode slimes, divided by the volume of electrolytic copper production from own concentrate.
<b>TPM</b> <i>(Total Precious Metals)</i>	Precious metals (gold, platinum, palladium).
<b>TRIR</b> <i>(Total Recordable Incident Rate)</i>	Number of accidents at work meeting the conditions of registration as defined in the ICMM (International Council on Mining & Metals) standard, standardised to 200000 worked hours.
<b>Troy ounce (oz t)</b>	A unit of measure mainly used in English-speaking countries. The troy ounce (abbreviated as oz t) is universally used in jewellery and precious metals commerce. 1 troy ounce equals 31.1035 grams.
<b>YoY</b>	year on year, i.e. comparison between one year and the next year.

**AGGREGATED DATA OF THE COMPANY AND GROUP FOR THE YEARS 2012-2019****BASIC ITEMS OF THE CONSOLIDATED FINANCIAL STATEMENTS**

		2019	2018	2017	2016	2015	2014	2013	2012
Revenues from contracts with customers	PLN mn	22 723	20 526	20 358	19 156	20 008	20 492	24 110	26 705
Profit/(loss) for the period	PLN mn	1 421	1 658	1 525	(4 449)	(5 009)	2 451	3 033	4 803
Total assets	PLN mn	39 409	37 237	34 122	33 442	36 764	40 374	34 465	33 616
Liabilities and provisions	PLN mn	19 207	18 012	16 337	17 531	16 350	14 844	11 401	11 906
Earnings per share (EPS) <sup>(1)</sup>	PLN	7.11	8.29	7.84	(21.86)	(25.06)	12.25	15.18	24.01
Share price of the Company <sup>(2)</sup>	PLN	95.58	88.88	111.20	92.48	63.49	108.85	118.00	190.00
Net debt/EBITDA <sup>(3)</sup>		1.5	1.6	1.3	1.6	1.4	0.9	0.4	-
Payable copper production <sup>(4)</sup>	kt	702	634	656	677	718	663	666	676
Payable silver production <sup>(4)</sup>	t	1 417	1 205	1 234	1 207	1 299	1 258	1 164	1 274
Concentrate production cost C1 <sup>(4)</sup>	USD/lb	1.70	1.81	1.59	1.41	1.59	1.89	1.85	1.59
Cash expenditures on property, plant and equipment and intangible assets	PLN mn	3 232	2 875	2 796	3 251	3 939	3 434	3 188	2 402

**BASIC ITEMS OF THE SEPARATE FINANCIAL STATEMENTS**

Revenues from contracts with customers	PLN mn	17 683	15 757	16 024	15 112	15 939	16 633	18 579	20 737
Profit/(loss) for the period	PLN mn	1 264	2 025	1 323	(4 085)	(2 788)	2 414	3 058	4 868
Total assets	PLN mn	35 989	34 250	30 947	30 100	33 120	32 312	29 038	28 177
Liabilities and provisions	PLN mn	16 100	15 205	13 691	14 200	12 841	8 035	5 740	6 254
Earnings per share (EPS) <sup>(1)</sup>	PLN	6.32	10.13	6.62	(20.42)	(13.94)	12.07	15.29	24.34
Electrolytic copper production	kt	566	502	522	536	574	577	565	566
Metallic silver production	t	1 400	1 189	1 218	1 191	1 283	1 256	1 161	1 274
Concentrate production cost C1	USD/lb	1.74	1.85	1.52	1.30	1.47	1.82	1.78	1.34
Cash expenditures on property, plant and equipment and intangible assets	PLN mn	2 366	1 907	1 991	2 604	2 481	2 203	2 174	1 647

**MACROECONOMIC DATA (AVERAGE ANNUAL)**

Copper prices on LME	USD/t	6 000	6 523	6 166	4 863	5 495	6 862	7 322	7 950
Silver prices per LBMA	USD/oz t	16.21	15.71	17.05	17.14	15.68	19.08	23.79	31.15
Exchange rate	USD/PLN	3.84	3.61	3.78	3.94	3.77	3.15	3.17	3.26

(data for the years 2012-2017 according to annual reports for these periods, data for the years 2018-2019 according to the current annual report)

<sup>1)</sup> Attributable to shareholders of the Parent Entity

<sup>2)</sup> At the end of the period

<sup>3)</sup> Adjusted EBITDA for the year, excluding EBITDA of the joint venture Sierra Gorda S.C.M.

<sup>4)</sup> Comprises Sierra Gorda S.C.M. pursuant to interest held (55%)

## SIGNIFICANT EVENTS IN 2019 AND TO THE DATE OF PREPARATION OF THIS REPORT

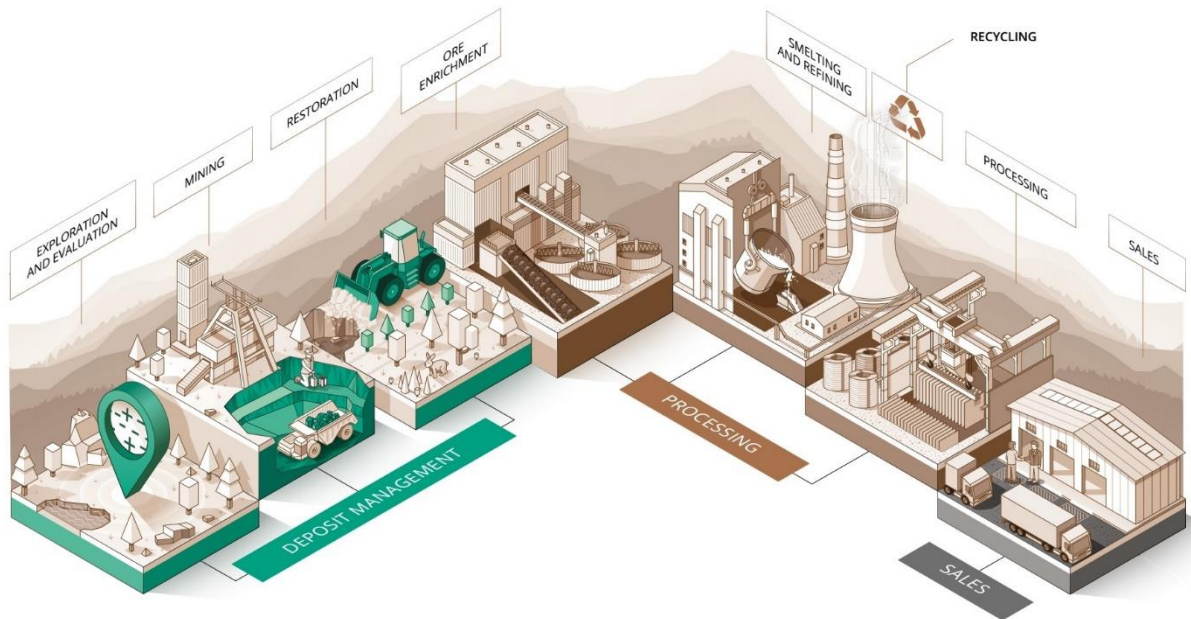
Date	Event	Section
<b>CHANGE IN MACROECONOMIC CONDITIONS</b>		
2019	A decrease in average annual prices of copper, molybdenum respectively by 8% and 2% alongside an increase in the silver price by 3%	4.1
2019	Changes in average annual exchange rates: USD/PLN by +6%, USD/CAD by +2% and USD/CLP by +10%	4.1
<b>KGHM POLSKA MIEDŹ S.A. ON THE STOCK EXCHANGE</b>		
2019	An increase in the share price of KGHM Polska Miedź S.A. by 8% from PLN 88.88 to PLN 95.58	11.1
15 February 2019	Decrease in the share of the total number of votes in the Company to below 5% by the pension fund Otwarty Fundusz Emerytalny PZU „Złota Jesień”.	11.4
3 October 2019	Debut of the bonds of KGHM Polska Miedź S.A. on the Catalyst market	6.6, 11.2
13 March 2020	On 13 March 2020, the closing price of shares of KGHM Polska Miedź S.A. amounted to 52.48 PLN/share, which is a decrease of 45% compared to the last day of trading in 2019. At the same time, there was a decrease in the cash settlement price of copper by 11%. Factors impacting the fall of the share price and copper price are described in more detail in note 12.13 of the separate and consolidated financial statements.	4.1
<b>CHANGES IN THE COMPOSITION OF KGHM POLSKA MIEDŹ S.A.'S GOVERNING BODIES</b>		
23 October 2019	Janusz Marcin Kowalski submitted his resignation from serving as a Member of the Supervisory Board (effective as of 11 November 2019)	17.3
<b>BOND ISSUE</b>		
9 May 2019	Information on the intention of issuing bonds.	6.6, 11.2
27 May 2019	Resolution on entering into an issue agreement, based on which a bond issue Program will be established up to 4 PLN billion.	6.6, 11.2
24 June 2019	Information on a resolution on the issue of two series of bonds on the Polish market in the total nominal amount of PLN 2 billion with an issue date of 27 June 2019.	6.6, 11.2
27 June 2019	Issue of two series of bonds on the Polish market in the total nominal amount of PLN 2 billion	6.6, 11.2
<b>IMPAIRMENT OF ASSETS</b>		
11 January 2019	Identification of indications to verify the recoverable amount of international mining assets in order to prepare the financial statements for 2018.	6, 7
5 March 2019	Information on completing the major work related to verifying the recoverable amount of international assets of the KGHM Polska Miedź S.A. Group as well as the joint venture, i.e. Sierra Gorda S.C.M., in order to prepare the financial statements for 2018.	6, 7
15 January 2020	Identification of indications to verify the recoverable amount of international mining assets.	6, 7
27 February 2020	Information on the completion of major work related to impairment testing of international mining assets of the KGHM Polska Miedź S.A. Group and assets of the company “Energetyka” sp. z o.o. (a subsidiary of KGHM Polska Miedź S.A. – 100% share) and its subsidiary – WPEC S.A. (100% share).	6, 7
<b>ALLOCATION OF PROFIT</b>		
17 April 2019	The Management Board's recommendation regarding the allocation of profit for 2018.	11.2
7 June 2019	Decision of the Ordinary General Meeting of KGHM Polska Miedź S.A. to transfer all of the profit earned in 2018 to the Company's reserve capital.	11.2
<b>SIGNIFICANT AGREEMENTS</b>		
2 January 2019	Multi-year contract signed with the NKT group for the supply of copper wire rod.	14
27 February 2019	Unsecured, working capital facility agreement signed with Bank Gospodarstwa Krajowego with a financing period of up to 84 months, as a revolving credit line in the amount of USD 450 million for a period of 60 months, with the option to transform it into non-revolving credit after 60 months.	6.6, 14
21 March 2019	A contract with China Minmetals Nonferrous Metals Co. Ltd. for the sale of copper cathodes produced by the Company entered into force.	14
19 June 2019	Framework contract signed with the European Bank for Reconstruction and Development, or EBRD, related to the issue of bonds.	6.6, 14
20 December 2019	Contract signed for an unsecured, syndicated credit facility agreement with an international syndicate banks group in the amount of USD 1 500 million with a 5-year tenor.	6.6, 14
<b>OTHER</b>		
10 January 2019	Approval by the Supervisory Board of the Budget of KGHM Polska Miedź S.A. and the Budget of the KGHM Group for 2019.	6.5
12 April 2019	Change in the act on the minerals extraction tax	7.3
16 January 2020	Approval by the Supervisory Board of the Budget of KGHM Polska Miedź S.A. and the Budget of the KGHM Group for 2020.	6.5

## 1. INTRODUCTION

KGHM Polska Miedź S.A. is the Parent Entity of a Group which is a world-class producer of copper and silver with nearly 60 years of experience in the copper ore mining and processing sector. In Poland, KGHM Polska Miedź S.A. operates one of the world's largest copper deposits, guaranteeing continuous production in Poland for the next several decades. KGHM Polska Miedź S.A. also produces silver, gold, molybdenum, lead and rock salt, as well as being one of the leading exporters in the country and one of the largest companies in Poland.

The KGHM Polska Miedź S.A. Group is a global and innovative organisation, which conducts technologically advanced exploration-mining and metallurgical activities and has a geographically diversified portfolio of mining projects. KGHM's business model is divided into 7 areas, through which the Group ensures a complete chain of value creation, from exploration to the sale of finished products:

Diagram 1. Business model of the KGHM Polska Miedź S.A. Group



KGHM actively supports the realms of science, the arts and sport. Through its Foundation founded in 2003, KGHM Polska Miedź engages in charitable activities.

The KGHM Polska Miedź S.A. Group includes the Parent Entity – KGHM Polska Miedź S.A. – and 73 subsidiaries. Uniformity in such a complex organisation is ensured by KGHM's values – zero harm, teamwork, results-driven, accountability and courage. For nearly 60 years they have been the Company's business compass, indicating the direction of development and the means of operation on the international market.

For over 20 years the Company has been listed on the Warsaw Stock Exchange. The Company is reflected in the WIG20 and WIG30 indices.



## 2. GROUP STRUCTURE

### 2.1. GROUP STRUCTURE

As at 31 December 2019, the Group was composed of KGHM Polska Miedź S.A. – the Parent Entity – and 73 subsidiaries (including two closed-end, non-public investment funds), located on four continents: Europe, North America, South America and Asia. Some of these subsidiaries form their own groups. The largest of these is the KGHM INTERNATIONAL LTD. Group, whose main assets are located in Canada, the USA and Chile. It was comprised of a parent entity and 26 subsidiaries. As at the end of the reporting period the KGHM Polska Miedź S.A. Group owned shares in two joint ventures - Sierra Gorda S.C.M. and NANO CARBON Sp. z o.o. in liquidation.

The detailed structure of the KGHM Polska Miedź S.A. Group, together with the relationships between entities, may be found in Appendices 2 and 3.

The Group's main entities, which are engaged in the mining sector, comprise three primary reporting segments which are independently evaluated by management bodies. These are: KGHM Polska Miedź S.A., KGHM INTERNATIONAL LTD. and Sierra Gorda S.C.M. Other companies, excluding Future 1 Sp. z o.o., Future 2 Sp. z o.o., Future 3 Sp. z o.o., Future 4 Sp. z o.o., Future 5 Sp. z o.o., Future 6 Sp. z o.o. and Future 7 Sp. z o.o., are part of the segment called Other segments.

The following diagram presents the significant production assets and projects underway within the reporting segments: KGHM Polska Miedź S.A., KGHM INTERNATIONAL LTD., Sierra Gorda S.C.M. and Other segments.

Diagram 2. Reporting segments of the KGHM Polska Miedź S.A. Group

KGHM Polska Miedź S.A.	KGHM INTERNATIONAL LTD.	Sierra Gorda S.C.M. <sup>(1)</sup>	Other segments
Activities			
Mined and metallurgical production of metals – Cu, Ag, Au	Mined production of metals - Cu, Ni, Au, Pt, Pd, Ag	Mined production of metals - Cu, Mo, Au, Ag	<ul style="list-style-type: none"> <li>- Companies supporting the core business of KGHM Polska Miedź S.A.</li> <li>- Closed-end investment funds and companies in their portfolios,</li> <li>- Companies playing an important role in advancing CSR policy,</li> <li>- Special purpose companies in the holding structure.</li> </ul>
Main production assets			
Underground mines - Lubin mine - Polkowice-Sieroszowice mine - Rudna mine Metallurgical plants - Legnica Copper Smelter and Refinery - Głogów I and Głogów II Copper Smelter and Refinery Cedynia Wire Rod Plant	Robinson mine in the USA (open pit)	Sierra Gorda mine in Chile (open pit)	
Most important development projects			
<ul style="list-style-type: none"> <li>- Głogów Głęboki-Przemysłowy (Deep Głogów)</li> <li>- Pre-production projects and exploration projects in south-west Poland</li> </ul>	<ul style="list-style-type: none"> <li>- Victoria project in the Sudbury Basin in Canada</li> <li>- construction of an underground copper and nickel mine</li> <li>- Sierra Gorda Oxide project in Chile</li> </ul>		

<sup>1)</sup> joint venture of KGHM INTERNATIONAL LTD. and Sumitomo Group companies

The following companies were not included in any of the aforementioned segments:

- Future 1 Sp. z o.o., which acts as a holding company with respect to the KGHM INTERNATIONAL LTD. Group,
- Future 2 Sp. z o.o., Future 3 Sp. z o.o., Future 4 Sp. z o.o., Future 5 Sp. z o.o., Future 6 Sp. z o.o. and Future 7 Sp. z o.o., which operate in the structure related to the establishment of a Tax Group.

These companies do not conduct operating activities which could impact the results achieved by individual segments.

### CHANGES IN THE BASIC PRINCIPLES FOR MANAGING THE GROUP

In 2019, there were no substantial changes to the principles of managing the Group. Actions undertaken aimed at improving the coordination of Group processes and enhancing the security of its operations included the introduction of new, or the improvement of existing, tools. One of the most important actions was the establishment of an advisory body to the Management Board, i.e. the KGHM Group Council.

The KGHM Group Council is a permanent team with advisory/consulting rights, facilitating the taking of organised actions within the KGHM Group. The Council cooperates with entities in the Group in a manner which does not conflict with the rights and entitlements of these companies' statutory bodies. The KGHM Group Council's mandate covers all matters of significance for the functioning of the Group. The Council comprises the management staff of the KGHM Head Office, which is responsible for managing all areas of substance. In justified cases, other persons may participate in the Council, including representatives of companies in the KGHM Group.

In 2019, a Security Policy was implemented in the Group, which is aimed at limiting losses and minimising risks and hazards to the interests of the KGHM Group. The security of the KGHM Group's operations is enhanced by the standardisation and unification of structural, organisational and substantive solutions implemented in various areas.

### 2.2. ORGANISATIONAL STRUCTURE OF KGHM POLSKA MIEDŹ S.A.

In 2019, the multi-divisional organisational structure of the Company, acting under the name KGHM Polska Miedź S.A., comprised the Head Office of the Company and 10 Divisions.

Diagram 3. Organisational structure of the Company as at 31 December 2019

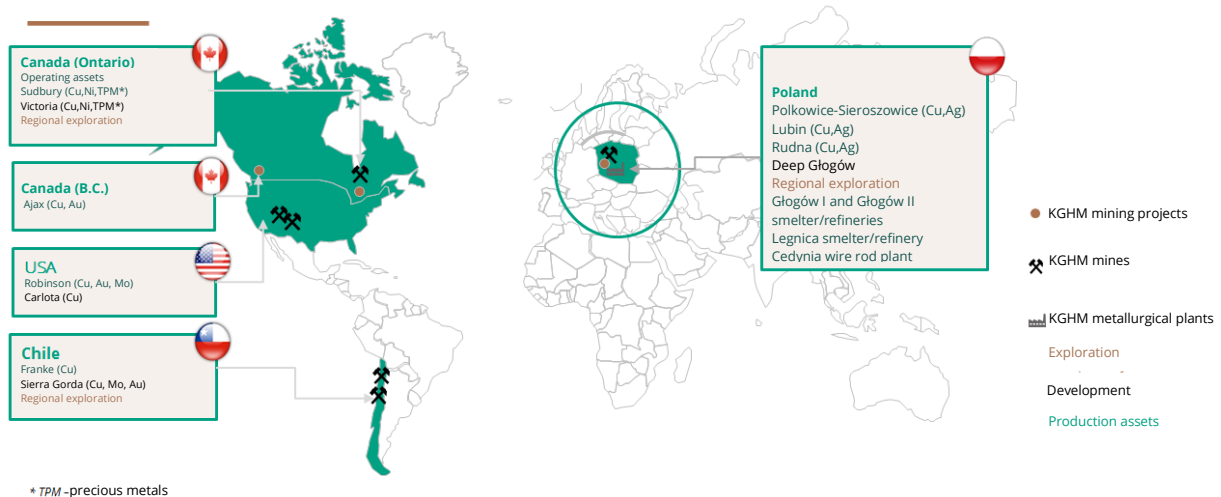


### 2.3. MAJOR ASSETS

The KGHM Polska Miedź S.A. Group holds geographically diversified mining assets (mines with copper, silver, molybdenum, nickel and other metals) located in Poland, the USA, Chile and Canada. The key international asset – the Sierra Gorda mine, which is a joint venture between KGHM INTERNATIONAL LTD., Sumitomo Metal Mining and the Sumitomo Corporation – is located in Chile. In addition, the KGHM Polska Miedź S.A. Group has mine projects which are at the preproduction phase (among others Victoria, Sierra Gorda Oxide), as well as exploration projects.

The major assets of the KGHM Polska Miedź S.A. Group are presented in the diagram below.

Diagram 4. Location of mining assets of the KGHM Polska Miedź S.A. Group



#### POLAND:

##### Polkowice-Sieroszowice mine

Location	Lower Silesia, Poland
Ownership	KGHM Polska Miedź S.A.
Type of mine	underground
Main ore type	copper ore
Associated metals	silver, lead, rock salt, gold
Type of orebody	stratiform
End product	copper ore
Copper in extracted ore in 2019	194.6 kt

The Polkowice-Sieroszowice mine is located in Lower Silesia, to the west of the town of Polkowice. Currently, it conducts mining works in four mining areas: Polkowice, Radwanice Wschodnie, Sieroszowice and in a part of the Głogów Głęboki – Przemysłowy (Deep Głogów) deposit.

Within the Sieroszowice mining area, there are also rich deposits of rock salt above the copper-bearing horizon.

Mining is conducted using room-and-pillar methods with natural roof settlement, using blasting technology. The Polkowice-Sieroszowice mine's current production capacity is around 12 million tonnes of ore per year.

##### Rudna mine

Location	Lower Silesia, Poland
Ownership	KGHM Polska Miedź S.A.
Type of mine	underground
Main ore type	copper ore
Associated metals	silver, lead, gold
Type of orebody	stratiform
End product	copper ore
Copper in extracted ore in 2019	181.3 kt

The Rudna mine is located in Lower Silesia, to the north of the town of Polkowice. It mines the copper deposit in the Rudna mining area as well as in parts of the mining areas of Sieroszowice, Lubin-Małomice and Głogów Głęboki-Przemysłowy (Deep Głogów).

The copper orebody in the currently mined deposit ranges from 844 meters to 1250 meters. Mining is conducted using room-and-pillar methods with natural roof settlement with hydraulic backfill, using blasting technology. The current average production capacity is approx. 12 million tonnes of ore per year.

**Lubin mine**

Location	Lower Silesia, Poland
Ownership	KGHM Polska Miedź S.A.
Type of mine	underground
Main ore type	copper ore
Associated metals	silver, lead, gold
Type of orebody	stratiform
End product	copper ore
Copper in extracted ore in 2019	73.5 kt

The Lubin mine is located in Lower Silesia, Poland, to the north of the town of Lubin. It mines the copper deposit in the mining area Lubin-Małomice at a depth from 368 meters to 1006 meters.

Mining is conducted using room-and-pillar methods with natural roof settlement with hydraulic backfill, in the vicinity of the support pillar of the town of Lubin, using blasting technology.

The mine's current production capacity is around 8 million tonnes of ore per year.

**Głogów Copper Smelter and Refinery**

Location	Lower Silesia, Poland
Ownership	KGHM Polska Miedź S.A.
Type of metallurgical plant	smelter/refinery
End product	electrolytic copper
Electrolytic copper production in 2019	448.1 kt

This complex of metallurgical plants located in Głogów comprises two copper concentrate smelting lines based on the one-stage smelting of concentrate in a flash furnace directly into blister copper. Apart from electrolytic copper, the Głogów Copper Smelter and Refinery produces crude lead (up to 30 thousand tonnes annually), silver (around 1400 tonnes), gold (around 2 tonnes) and sulphuric acid (over 500 thousand tonnes).

**Legnica Copper Smelter and Refinery**

Location	Lower Silesia, Poland
Ownership	KGHM Polska Miedź S.A.
Type of metallurgical plant	smelter/refinery
End product	electrolytic copper
Electrolytic copper production in 2019	117.5 kt

The copper smelter and refinery located in Legnica has a current production capacity of 120 thousand tonnes of electrolytic copper. In operation since the 1950s based on shaft furnace technology. Apart from electrolytic copper, the plant also produces around 30 thousand tonnes annually of refined lead and also around 100 thousand tonnes of sulphuric acid, as well as copper sulphate and nickel sulphate.

**Cedynia Wire Rod Plant**

Location	Lower Silesia, Poland
Ownership	KGHM Polska Miedź S.A.
Type of metallurgical plant	processing
End product	copper wire rod and Cu-OFE rod
Production in 2019	250.7 thousand tonnes of copper wire rod and 15.5 thousand tonnes of OFE rod

Production at the Cedynia Wire Rod Plant located in the vicinity of Orsk is based on the use of copper cathodes, around 75% of which come from the Głogów Copper Smelter and Refinery and around 25% from the Legnica Copper Smelter and Refinery. The basic product of the Cedynia Wire Rod Plant is copper wire rod produced in a Contirod line amounting to around 250 thousand tonnes annually and around 18 thousand tonnes of oxygen-free copper wire rod produced in an UPCAST line, including oxygen-free, silver-bearing copper wire rod.

**THE UNITED STATES:****Robinson mine**

Location	Nevada, USA
Ownership	100% KGHM INTERNATIONAL LTD.
Type of mine	open pit
Main ore type	copper ore
Associated metals	gold and molybdenum
Type of orebody	porphyry/skarn
End product	copper and gold concentrate, molybdenum concentrate
Payable copper production in 2019	48.8 kt

The mine is located in White Pine county, Nevada, USA, around 11 km west of Ely (approx. 400 km north of Las Vegas), in the Egan range, at an average altitude of 2130 meters a.s.l., near highway no. 50.

The mine is comprised of 3 large pits: Liberty, Tripp-Veteran and Ruth. Currently, Ruth is in operation. The ore is extracted by conventional methods, and is then processed into a copper and gold concentrate, and separately into molybdenum concentrate in a concentrating plant.

**Carlota mine**

Location	Arizona, USA
Ownership	100% KGHM INTERNATIONAL LTD.
Type of mine	open pit
Main ore type	copper ore
Type of orebody	porphyry
End product	copper cathodes
Payable copper production in 2019	4.4 kt

The Carlota mine is located in the Western part of the Miami-Globe mining region, in the state of Arizona at an altitude of 1 300 meters (4 200 feet) a.s.l. Surrounding the mine is mountainous, desert terrain.

Copper ore extraction by the Carlota mine is by conventional methods typical for open-pit metals mines, i.e. the ore is mined by blasting and then is transported by haulage trucks. In 2018 mining re-commenced in the Eder South area.

Due to the nature of the ore, it is processed using the heap leach, solvent-extraction and electrowinning method. The end product is electrolytic copper in the form of cathodes.

**CANADA:****Sudbury Basin**

Location	Sudbury, Ontario, Canada
Ownership	100% KGHM INTERNATIONAL LTD.
Type of mine	underground
Main ore type	copper ore, nickel, platinum, palladium and gold
Type of orebody	footwall/contact Ni
End product	copper and nickel ore with precious metals
Payable copper production in 2019	4.2 kt

The Sudbury Basin is located in central Ontario in Canada, approx. 400 km north of Toronto. In this region KGHM INTERNATIONAL LTD. owns a variety of assets extracting, though since April 2019 mining has only been conducted in the underground McCreedy West mine, due to the fact that the Morrison/Levack mine has been placed into Care & Maintenance (i.e. mining of the deposit was suspended). Extraction is through mining methods which are dependent on the geometry of the deposit – mainly a mechanised method of selective extraction using undercutting of successive levels from bottom to top at various mine levels. All of the ore extracted from the mine, containing copper, nickel and precious metals, is processed in the Clarabelle plant in Sudbury, owned by Vale.

**Victoria project**

Location	Sudbury Basin, Ontario, Canada
Ownership	100% KGHM INTERNATIONAL LTD.
Type of mine	underground
Main ore type	copper-nickel ore
Associated metals	gold, platinum and palladium
Mine life	13 years
End product	copper ore, nickel and precious metals
Forecasted annual production	17 kt Ni, 19 kt Cu

This project is located in the Canadian province of Ontario, around 35 km west of the town of Sudbury. In 2002 rights were acquired to the Victoria mineral deposit and a campaign of exploration in this region commenced. All of the ore extracted from the mine will be processed in the Clarabelle plant in Sudbury, owned by Vale. The current development scenario for the project calls for the sinking of 2 shafts to access the deposit (a production shaft and a ventilation shaft). Exploration work performed thus far confirmed the continuity and characteristics of the mineralisation to the level of approximately 2200 meters below the surface.

Based on analytical work performed in 2017, the base scenario assumes the Victoria project will be developed in two stages, comprised of the sinking of a first shaft along with additional exploration, followed by a second shaft for production.

In 2019, work continued on securing existing infrastructure and project terrain, as well as preparatory work aimed at conducting additional exploratory work and work related to an application to obtain the required environmental permits.

On 27 June 2019, the Canadian Environmental Assessment Agency decided that it was unnecessary to conduct an environmental assessment at the federal level, which means a positive conclusion to the process of obtaining an environmental permit. The Agency stated that the project's environmental impact was properly described in the project description, and that the methods applied in the project for restricting its impact are in compliance with law in force. The Agency's decision is a milestone in the development of the Victoria project.

**Ajax project**

Location	Kamloops, British Columbia, Canada
Ownership	KGHM INTERNATIONAL LTD. 80%; Abacus Mining and Exploration Inc. 20%
Type of mine	open pit
Main ore type	copper ore
Associated metals	precious metals (gold and silver)
Mine life	19 years
End product	copper concentrate
Forecasted annual production	53 kt Cu, 114 thousand ounces Au

The Ajax project is located in British Columbia, Canada, 400 km north-east of Vancouver near the town of Kamloops. The project assumes the construction of an open-pit copper and gold mine and an ore processing plant, with associated infrastructure. In January 2012, the company Abacus Mining and Exploration Inc. prepared a feasibility study, based on which the preliminary economic parameters of this project were described. Due to the substantial risk of not receiving environmental permit based on the assumed technological parameters of the project, including the siting of basic mine plant infrastructure, the assumptions of the feasibility study from 2012 were reviewed in terms of identifying risk factors and the potential for increasing the project's value.

In January 2016, an Updated Feasibility Study was published, replacing the earlier version dated 6 January 2012. The Updated Feasibility Study reflects changes to the project, under which the mine's infrastructure was moved farther from the buildings in the town of Kamloops, technology improvements were incorporated and the processing facility's throughput capacity was increased from 60 to 65 thousand tonnes of ore per day.

In December 2017, the Ministers of Environment and of Energy, Mines and Petroleum Resources of British Columbia (provincial authorities) decided against the granting of an Environmental Assessment Certificate for the Ajax project. In June 2018, the Government of Canada, through the Governor-in-Council (Cabinet) issued a negative decision regarding the Ajax project as the project is likely to cause significant adverse environmental effects.

The decisions were made through the environmental impact assessment process, and reflect the substantial engagement of provincial and federal governmental agencies, First Nations and a broad spectrum of stakeholders, including thousands of local citizens.

In 2019, work was carried out related to maintaining existing infrastructure and requisite monitoring of terrain. A strategy for further action in respect of the Ajax project was also defined, which concluded with a mutual decision by the project's partners to commence the process of re-engaging with its stakeholders, aimed at improving relations with First Nations and the local community. Under this strategy, talks were held with First Nations representatives, among others during meetings between representatives of First Nations in the Kamloops region (Canada) and representatives of the Management Board of KGHM Polska Miedź S.A. in Poland.

**CHILE:****Sierra Gorda mine and Sierra Gorda Oxide project**

Location	Region II, Chile
Ownership	55% KGHM INTERNATIONAL LTD, 45% Sumitomo Group companies: -Sumitomo Metal Mining Co., Ltd. (31.5%) -Sumitomo Corporation (13.5%)
Type of mine	open pit
Main ore type	copper ore
Associated metals	molybdenum, gold
Mine life	24 years for the current deposit based on phase I of the investment, including actions to remove bottlenecks. Moreover, there is a possibility to extend the mine's life using new deposits.
End product	copper concentrate, molybdenum concentrate
Payable production in 2019	108.2 thousand tonnes of copper in concentrate, 20.3 million pounds of molybdenum in concentrate – on a 100% basis, share of KGHM Polska Miedź S.A. is 55%

The Sierra Gorda mine is located in the Atacama desert, in the Sierra Gorda administrative area in the Antofagasta region, in northern Chile, approx. 60 km south-west of the city of Calama. The mine is situated at an altitude of 1 700 meters a.s.l. and 4 km from the town of Sierra Gorda.

On 1 July 2015 the Sierra Gorda mine commenced commercial production (since then it has prepared statements of profit or loss). The ore is extracted using explosives, and next is loaded and hauled away in trucks to the processing plant, where it is crushed and milled.

The end product of Sierra Gorda's processing plant is copper concentrate and molybdenum concentrate.

In 2019 Sierra Gorda, in cooperation with representatives of KGHM Polska Miedź S.A., Sumitomo Metal Mining and Sumitomo Corporation, focused on preparing an Integrated Plan, which will comprise a new scope of work, schedule and costs involving optimisation of the production process and increasing sulphide ore throughput. The final results of this work will be known in the first half of 2020.

The Sierra Gorda Oxide project involves the leaching of the copper oxide ore of Sierra Gorda on a permanent heap and

the production of high-quality copper cathodes in a solvent extraction and electrowinning (SX-EW) installation, over a period of 10 years. Average copper production will be approx. 30 thousand tonnes/year. Most of the oxide ore assumed for the project is currently stored, near the site of the planned heap, on the grounds of the Sierra Gorda mine.

In 2019, work continued aimed at preparing the project for realisation. This work included verifying the block model for the heaped oxide ore at the storage site. Required changes for updating the project's environmental permits were reviewed. Additional work was carried out aimed at more precisely defining the technical solutions for the heaped ore's crushing and transport operations. Tests involving the leaching of the crushed ore in columns were completed and required analysis began of the post-leaching material, aimed at developing a final report.

#### Franke mine

Location	Antofagasta Region, Chile	The mine is located in a desert area of northern Chile, in the Altamira region, near the southern boundary of the Antofagasta region, near a public road connecting the mine with the Pan-American highway.
Ownership	100% KGHM INTERNATIONAL LTD.	
Type of mine	open pit	Mining is conducted by conventional open-pit methods. Due to the nature of the ore, it is processed using the heap leach, solvent-extraction and electrowinning method. The end product is electrolytic copper in the form of cathodes.
Type of orebody	IOCG (ore type containing iron, copper and gold)	
End product	copper cathodes	
Payable copper production in 2019	19.0 kt	

KGHM is engaged in exploration work within the Franke concession as well as in the immediate vicinity (mainly the Franke, San Guillermo and Pelusa deposits) aimed at expanding the resource base and prolonging the life of the Franke mine. At the moment it is expected that the future activities of the Franke mine (following exhaustion of the oxide ore resources) will be based on the sulphide ore resources.

#### OTHER ASSETS

In terms of assuring the operations of the core business of KGHM Polska Miedź S.A., of significance are investments in domestic companies acting on its behalf, such as:

- PeBeKa S.A. – mining work contractor,
- KGHM ZANAM S.A. – a supplier and service provider for mining machinery, and also provides production maintenance services in selected areas and participates in investment tasks,
- KGHM Metraco S.A. – a supplier of copper scrap,
- „Energetyka” sp. z o.o. – this company secures part of the energy needs of KGHM Polska Miedź S.A.

In terms of the amount of capital committed, an important investment are the shares of TAURON Polska Energia S.A., a company listed on the Warsaw Stock Exchange. As at 31 December 2019, KGHM Polska Miedź S.A.'s share in the share capital of TAURON Polska Energia S.A. amounted to 10.39%. The carrying amount of the shares of TAURON Polska Energia S.A. held by KGHM Polska Miedź S.A. amounted to PLN 299 million.

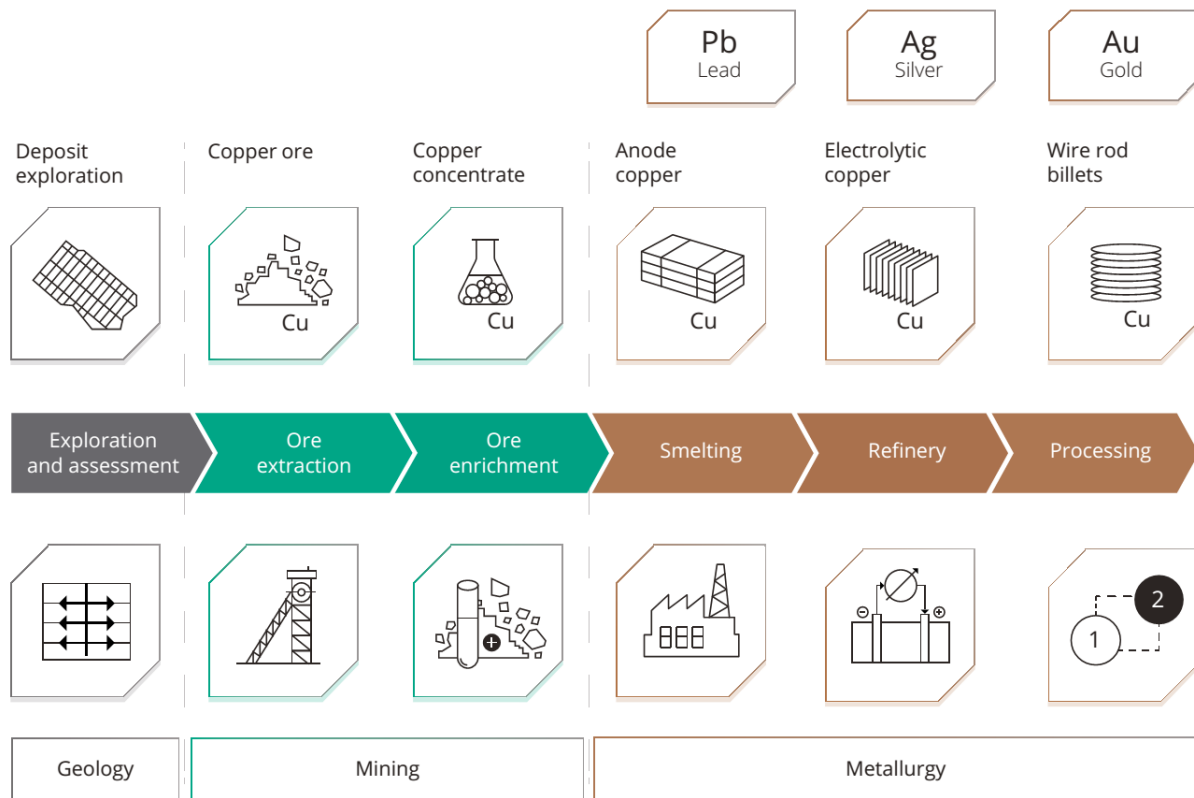
Investments in closed-end investment funds are a tool used to diversify the investment risk for KGHM Polska Miedź S.A. In advancing the strategy of the Group, they fill a role in the management of selected non-core assets and are a tool in the advancement of projects aimed at increasing value. A significant portion of these Funds' assets are investments in the general field of healthcare.

In addition, amongst the international companies is a group operating under the DMC Mining Services brand: DMC Mining Services Ltd., FNX Mining Company Inc., Raise Boring Mining Services S.A. de C.V., DMC Mining Services Corporation, DMC Mining Services Colombia S.A.S., DMC Mining Services (UK) Ltd. and DMC Mining Services Chile SpA, which provide services in shaft sinking, mine development work, above-ground and underground mine facilities, mine drilling, tunnel drilling for general construction purposes and engineering services.

## 2.4. PRODUCTION PROCESS

Production in the Group is based on the processes illustrated in the following two diagrams:

Diagram 5. Integrated mining, processing, smelting and refining processes in KGHM Polska Miedź S.A.



Production in KGHM Polska Miedź S.A. is a fully integrated process, in which the end product of one technological phase is the starting material (half-finished product) used in the next phase. Mining in KGHM Polska Miedź S.A. is performed by three mining Divisions: Lubin, Rudna and Polkowice-Sieroszowice. In the subsequent phase the Concentrators Division prepares concentrate for the smelters and refineries, while the Tailings Division is responsible for storing and managing the tailings generated by the copper ore enrichment process. The organisational structure of KGHM includes two metallurgical facilities: the Legnica Copper Smelter and Refinery and the Głogów Copper Smelter and Refinery, as well as the Cedynia copper wire rod plant.

### MINING

The technology of mining the copper ore in all 3 mines is based on the room-and-pillar system with the use of blasting technology for ore extraction. This involves access and preparatory work, comprised of the excavation of a drift network on all sides of the site to be mined, cutting of the unmined rock mass with rooms and drifts separating a number of operating pillars, as well as extraction of the ore followed by the transport of the ore to underground dumping stations, where the large rocks are crushed and sifted through a grate, and then the crushed muck is transported to the storage areas near the shafts, from which it is transported to the surface by skip hoisting shafts.

The work related to mining of the copper ore is fully mechanised, in a 4-shift labour system, with the use of motorised mining rigs, most of which are equipped with air-conditioned cabins and systems supporting the work of the operators. Mining work is conducted in the following cycle: drilling the blasting holes with the support of motorised drilling rigs, loading blasting material into drilled holes by motorised blasting rigs, group blasting in mining divisions, followed by the ventilation of the areas blasted (from 30 minutes to 2 hours; in seismically-sensitive areas this time may be longer). The next stage involves the loading of the muck using motorised loaders into haulage vehicles and its transport to dumping stations, along with protection of the exposed face by roof anchor bolts using bolting rigs. The crushed muck is transported by conveyor belts or mine rail trolleys to the storage sites near the shafts, and is then transported to the surface. After the muck is unloaded at the shaft top, it is transported by conveyor belts or railway to the ore concentrators located at each of the three mines.

The operations and processes applied at each of the three ore concentrators are the same. However, due to the varied lithological and mineralogical composition of the ore from individual mines, the production layout of each facility differs. The processing technologies applied include the following individual operations: screening and crushing, milling and classification, flotation and drying of the concentrate.



The flotation process results in concentrate with an average copper content of approx. 22-23%, and flotation waste. The Rudna mine concentrator produces concentrate with the highest copper content (approx. 26%), while the lowest is at the Lubin mine concentrator (approx. 13%). The Polkowice mine concentrator produces concentrate of approx. 25% copper content.

The dried concentrate of approx. 8.5% water content is transported by rail to the following smelter/refineries: the Legnica Copper Smelter and Refinery located in Legnica, the Głogów I Copper Smelter and Refinery and the Głogów II Copper Smelter and Refinery, located in Głogów.

The flotation waste, in the form of slimes, are transported through pipelines to the Żelazny Most Tailings Storage Facility, where the sedimentation of the solid particles takes place and the clarified water is collected and redirected to the ore concentrators. The storage site also serves as a retention-dosage reservoir for excess mine and process water in circulation. Excess water is hydrotechnically discharged (periodically) to the Odra River. This method was developed and implemented in partnership with research institutions, and it has been officially approved for use under the provisions of the Water Law. Studies demonstrate that the discharging of mine and process water to the Odra River cannot result in any changes that would make the proper functioning of water ecosystems impossible or prevent conformance with the applicable water quality requirements.

## **METALLURGY**

The copper smelters/refineries produce electrolytic copper from own concentrates as well as from purchased metal-bearing material (copper concentrates, copper scrap, blister copper).

The Legnica Copper Smelter and Refinery uses a multi-stage process whose main stages include: preparation of the charge material, its reduction smelting in shaft furnaces to the form of matte copper, conversion to the form of blister copper with approx. 98.5% Cu content; fire refining in anode furnaces to produce anodes of 99.2% Cu content; and electrorefining. The final product is electrolytic copper cathodes with 99.99% Cu content.

The Głogów Copper Smelter and Refinery applies one-stage flash furnace technology. The dried concentrate, with a moisture content of 0.3% H<sub>2</sub>O, is smelted in a flash furnace into blister copper containing around 98.6% Cu, which is subject to fire refining in anode furnaces. The slag, which still contains on approximately 14% copper, is sent to an electric furnace, where the copper is removed while the CuPbFe alloy obtained is sent to the convertors, from which the resulting copper is sent for refining in anode furnaces. The copper anodes produced from fire refining are then sent for electrorefining, and the end product is electrolytic copper in the form of cathodes containing 99.99% Cu.

Approx. 45% of the electrolytic copper produced by KGHM's smelters and refineries are further processed in the Cedynia Copper Wire Rod Division, where copper wire rod is produced by a continuous smelting, casting and rolling process as well as oxygen-free copper rod and oxygen-free, low-alloy, silver-bearing copper rod based on UPCAST technology are produced.

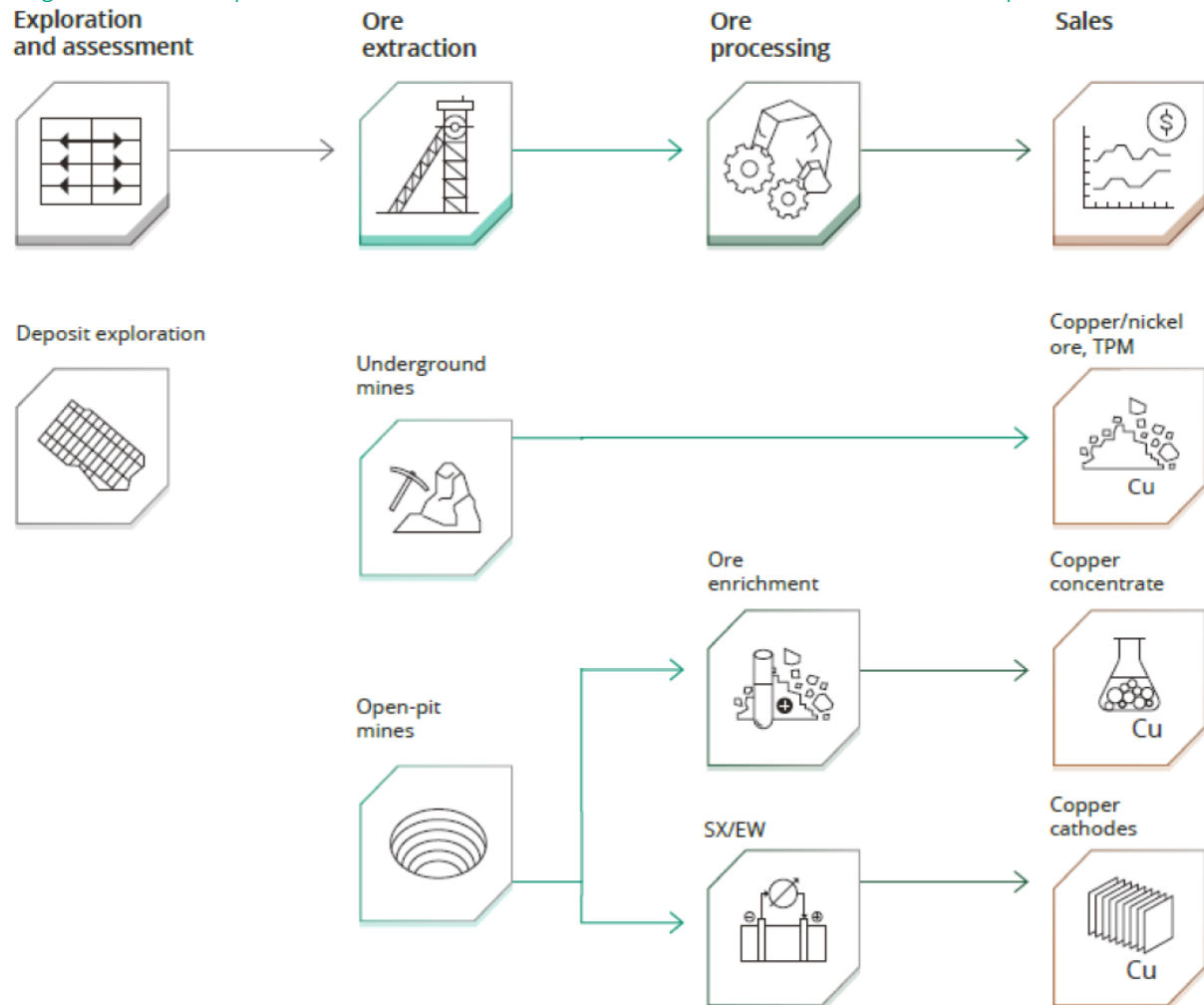
The anode slime produced during the electrorefining process at KGHM's smelters and refineries contains precious metals, and is the raw material used by the Precious Metals Plant at the Głogów Copper Smelter and Refinery to produce the following products: refined silver, gold, palladium-platinum concentrate and selenium. The electrolyte in the Tank Hall, once the copper is removed, is used to produce crude nickel sulphate.

The lead-bearing dust and slimes collected as a result of the removal of dust from technological exhaust gases at the smelters and refineries are smelted, together with decopperised convertor slag from the flash furnace production line, in Dörschel furnaces at the Lead Section of the Głogów Copper Smelter and Refinery into crude lead containing 99.3% Pb. This crude lead is then refined at the Legnica Copper Smelter and Refinery to obtain the end product - refined lead containing 99.85 % Pb.

## **THE SEGMENT KGHM INTERNATIONAL LTD.**

The core business of the KGHM INTERNATIONAL LTD. Group of companies is the mined production of metals, such as copper, nickel, gold, platinum and palladium, from both open-pit and underground mines, as well as advancement of mining and exploration projects. The following drawing shows a simplified flowchart of the core business of the KGHM INTERNATIONAL LTD. Group.

Diagram 6. Simplified flowchart of the core business of the KGHM INTERNATIONAL LTD. Group



## 2.5. CHANGES IN GROUP STRUCTURE, EQUITY INVESTMENTS AND THEIR FINANCING EQUITY INVESTMENTS IN DOMESTIC ASSETS

In 2019, total investment expenditures by KGHM Polska Miedź S.A. amounted to PLN 430 million, including PLN 295 million on Investment Certificates acquired in 2019, PLN 134 million on Investment Certificates acquired in 2018 and PLN 1.3 million on shares acquired in CBJ sp. z o.o. (as described below). Purchase of the Investment Certificates of the KGHM VI and KGHM VII FIZAN funds was mainly financed by the redemption of the Investment Certificates of liquidated KGHM I FIZAN and KGHM IV FIZAN funds.

Table 1. Changes in the Group's structure and organisation in 2019

### EQUITY INVESTMENTS, CHANGES IN FUND STRUCTURE

#### Acquisition of Investment Certificates:

- KGHM VI FIZAN,
- KGHM VII FIZAN

#### and changes in the funds' structures

In 2019, KGHM Polska Miedź S.A. acquired Investment Certificates, Series C of the following funds: KGHM VI FIZAN and KGHM VII FIZAN, for the total amount of PLN 258 million, due to liquidation of the KGHM I FIZAN fund and Investment Certificates, Series D of the KGHM VII FIZAN fund for the amount of PLN 38 million, due to liquidation of the KGHM IV FIZAN fund. Acquisition of the aforementioned Certificates was aimed at financing the acquisition by the new funds, established in 2018, of the investments of the liquidated funds. The funds were liquidated due to the expiry of the founding period of the funds.

In addition, at the start of 2019, KGHM Polska Miedź S.A. paid the second instalment on the Investment Certificates, Series B, of the KGHM VI FIZAN fund, acquired in December 2018, in the amount of PLN 60 million and the second instalment on the Investment Certificates, Series B, of the KGHM VII FIZAN fund, acquired in December 2018, in the amount of PLN 74 million.

The main source of financing for the purchase of the Investment Certificates of the KGHM VI and KGHM VII FIZAN funds was the redemption of the Investment Certificates of liquidated Funds.

At the end of 2019 the KGHM I FIZAN and KGHM IV FIZAN funds were liquidated and their investments were added to the KGHM VI FIZAN and KGHM VII FIZAN funds.

KGHM Polska Miedź S.A. is the sole participant in the aforementioned funds.

#### Acquisition of shares in the increased share capital of CBJ sp. z o.o.

In October 2019, KGHM Polska Miedź S.A. acquired shares in the increased share capital of the subsidiary

CBJ sp. z o.o. which were paid for in cash in the amount of PLN 1.3 million. This increase in share capital was financed by funds arising from the return by the company on a payment to capital granted in prior years.

KGHM Polska Miedź S.A. is the sole shareholder of CBJ sp. z o.o.

**Acquisition of employees' shares in Świeradów-Czerniawa Sp. z o.o. – Grupa PGU**

In November 2019, as a result of the acquisition of employees' shares, the interest of the KGHM VII FIZAN in the company Uzdrowisko Świeradów-Czerniawa Sp. z o.o. – Grupa PGU slightly increased (from 99.19 % to 99.40%).

**COMBINATION OF ENTITIES**

**Combination of PMT LK 2 Sp. z o.o. with PMT Linie Kolejowe Sp. z o.o.**

In December 2019 the direct subsidiary PMT LK 2 Sp. z o.o. was combined with the indirect subsidiary PMT Linie Kolejowe Sp. z o.o. (PMT LK 2 Sp. z o.o. owned all of the shares of PKT Linie Kolejowe Sp. z o.o.). Under this combination, all of the assets of the acquired company PMT LK 2 Sp. z o.o. were transferred to the acquiring company PMT Linie Kolejowe Sp. z o.o., as a result of which the acquiring company acquired 100% of its shares, which as a result of the combination were granted to KGHM Polska Miedź S.A. Court registration of this combination occurred on 31 December 2019.

**LIQUIDATION OF ENTITIES**

**Liquidation of KGHM I FIZAN**

As a result of the process of liquidating the KGHM I FIZAN Fund (due to the expiry of the founding period of the Fund) carried out in 2018, in January 2019 all of the Investment Certificates of the Fund were redeemed. KGHM Polska Miedź S.A. as a result received a refund in the amount of PLN 391 million and was removed from the record of the Fund's participants. In June 2019, the Fund was removed from the registry.

KGHM Polska Miedź S.A. was the sole participant in the Fund.

**Liquidation of KGHM V FIZAN**

As a result of the process of liquidating the KGHM V FIZAN Fund (due to the expiry of the founding period of the Fund) carried out in 2018, in January 2019 all of the Investment Certificates of the Fund were redeemed. KGHM Polska Miedź S.A. as a result received a refund in the amount of PLN 0.7 million and was removed from the record of the Fund's participants. In March 2019 the Fund was removed from the registry.

KGHM Polska Miedź S.A. was the sole participant in the Fund.

**Liquidation of KGHM IV FIZAN**

In May 2019 the liquidation of the KGHM IV FIZAN Fund began, due to the expiry of the founding period of the Fund. In September 2019 all of the Investment Certificates of the Fund were redeemed. KGHM as a result received a refund in the amount of PLN 13 million. In November 2019 the Fund was removed from the registry.

The participants in the Fund were companies in the Group - KGHM Polska Miedź S.A. and the subsidiary CUPRUM Nieruchomości sp. z o.o.

**Liquidation of Staropolanka Spółka z o.o.**

In October 2019 the liquidation of a portfolio company of the KGHM VII FIZAN Fund began - Staropolanka Spółka z o.o. This company did not engage in operations.

The KGHM Polska Miedź S.A. Group holds a 100% interest in this company.

**Liquidation of NANO CARBON Sp. z o.o.**

In December 2019 the liquidation of a portfolio company of the KGHM VII FIZAN Fund began - NANO CARBON Sp. z o.o. The Fund holds a 49% interest in this company. The company's second shareholder is PGZ S.A. (51%).

**EQUITY INVESTMENTS IN INTERNATIONAL ASSETS**

Equity investments carried out in 2019 aimed mainly at financing Sierra Gorda S.C.M. were made by the granting of loans and/or increases in share capital.

In 2019, in terms of financing for Sierra Gorda S.C.M., KGHM Polska Miedź S.A. granted the company Quadra FNX FFI S.à r.l. (an indirect subsidiary) loans in the total amount of USD 112.75 million (PLN 428.2 million at the average exchange rate of the NBP from 31 December 2019). Subsequently the funds were transferred in the form of loans to the company Quadra FNX Holdings Chile Limitada (an indirect subsidiary), and next, in the form of increases in share capital, to the company Sierra Gorda S.C.M.

The increases in the share capital of the Group's companies aimed among others at financing Sierra Gorda S.C.M. are described below.

<b>Sierra Gorda S.C.M.</b> USD 205 million (PLN 779 million)	In 2019, as a result of financing for this company, there were increases in share capital in the total amount of USD 205 million (PLN 779 million at the average exchange rate of the NBP from 31 December 2019). Proportionally to the interest held in the company Sierra Gorda S.C.M., the company Quadra FNX Holdings Chile Limitada acquired 55% of the shares in the increased share capital, while 45% were acquired by SMM SIERRA GORDA INVERSIONES LIMITADA (a Sumitomo company).
<b>Centenario Holdings Ltd.</b> CAD 7 million (PLN 19 million)	As a result of the need to increase the share capital of the company KGHM Chile SpA, FNX Mining Company Inc. increased the share capital of the company Centenario Holdings Ltd. by CAD 7 million (being the equivalent of USD 5 million). As a result, FNX Mining Company Inc. acquired 6 639 788 shares in the increased share capital.
<b>KGHM Chile SpA</b> USD 5 million (PLN 19 million)	Centenario Holding Ltd. increased the share capital of the company KGHM Chile SpA by USD 5 million. As a result, Centenario Holdings Ltd. acquired 5 000 000 shares in the increased share capital of the company KGHM Chile SpA.

In addition, on 2 May 2019 a new company, DMC Mining Services Chile SpA with its registered head office in Chile, was founded, as a direct subsidiary of DMC Mining Services Ltd.

### 3. PRIMARY GROUP PRODUCTS



#### COPPER CATHODES

Copper cathodes made from electrolytic copper with a minimum copper content of 99.99% are the basic product of KGHM Polska Miedź S.A. They meet the highest quality requirements and are registered as Grade „A” on the London Metal Exchange (LME) under three brands: HMG-S, HMG-B and HML and on the Futures Contracts Exchange in Shanghai.

Copper cathodes are also the primary product of the Carlota mine in the USA and the Franke mine in Chile, both part of the KGHM INTERNATIONAL LTD. Group.

The main customers for the cathodes are producers of wire rod, other rods, flat bars, pipes, sheets and conveyor belts.



#### COPPER WIRE ROD

8 mm copper wire rod is manufactured through the Contirod® continuous process of melting, casting and drawing. It is mainly produced from cathodes manufactured by KGHM Polska Miedź S.A. and is the second most numerous copper product volume-wise produced by KGHM. Wire rod is produced in five classes of quality, depending on the needs of the customer. The main customers for wire rod are the cable, electrical goods and electrotechnical industries.



#### SILVER

Electrolytic silver is produced mainly by KGHM Polska Miedź S.A., in the form of bars (ingots, billets) and grains containing 99.99% silver. Silver bars (weighing approx. 32 kg) hold a certificate registered on NYMEX in New York as well as a Good Delivery certificate issued by the London Bullion Market Association. Grain silver is packed in bags weighing 25 kg or 500 kg. The main customers for silver are financial institutions, the jewellery industry, photographic industry, and the electronics and electrical industries as well as producers of coins and medallions.



#### COPPER CONCENTRATE

Produced by the Robinson mine in the USA, part of the KGHM INTERNATIONAL LTD. Group, containing about 20% of copper. This product is also produced by the Sierra Gorda mine in Chile (copper content is above 20%). Both of these concentrates also include gold as an additional product. The copper concentrates are sold for further processing as a commercial product. Occasionally KGHM Polska Miedź S.A. also sells copper concentrate produced by the Lubin, Rudna and Polkowice-Sieroszowice mines (average copper content, depending on the type of concentrate, is from approx. 13% to approx. 26%).



#### MOLYBDENUM OXIDES

One of the main commercial products of Sierra Gorda apart from copper concentrate is molybdenum oxide, arising from the processing of the molybdenum sulphide concentrate (containing approx. 48% Mo) produced by the Sierra Gorda mine. Molybdenum is used in the aircraft, defense, oil, nuclear and electronics industries.



#### MOLYBDENUM CONCENTRATE

Another commercial product (apart from copper concentrate) produced by the Robinson mine in the USA, part of the KGHM INTERNATIONAL LTD. Group. Production of molybdenum concentrate is derivative from the process of copper concentrate production.



#### GOLD

Gold in the form of bars weighing approximately 0.5 kg, 1 kg, 4 kg, 6 kg and 12 kg containing 99.99% gold is produced by KGHM Polska Miedź S.A. Gold is used in the jewellery industry, by banks and in the electrical industry.



### **ORE CONTAINING COPPER, NICKEL AND TPM (PRECIOUS METALS – GOLD, PLATINUM, PALLADIUM)**

Ores containing copper, nickel and TPM are produced by the mines in the Sudbury Basin in Canada, part of the KGHM INTERNATIONAL LTD. Group, and sold for further processing to a smelter and refinery (belonging to Vale) in the Sudbury Basin.



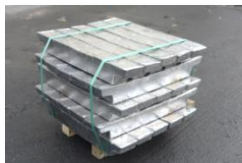
### **OXYGEN-FREE COPPER ROD**

Two types of rod are produced using UPCAST® technology: Cu-OFE oxygen-free rod and CuAg(OF) oxygen-free, silver-bearing rod. Depending on customer need, the rod is produced in several diameters: 8 mm, 12.7 mm, 16 mm, 20 mm, 22 mm, 24 mm and 25 mm with possible silver content. Customers for this product are in the cable industry, with application in the form of thin wires, enamelled wires and fire-resistant cables, as well as cables for transmitting audio and video signals. In addition, oxygen-free, silver-bearing rod is used in the manufacture of trolleys and commutators.



### **ROUND COPPER BILLETS**

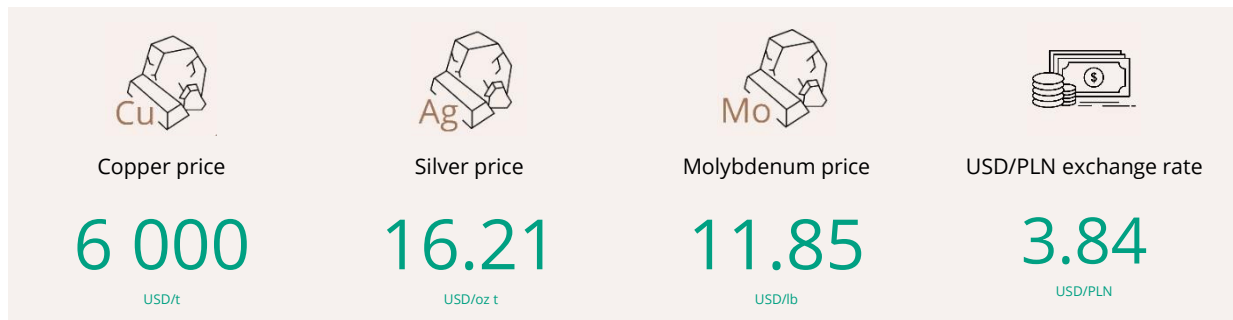
Round copper billets are produced from non-alloy copper cast in the classification Cu-ETP1 and Cu-ETP, and from oxygen-free phosphorus-containing copper, depending on customer need. They are mainly used for further processing into products such as flat and other profiles, rods and pipes. Due to the low profitability of producing and selling copper billets, the limited sales market for the assortment produced and the inability to significantly restructure the costs, production of billets has ceased from 2020.



### **REFINED LEAD**

Refined lead in the form of bars (dimensions: 615 x 95 x 80 mm) has been produced by KGHM Polska Miedź S.A. since 2007. It has been registered on the London Metal Exchange since 2014 under the brand „KGHM”. Refined lead is mainly used to produce batteries and lead oxides.

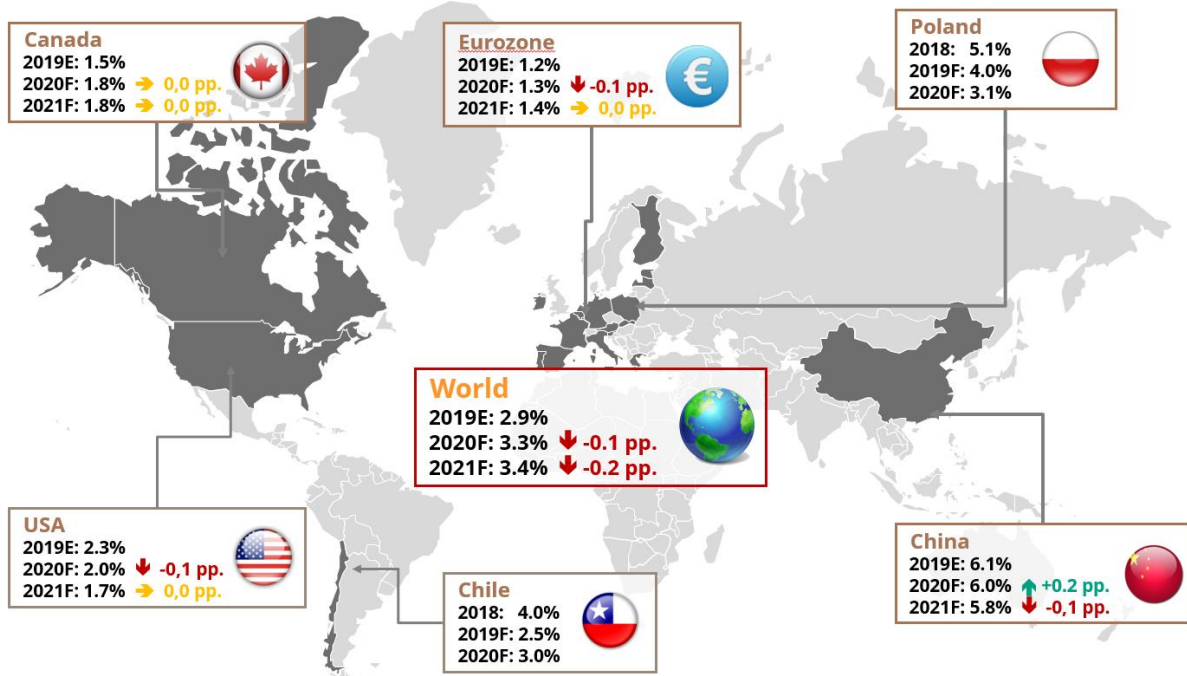
## 4. MACROECONOMIC CONDITIONS AND ANALYSIS OF THE MARKET



### 4.1. MACROECONOMIC ENVIRONMENT

In 2019, there was a continuation of the reduction in global economic growth forecasts published by the International Monetary Fund (IMF). The accrued revision for 2020 in the period from January 2019 to January 2020 amounted to -0.2 percentage points globally. The structure of the forecasted reductions in global economic growth mainly affected emerging market and developing economies, whose expected rate of growth was reduced by 0.5 percentage points, compared to the revision in advanced economies of -0.1 percentage points.

Chart 1. Forecasts of real GDP growth per the International Monetary Fund from January 2020 versus previous forecasts



The most recent update in forecasts for Poland and Chile was in October 2019; Source: International Monetary Fund, KGHM Polska Miedź S.A.

According to the IMF's latest estimates, global GDP growth in 2019 amounted to 2.9% compared to 3.6% in the prior year. Growth in advanced economies is estimated at 1.7% compared to 2.2% growth in 2018. The main reason for the decrease in rate of growth was the slowdown in the US economy (estimated at 2.3% in 2019 compared to 2.9% in the prior year) and in the eurozone (estimated at 1.2% compared to 1.9% in the prior year). In emerging market and developing economies, the rate of growth decreased from 4.5% to 3.7% year on year, mainly due to an economic slowdown in China and India respectively by 0.5 percentage points and 2 percentage points compared to the rate of growth in 2018. The reason for the lower rate of growth came from a substantial deterioration in perceived global industrial activity, as seen in the lower PMI (Purchasing Manager Index), which, month by month in 2019, fell to increasingly lower levels. Another major reason for this slowdown in global economic activity in 2019 was the lower volume of global trade in goods and services, whose annual level fell from 3.7% to 1% globally. The slowdown in international commercial activity was most felt in developing economies, in which the growth in the volume of trade decreased from 4.5% in 2018 to 0.4% in 2019. This slowdown in global trade was caused by the trade conflict between the USA and China, but was also due to the hard negotiating stance of the United States with other trading partners.

The result of these actions was an increase in global protectionism, evident in the increased amount of customs barriers in trade between the USA and its trading partners (the European Union, Japan, Canada and many others). At the turn of November and December 2019, the administration of President Donald Trump reached an agreement with China, but the increased divergence in interests along with subsequent rounds of negotiations were not enough to enable complete agreement to be reached, which led to a change in negotiating tactics and separation of the process into phases. The conditions for the first of these were set at year's end and officially signed in January 2020. The market reacted positively to the achievement of a partial agreement, lending hope to a gradual easing of the conflict.

The slowdown in growth and the weakening macroeconomic readings generated a reaction on the part of central banks, with a response and implementation of further easing in monetary parameters. The greatest surprise for the financial markets was the change in monetary policy assumptions by the US Federal Reserve (Fed), which, in the expectations published in the first half of 2019 by the members of the Federal Open Market Committee (FOMC), assumed continuation of rising rates. These forecasts failed to materialise, and the change in rhetoric led to three decreases in interest rates in a row. The change in monetary policy assumptions also affected the Fed's balance sheet. The decrease in the balance sheet announced by the members of the FOMC did not occur and, given the problems with liquidity at the turn of the third and fourth quarters, the amount of short-term securities accumulated by the Fed rose dramatically.

Despite the weaker macroeconomic readings and problematic global trade relations, the commodities market, measured by the Bloomberg Commodity TR Index (BCOM) recorded an increase of 7.7% year on year (y/y). However, the commodities market was weakest compared to the American S&P500 (+31.5% y/y) and to the bond market measured by the Barclays U.S. Aggregate Index (+8.7% y/y). The greatest impediment to a higher rate of return in the general BCOM index were the prices of agricultural goods and livestock (+0.4% y/y). The greatest impact on raising the index came from precious metals (+17% y/y) and energy materials (+11.8% y/y) and, to a lesser extent, industrial metals (+7% y/y).

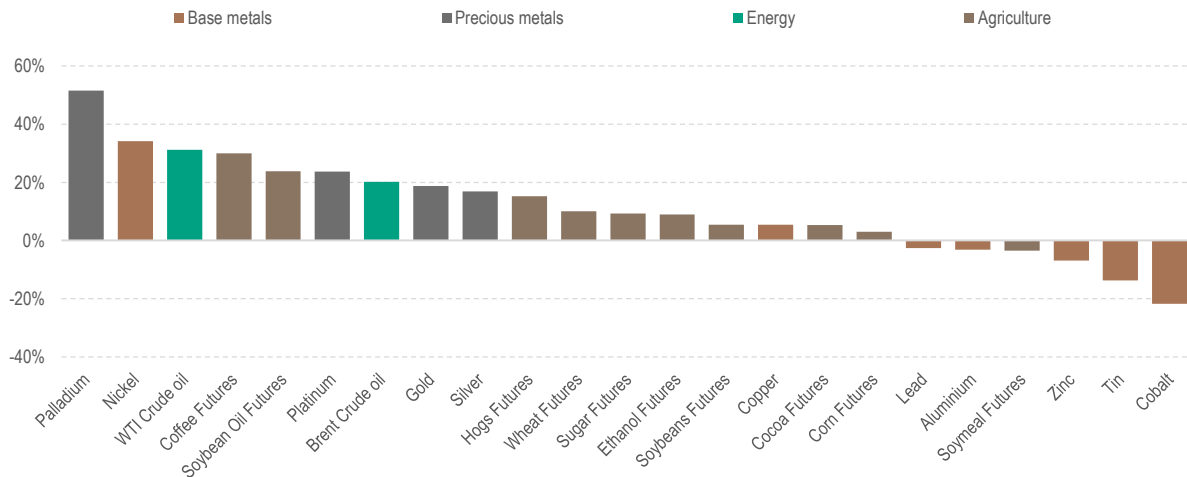
Comparing the difference in the price of copper from the first (5 839 USD/t) and last (6 156 USD/t) official cash settlement price of 2019, which was just 317 USD/t (approx. 5%), one can conclude that the past year did not abound in breakthrough events for the red metal. The average cash settlement price amounted to nearly 6 000 USD/t, and remained within a range of no more than 600 USD/t. Although this would suggest a relatively low level of copper price volatility, 2019 was nonetheless full of the aforementioned events, macroeconomic readings and geopolitical aspects, which affected the copper market.

While in the first half of the year the copper price was supported by a halt in the appreciation of the USD and hope for an imminent solution to the trade conflict, the US administration, contrary to expectations by the market, imposed duties on Chinese goods. As a result the USD strengthened, although given the fears of an expansion of the trade conflict into further areas of the economy, there was a sell-off of assets in many markets, including that of the basic metals. This led, in June 2019, to a fall in the copper price to under 6 000 USD/t. The global trade conflict is a natural cause of the rise in market uncertainty, which affects demand for copper, since those countries engaged in the trade conflict (which includes, apart from the USA and China, the European Union and Japan) represent a majority of the market. For example – China accounts for over 50% of global copper consumption and for many years has been responsible for the largest rise in the volume of consumption. If economic growth slows as a result of an escalation in the trade conflict and the imposition of new duties and sanctions, the resulting negative sentiment could lead to a lower rate of growth in demand, and this would undoubtedly have an impact on the price of the metal.

The second half of the year was mainly affected by a deterioration in macroeconomic readings and further escalation of the trade conflict. Apart from the weakening data from China (the lowest rate of GDP growth in more than two decades), the German economy also recorded a slowdown in economic activity. This mainly affected was the industrial sector, where the PMI reading fell to record lows, substantially below 50 points, demarcating the theoretical boundary of the slowdown from growth.

In terms of fundamentals, the copper price was stabilised by information on higher costs in the sector and lower availability of concentrate and copper scrap. This had a significant impact on the decrease in discounts (including TC/RC) to a level which to a significant degree reduces the profitability of non-integrated refined copper producers, located mainly in China. The first signals about restrictions to production appeared in the fourth quarter of 2019, though the impact of lower TC/RCs on the copper market in subsequent periods remains an open question. According to data from the International Copper Study Group (ICSG) for the first 11 months of 2019, the deficit on the refined copper market (based on apparent demand in China) amounted to 385 thousand tonnes. The price of copper in the fourth quarter was also affected by country-wide protests in Chile, which apart from their social aspects impacted the operations of copper producers. Part of the November and December production was interrupted, which could be a reason for the heightened imbalance on the copper market and one of the reasons for the higher prices in the last weeks of 2019.

Chart 2. Change in commodities prices in 2019



Source: Refinitiv, KGHM Polska Miedź S.A.

The macroeconomic factors of the greatest significance for the operations of the Company are presented in the following table.

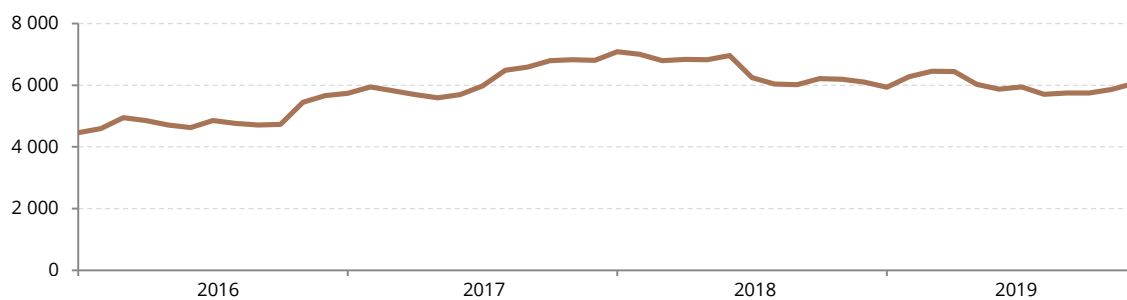
Table 2. Macroeconomic factors significant for the operations of the KGHM Polska Miedź S.A. Group – average prices <sup>(1)</sup>

	Unit	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Copper price on the LME	USD/t	6 000	6 523	(8.0)	5 881	5 802	6 113	6 215
Copper price on the LME in PLN	PLN/t	23 029	23 520	(2.1)	22 773	22 520	23 304	23 548
Silver price per the LBMA	USD/oz t	16.21	15.71	+3.2	17.32	16.98	14.88	15.57
Molybdenum price per the CRU	USD/lb	11.85	12.14	(2.4)	10.75	12.18	12.51	11.94
USD/PLN exchange rate per the NBP		3.8399	3.6117	+6.3	3.8741	3.8831	3.8125	3.7883
USD/CAD exchange rate per the Bank of Canada		1.3269	1.2957	+2.4	1.3200	1.3204	1.3377	1.3295
USD/CLP exchange rate per the Bank of Chile		703	640	+9.8	755	705	684	667

<sup>1)</sup> arithmetic average of daily quotations

The average annual price of copper on the London Metal Exchange (LME) in 2019 was 6 000 USD/t, 8% below the average price in 2018 (6 523 USD/t).

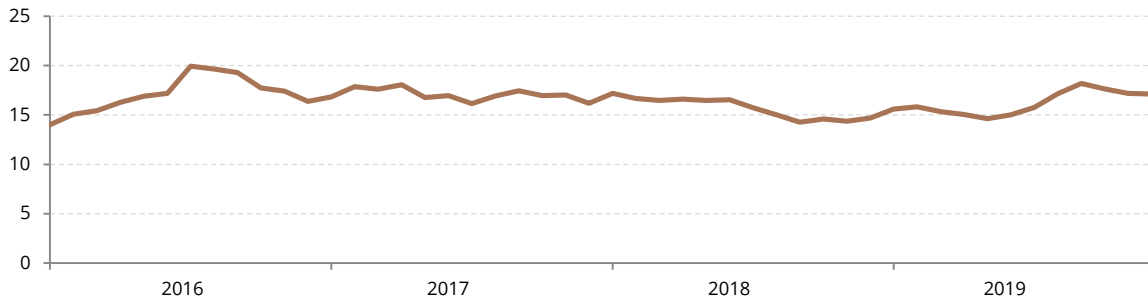
Chart 3. Copper price per the LME (USD/t)



At the start of the year investors showed little interest in the precious metals market. Subsequent unsuccessful negotiating rounds generated additional geopolitical risk, which nonetheless failed to convince the market to avoid risky assets in favour of safer ones, preserving value. At the time, silver recorded its yearly minimum of 14.38 USD/oz t. The upsurge in gold prices, followed by silver, which began at the turn of May and June 2019, coincided with the further escalation of the trade conflict between the USA and China, and consequently with the imposition of new tariffs. In addition, in the USA monetary policy was reviewed, while the announced easing to a large extent led to higher precious metals prices. The increases in gold and silver prices resulted in rapid inflows to ETFs. At the end of 2019 the price of silver amounted to 18.05 USD/oz t. The average price of silver according to the London Bullion Market Association (LBMA) rose in 2019 by 3.2% and amounted to 16.21 USD/oz t compared to 15.71 USD/oz t in 2018.

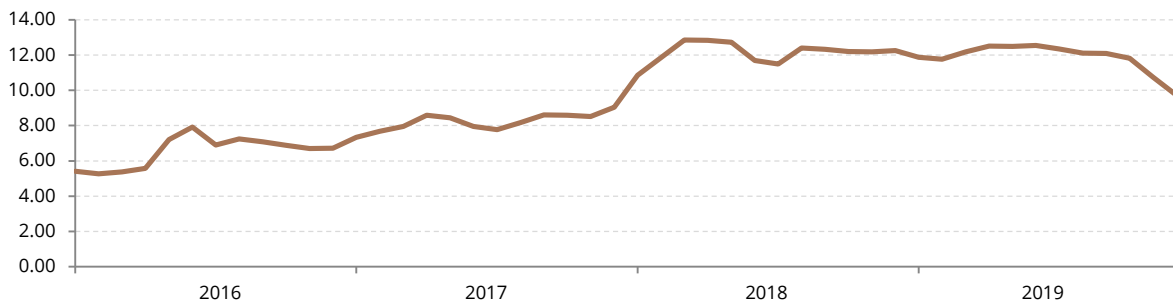


Chart 4. Silver price per the LBMA (USD/oz t)



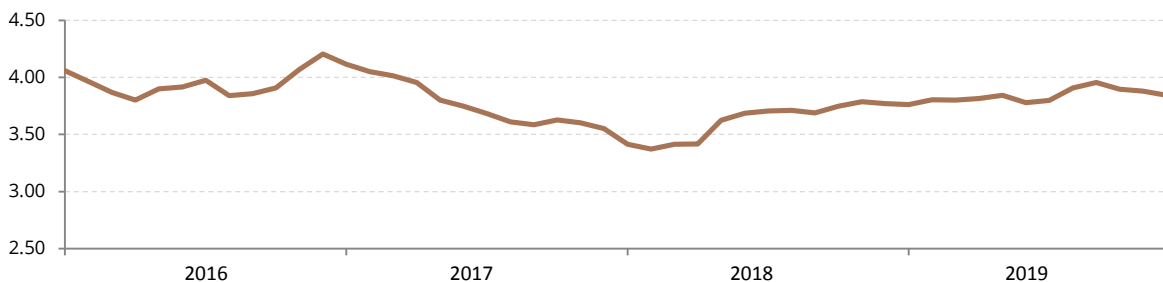
The high volatility in demand for molybdenum was the main factor affecting its price in 2019. For an extended period the price of the metal remained within a relatively narrow range of 11-12 USD/lb, while the drop in activity on the physical market in the USA and lower smelter demand near the end of the year in China led to a price drop to below 10 USD/lb, despite the decrease in inventories. As a result the average price of the metal in 2019 amounted to 11.85 USD/lb and was 2.4% lower than the average price recorded in 2018 (12.14 USD/lb).

Chart 5. Molybdenum price per the CRU (USD/lb)



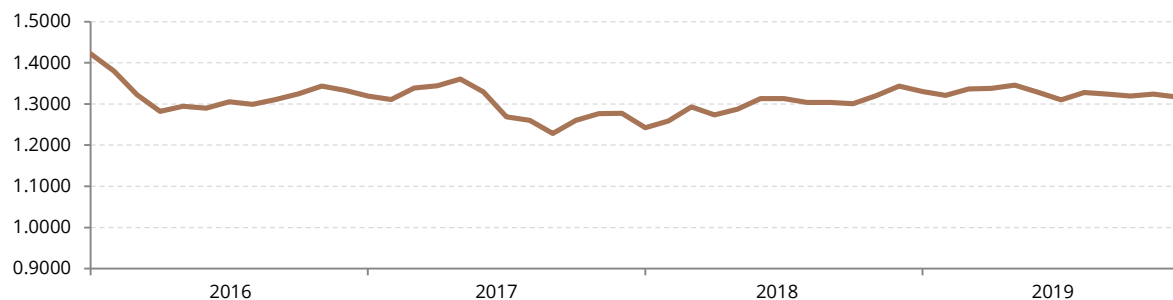
From the start of 2019 the Polish zloty showed little volatility versus the euro, mainly due to stable fundamentals (industrial production, retail sales, export orders). Nonetheless, uncertainty related to the trade conflict, lower global economic activity and interest rate decreases in the USA in 2019, as well as the return of the ECB to quantitative easing, led to heightened USD volatility versus other currencies. The USD/PLN exchange rate reached its lowest level in January. At that time it ranged around 3.70, thereafter followed by a gradual depreciation of the PLN to above 4.00. The PLN ended 2019 at around 3.80 to the USD. The average USD/PLN exchange rate (per the NBP) in 2019 amounted to 3.8399 and was higher by 6.3% than the rate in 2018 (3.6117 USD/PLN).

Chart 6. USD/PLN exchange rate per the NBP



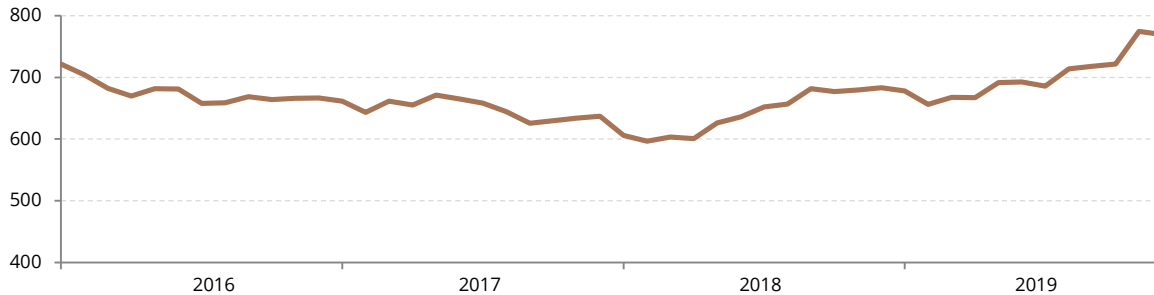
In 2019, the Canadian dollar was slightly weaker compared to the USD. The average USD/CAD exchange rate (per the Bank of Canada) in 2019 amounted to 1.3269 and was slightly higher by 2.41% than the rate recorded in 2018 (1.2957).

Chart 7. USD/CAD exchange rate per the Bank of Canada



In the case of the USD/CLP exchange rate, worth noting is the gradual depreciation of the Chilean peso in 2019. In the second half of the year, this depreciation accelerated as a result of country-wide protests, which to quite a large extent were responsible for the slowdown in economic activity and to a certain degree increased risk aversion towards what until now has been the most politically and socially stable country in South America. The average annual USD/CLP exchange rate (per the Bank of Chile) in 2019 amounted to 703, meaning a weakening of the local currency as compared to the USD by 9.77% (640 in 2018).

Chart 8. USD/CLP exchange rate per the Bank of Chile



### Macroeconomic conditions at the start of 2020

The first weeks of 2020 were rich in events of significance for the financial markets. The agreement announced in the final weeks of 2019 summarising the first of three stages in the trade negotiations between the USA and China was signed on 15 January 2020.

As the agreement was announced and expected by investors, it was greeted by them with calm. At the end of January the second factor causing economic uncertainty – brexit – was delayed and eased. The agreement reached on the United Kingdom's exit from the European Union provided additional time for negotiations involving trade and other principles of cooperation between this country and the member states. At the start of January the USA conducted an attack on an Iranian general, as a result of which Qasem Soleimani, as well as several persons traveling with him, including some Iranian leadership, were killed. The attack provoked retaliation by Iran and a diplomatic crisis in the Middle East. Although the situation did not escalate further, it exacerbated political uncertainty in a region which is the world's main oil exporter. The price of oil began to fall, and this trend deepened in the second half of January.

Also in January there appeared a new, unexpected threat, which could have a substantial, though hard to judge at the present time, impact on economic activity and global commerce – the emergence of an epidemic in the form of the COVID-19 virus in the Chinese province of Hubei. This virus quickly spread throughout the country, and in subsequent weeks appeared in every part of the world. Following the experience gained in the SARS epidemic from 2003, China acted decisively to contain the spread of the epidemic, which included tight quarantines in several large cities, restrictions to human movement within and between cities and the prolongation of the New Year's holiday by 10 days. As a result of the actions taken the Chinese economy was partially paralysed, and the process of re-starting operations by many Chinese companies was spread over several weeks. These production stoppages led to a breakdown in the supply chains of many sectors of the economy, not only in China, but also in other parts of the world. The epidemic is spreading to other countries and in many of them this is causing further interruptions not only to production, but also consumption-related problems. There was a rapid and surprising emergence of a large pocket of the disease in Italy as well as in highly industrialised South Korea, which in the last week of February instigated a nervous reaction among investors around the world and a rapid collapse of share prices. Investors appear to be expecting decisive actions by the main central banks and governments of individual countries if it appears that the stability of the world's economic growth is threatened.

Due to the significance of the Chinese economy for copper consumption (around 50% share), investors reacted to information on the extended shutdown in Chinese factories by a sell-off of the red metal. The copper price offset the price rises in the last months of 2019 and fell, in the last days of January 2020, from 6300 USD/t to the level of last year's lows, and in subsequent weeks remained in a range of 5500 – 5800 USD/t. While the epidemic brings the risk of a global slowdown, the scope of any potential negative consequences is difficult at present to determine and demands monitoring of development of the situation in the coming months.

## 4.2. ANALYSIS OF THE GLOBAL MARKET FOR THE GROUP'S BASIC PRODUCTS

The primary products of the KGHM Polska Miedź S.A. Group, i.e. copper concentrates, cathodes, copper wire rod and silver in the form of bars and grains are traded on the highly-competitive global market as well as in reference to the commodity markets. Individual markets for the products offered by KGHM have varied rules and customs concerning trading and standard prices. Their incomparability is also due to the characteristics of individual products, which impacts their usage and the diversification of market participants.

### COPPER

The primary products offered by the companies of the KGHM Group are concentrates, cathodes and copper wire rod. They are products of individual stages of copper ore processing and recycling of copper scrap. For all of these products, the price benchmark (i.e. the global benchmark of copper prices for physical sales contracts of copper-bearing materials and products) is stock market quotations, with the cash settlement of the London Metal Exchange (LME) being most commonly used. Less commonly used are alternative quotations of copper on stock exchanges in New York (COMEX) and Shanghai (Shanghai Futures Exchange). Grade "A" type, with a copper content of at least 99.99% (standard BS:EN 1978:1998 - Cu-CATH-1) is quoted on the LME. In order to be able to apply stock exchange prices to purchase/sale transactions of the products to which this quality standard is not applicable (i.e. all types of copper-bearing materials like copper concentrates, copper scrap or more processed products like copper wire rod), market participants have developed a premium and discount system, which adjusts stock quotations. It allows setting of a market price for a product which takes into account its processing stage, its physical state and chemical makeup, as well as costs of transport and insurance to an agreed delivery destination and the current availability of the metal in a given location.

#### Copper concentrates

Copper concentrate is a product made by processing/enriching copper ore, which usually has a relatively low metal content and is not suitable for direct metallurgical processing. Usually, copper content in concentrate varies from percentages in the teens to several tens of percent, which enables further processing in copper smelters and refineries. The cost of transporting products with a lower copper content (for example copper ore) basically eliminates them from trade in the global market (with certain exceptions), therefore it may be assumed that copper concentrate is the first product of processing copper ore that may be generally traded. As a result of metallurgical processes copper is produced as well as the by-products of processing (mainly precious metals, sulphuric acid, lead etc.). The main participants of the concentrate markets are mines supplying the product on the market and smelters and refineries, for which the concentrates are materials for production. Trading companies also play a role on this international market, intermediating in the purchase/sale transactions and offering additional services expected by the parties. In 2019, the total global production of copper in Cu concentrate is estimated at 16.8 million tonnes (according to CRU).

Chart 9. Geographical breakdown of copper concentrates production in 2019 (source: CRU, KGHM Polska Miedź S.A.)

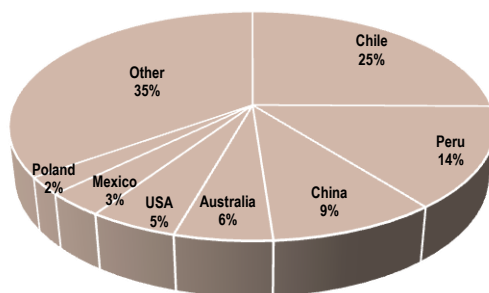
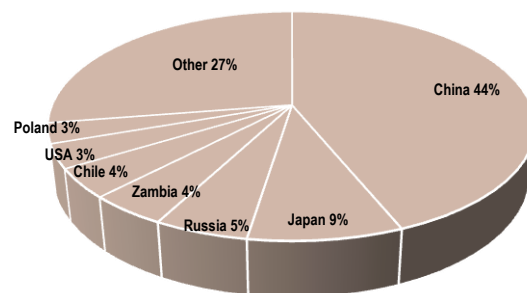


Chart 10. Geographical breakdown of copper blister production from copper concentrates in 2019 (source: CRU, KGHM Polska Miedź S.A.)



Copper concentrates require processing into refined copper, which leads to incurring processing costs and the incomplete recovery of metals in individual production stages. Therefore, the transaction price should have a set of discounts as compared to quoted prices for refined copper. The benchmark of these discounts (for TC/RC) is determined during negotiations with the main producers of concentrates (Freeport McMoRan, Antofagasta) and their customers (mainly Chinese and Japanese smelters and refineries).

Companies of the KGHM Group participate in the copper concentrate markets mainly by selling concentrate from Sierra Gorda in Chile and from Robinson in the USA. Occasionally, KGHM Polska Miedź S.A. also sells copper concentrate produced by the Lubin, Rudna and Polkowice-Sieroszowice mines. At the same time the Company purchases copper concentrates from the market with characteristics suitable for more efficient utilisation of the production capabilities of the smelters and refineries in Poland.

#### Copper cathodes

Refined copper in the form of copper cathodes is the end product of the smelting and refining processes, to which the copper-bearing materials are subjected (including concentrates, copper blister, anodes and copper scrap). Primary commodities exchanges (including the LME and SHFE) enable cathodes to be registered (Grade A type, with a copper content of at least 99.99% under the BS:EN 1978:1998 - Cu-CATH-1 standard), and therefore their trading on exchanges and through

LME-approved warehouses. The copper cathodes produced by KGHM are registered on the LME as well as on SHFE, under the brands: HML, HMG-B and HMG-S. Unregistered cathodes are also traded on the physical market (for example those that do not meet quality parameters or the minimal yearly production conditions set by exchanges). One example of unregistered cathodes produced by KGHM are those from the Carlota and Franke mines. The main participants in the cathodes market are mining and smelting companies producing copper in the form of cathodes and wire rod plants and other companies engaged in copper processing, which use cathodes to produce wire rod, other rods, flat bars, pipes, sheets and belts. Similarly as in the case of copper concentrates, trading companies and financial institutions intermediating in the cathodes trade also participate in the market. In 2019, total global production of refined copper is estimated by CRU at 23.5 million tonnes.

Chart 11. Geographical breakdown of refined copper production in 2019 (source: CRU, KGHM Polska Miedź S.A.)

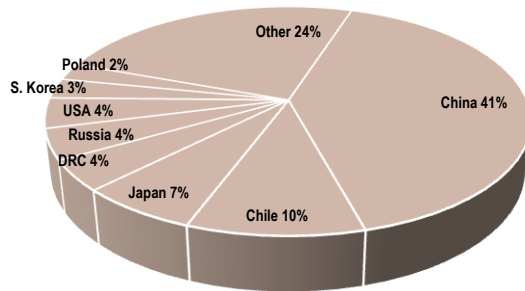
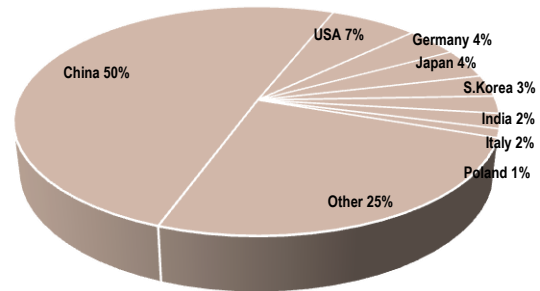


Chart 12. Geographical breakdown of refined copper consumption in 2019 (source: CRU, KGHM Polska Miedź S.A.)



It is a standard practice on the Grade "A" copper cathodes market to add a producer's premium to the prices set by global exchanges. Its level allows the producer to cover the cost of transport and insurance to the agreed delivery destination, and it also includes the premium for quality (of a given cathodes brand) and supply-demand situation on a given market.

The companies of the KGHM Group participate on the cathodes market mainly by selling cathodes from the Group's Polish assets. The Głogów Copper Smelter and Refinery produces cathodes of the HMG-S and HMG-B brands, while the Legnica Copper Smelter and Refinery produces cathodes of the HML brand, registered on the exchanges in London (LME) and in Shanghai (SHFE). Moreover, the KGHM Group offers cathodes produced through the leaching and electrowinning process (SX/EW) in the Franke mine in Chile and in the Carlota mine in the United States. Production of refined copper in the companies of the KGHM Group amounted to 566 thousand tonnes, which represents approx. 2.4% of global production.

**Copper wire rod**

Copper wire rod is manufactured in the continuous process of melting, casting and drawing in plants processing refined copper. The material used in this part of the production cycle is mainly copper in the form of cathodes, although higher-grade copper scrap may also be used. Wire rod is a half-finished product used in the production of single wires and multiple wires used to produce conducting vines in cables and electric cables (for example: enamelled cable, car cables, power cords etc.). Similarly as for copper cathodes, trading companies are also involved in the physical trading of copper wire rod, apart from companies with wire rod plants and cable-producing companies. The wire rod market, due to the quality characteristics of the product, is more of a local market, which also means that it is highly competitive and demanding. In 2019, total global production of copper in the form of wire rod is estimated by CRU at 17.8 million tonnes.

Chart 13. Geographical breakdown of copper wire rod production in 2019 (source: CRU, KGHM Polska Miedź S.A.)

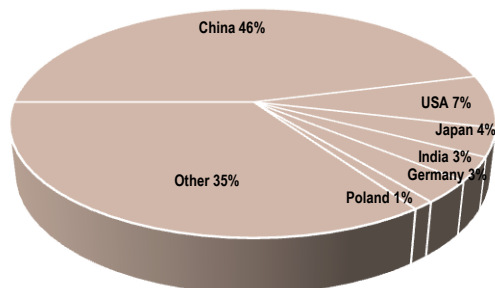
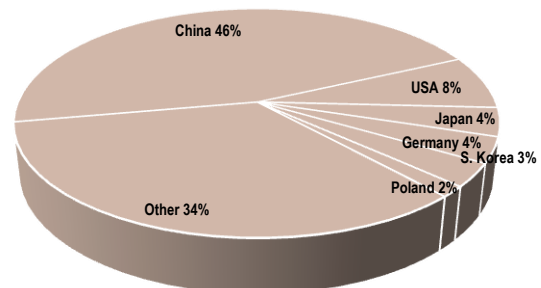


Chart 14. Geographical breakdown of global wire rod consumption in 2019 (source: CRU, KGHM Polska Miedź S.A.)

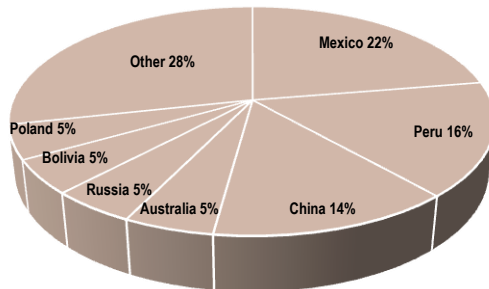


Wire rod's price structure, apart from the copper quotations on the London Metals Exchange, also includes a producer's fee (added to cathodes) and the refining charges due to the costs of processing cathodes into wire rod. KGHM Polska Miedź S.A. produces wire rod in the Cedynia Wire Rod Plant in Orsk.

## SILVER

Approx. 75% of global metallic silver production is a by-product of mining ores of other metals. Silver, due to its unique physical characteristics, is used in the jewellery, electronics and electrical industries, as well as in medicine, optics, the energy industry and many others. It is also applied in newest technological solutions, among others in infrastructure, automotive industry and photovoltaics. In total, industry utilises approx. 40% of global silver production. It is also a valued investment metal. According to Metals Focus estimates, in 2019 global production of mined silver amounted to 26.3 thousand tonnes.

Chart 15. Geographical breakdown of global mined silver production in 2019 (source: Metal Focus, KGHM Polska Miedź S.A.)

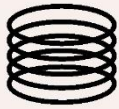


Usually, participants in the silver market make use of London Bullion Market Association quotations when setting the price for silver in physical transactions, after adjusting for current market conditions.

KGHM sells silver in the form of bars and grains (produced at the Głogów Copper Smelter and Refinery) and is one of the largest producers of metallic silver. Yearly, the Company produces around 1200 tonnes of this valuable metal. In 2019, KGHM produced approx. 1400 tonnes of silver, making the Company one of the world's leading producers of silver. Silver in the form of bars is registered under the brand KGHM HG and has a registered certificate on the New York Mercantile Exchange (NYMEX) as well as Good Delivery certificates issued by the London Bullion Market Association. Silver is supplied in the form of grains to the photographic, jewellery and metals industries, which produce alloys containing silver. Silver in the form of bars (ingots) is mainly purchased by financial institutions.

## 5. STRATEGY OF KGHM POLSKA MIEDŹ S.A.

### Four development directions



Flexibility



Efficiency



Ecology

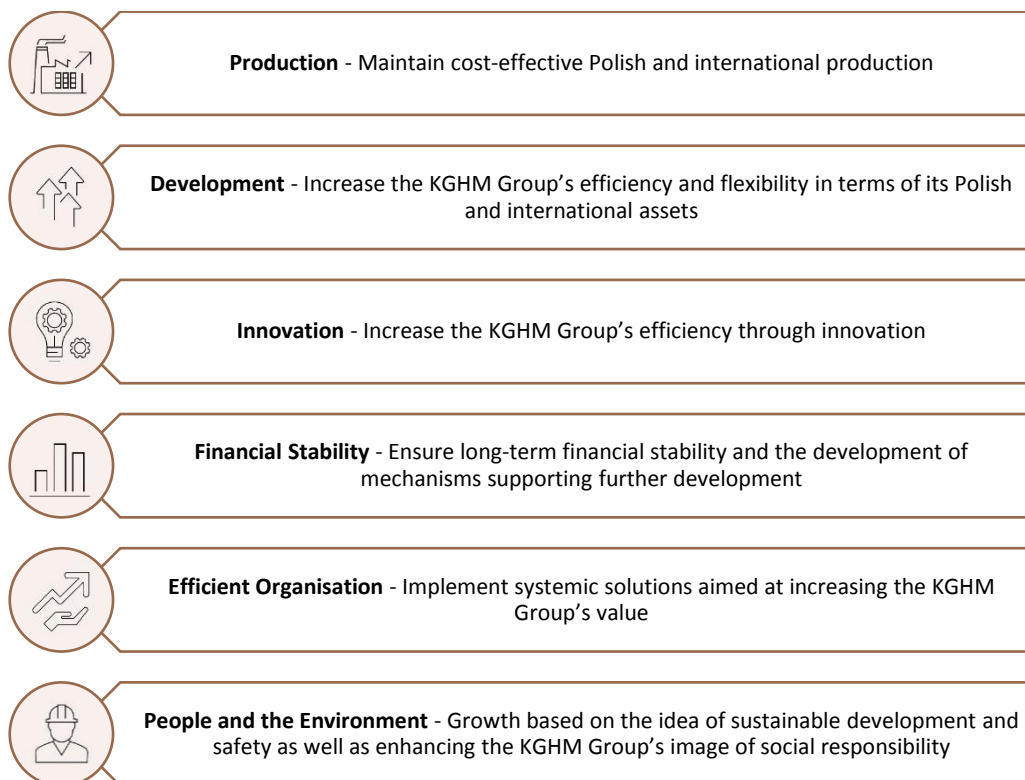


E-Industry

#### 5.1. BASIC ELEMENTS AND REALISATION OF THE STRATEGY OF KGHM POLSKA MIEDŹ S.A.

The Company advanced the „Strategy of KGHM Polska Miedź S.A. for the years 2019-2023” which was approved on 19 December 2018. The Strategy is based on four development directions (elasticity/flexibility, efficiency, ecology and e-industry) arising from global market trends. The aforementioned directions are reflected in six identified strategic areas, with individualised and measurable main goals:

Diagram 7. Strategic areas and primary goals of the Strategy of KGHM Polska Miedź S.A.



In 2019, work commenced on preparing the process of implementation of the Strategy of KGHM Polska Miedź S.A. for the years 2019-2023. Work continues on defining a detailed implementation schedule and organising a system to monitor progress in advancing the Strategy.

#### POLICY REGARDING THE DEVELOPMENT DIRECTIONS OF THE KGHM GROUP

During the reporting period, policy regarding the development directions of the KGHM Group was continued. Further actions were also taken aimed at adapting the Group's organisational functioning model to the business model of KGHM Polska Miedź S.A. and the market environment. In terms of the domestic companies, development policy was also aimed at cooperation between the Group's entities and at eliminating overlapping areas of competence in terms of individual entities. With respect to implementation of the Strategy of KGHM for the years 2019-2023, in the case of the international companies of the Group, KGHM is aiming at developing unified reporting principles, coherent internal regulations and standardised solutions with respect to individual functional areas of the international entities.

## DIRECTIONS REGARDING EQUITY INVESTMENTS

In the case of the companies in Poland, the primary development goal is to ensure continuity and safe working conditions in the core business of KGHM Polska Miedź S.A. and at integrating the KGHM Group around the idea of sustainable development. One of the most important actions is the implementation of development initiatives under the Circular Economy program aimed at limiting the environmental footprint. In the case of the international part of the Group, the Company is concentrating on maximising the value of its assets portfolio.

## INTENTIONS REGARDING CAPITAL EXPENDITURES

In terms of the development directions adopted in the Company's Strategy, investments will focus on projects leading to improved efficiencies in the core business. The investment policy of KGHM Polska Miedź S.A. is based on advancing the Company's five-year investment plan, enabling execution of the long-term production plan.

In 2020 the Company will continue to advance key mining and metallurgical investments, such as:

- The Deposit Access Program (Deep Głogów along with access and development tunnels);
- Development of the Żelazny Most Tailings Storage Facility;
- Investment projects aiding in de-watering in the Polkowice-Sieroszowice mine;
- The program to adapt to the requirements of BAT Conclusions for the non-ferrous metals industry and to restrict emissions of arsenic (BATAs);
- Optimal utilisation of the production capacity of the Legnica Copper Smelter and Refinery by the processing of scrap;
- Investment projects related to replacing equipment and optimisation at the Głogów I Copper Smelter/Refinery.

In addition, with respect to development of the resource base, the Company will conduct further exploration and geological work under the existing concessions to search for and explore copper ore deposits in areas directly adjacent to those currently in operation.

The directions adopted also include the advancement of actions under the circular economy concept. Additionally the Company will engage in unceasing work on new, intelligent technologies and production management systems, based on online communication between elements of the production process and advanced data analysis, in accordance with the KGHM 4.0 Program concept.

The Company is also intensifying actions aimed at improving energy efficiency through investments in its own generating capacity, in particular those which have little to no emissions. Also under review are the possibilities for investing in energy projects, for example in the area of photovoltaics. Pursuant to the Strategy of the KGHM Group for the years 2019-23 published in 2018, it is expected that by the year 2030, 50% of KGHM Polska Miedź S.A.'s demand for electricity will be met by its own sources of energy generation and renewable energy sources.

## 5.2. ADVANCEMENT OF THE STRATEGY IN 2019

In advancing the Strategy, the Company endeavoured to maintain stable production in its domestic and international assets, and a level of costs guaranteeing financial security while ensuring safe working conditions and minimising its impact on the environment and surroundings, pursuant to the idea of sustainable development.

Following are the key achievements in 2019 with respect to strategic programs and projects being advanced under individual areas of the Strategy:

*Strategic area/ Programs and projects*

*Degree of advancement*

### PRODUCTION

#### **Selected actions aimed at improving the efficiency of the core production line in Poland**

The advancement of projects aimed at automatization of production in the Mining Divisions of KGHM, under the KGHM 4.0 program in the area INDUSTRY, was continued:

- „The placement and identification of machinery and persons in underground mines” (pilot version and proof of proper functioning).
- „Broad-band data transmission in underground mines”.
- „Monitoring of utilities - power, ventilation, water”.
- „Robotisation of production and auxiliary processes” (construction of a CuXRF robot for scanning for copper content at the working faces in the mines) – the detailed technical scope of the project was developed.
- „Centre of Advanced Data Analysis (Centrum Zaawansowanych Analiz Danych - CZAD)”.
- Work was also carried out on the project "Monitoring of mining vehicle parameters – continuation of the SYNAPSA project" – The functionality on mobile equipment of basic reporting of monitoring-generated data was tested. In 2019, 55 new machines equipped with monitoring were put into service, used to analyse the efficiency of the processes of ore loading and haulage, drilling and bolting. More than 200 machines in the mines are equipped with monitoring;
- To achieve savings through the acquisition of freely-granted energy efficiency certificates, in-depth energy efficiency audits were performed in respect of 9 activities which meet the requirements of the energy

	<p>efficiency law. In 2020, subsequent energy efficiency audits are planned.</p> <ul style="list-style-type: none"> <li>- In accordance with the implemented, PN-EN ISO50001:2012-compliant Energy Management System and with the Energy Savings Program (ESP), the Company continued to advance tasks aimed at reducing energy consumption. During the reporting period, tasks related to energy and savings were carried out in the Divisions of KGHM, as a result of which energy savings amounted to 3890 MWh. The energy savings planned for 2020 are around 1500 MWh.</li> </ul>
<p><b>Sierra Gorda mine in Chile - Phase 1</b> (KGHM INTERNATIONAL LTD. Group 55%, Sumitomo Metal Mining and Sumitomo Corporation 45%)</p>	<ul style="list-style-type: none"> <li>- In 2019, production of payable copper amounted to 59.5 thousand tonnes, and production of molybdenum 11.2 million pounds (based on the 55% interest held by KGHM Polska Miedź S.A. in the Sierra Gorda mine).</li> <li>- In 2019, the Sierra Gorda mine, in cooperation with representatives of KGHM Polska Miedź S.A., Sumitomo Metal Mining and Sumitomo Corporation, focused on preparing an Integrated Plan, which will comprise a new scope of work, schedule and costs involving optimisation of the production process and increasing sulphide ore throughput. The final results of this work will be known in the first half of 2020.</li> </ul>
<p><b>Pyrometallurgy Modernisation Program at the Głogów I Copper Smelter and Refinery</b></p>	<ul style="list-style-type: none"> <li>- The flash furnace of the Głogów I Copper Smelter and Refinery is operating in accordance with the present production plan. The project is at the conclusion stage.</li> </ul>
<p><b>Metallurgy Development Program</b></p>	<ul style="list-style-type: none"> <li>- In 2019, the steam drier and the concentrate roasting installation were brought on-line. Basic work was completed under projects related to adapting technical infrastructure to the changes in smelting technology at the Głogów I Copper Smelter and Refinery. The process of concluding the project commenced.</li> </ul>
<p><b>Increasing cathode production at the Legnica Copper Smelter and Refinery to 160 kt/year</b></p>	<p>Revolving-Casting-Refining (RCR) Furnace</p> <ul style="list-style-type: none"> <li>- In 2019, an RCR furnace was built and brought on-line at the Legnica Copper Smelter and Refinery with associated installations. Guarantee testing of the RCR furnace, Casting carousel and the Full Evaporation Tower with deduster was conducted with a positive result, and guarantee parameters were obtained. A scrap storage facility was constructed, thereby increasing scrap storage capacity by approx. 1500 tonnes of material.</li> </ul> <p>Permanent starter sheet technology</p> <ul style="list-style-type: none"> <li>- In 2019, an economic feasibility study was carried out on the possibility of implementing new technology based on permanent starter sheets for the production of electrolytic copper at the Legnica Copper Smelter and Refinery with capacity of 120 thousand tonnes of copper cathode annually. Assumptions were reviewed and verified and an economic feasibility study was developed along with a sensitivity analysis regarding the conversion to permanent starter sheet technology.</li> </ul>

## DEVELOPMENT

<p><b>Deposit Access Program</b></p>	<p>Construction of the GG-1 shaft</p> <ul style="list-style-type: none"> <li>- The injection process was completed and sinking of the shaft reached a depth of 1099.3 m. Completion of the sinking of the shaft using tubing technology is planned by the end of the first quarter of 2020.</li> </ul> <p>Construction of the GG-2 „Odra” shaft</p> <ul style="list-style-type: none"> <li>- An Area Planning Concept for the GG-2 „Odra” shaft was developed. Procedures were carried out related to the amendment of planning documentation (Study on Spatial Development Conditions and Directions and Local Zoning Plan) with a planned publication date of 15 February 2021. The inventorisation of buildings in the villages of Kamiona and Słone was carried out.</li> </ul> <p>Access and development tunnels</p> <ul style="list-style-type: none"> <li>- 48.1 kilometers of tunneling were excavated (versus a planned 46.6 km) along with added infrastructure in the Rudna and Polkowice-Sieroszowice mines.</li> <li>- Progress on the excavation of tunnels in the main directions towards the GG-1 shaft, as compared to the yearly plan, amounts to 97% (for directions D-1,2,3,4) and 95.3% (for directions T,W-169).</li> </ul> <p>Surface-based Central Air Conditioning System (SCA)</p> <ul style="list-style-type: none"> <li>- Construction continued on the SCA at the GG-1 shaft. Assembly of the hall's steel elements was completed along with construction of the power building.</li> <li>- Cooling aggregates were delivered to the construction site: compressors, absorbers.</li> <li>- 90% of the cooling tower's supporting structure was assembled.</li> </ul> <p>Ice Water Transportation System (IWTS)</p> <ul style="list-style-type: none"> <li>- Construction-mining work in feeder unit no. 1 was completed.</li> <li>- 95% of drilling of technical openings TK-5 and TK-6 was completed. Completion of the drilling was planned for 30 January 2020.</li> <li>- 90% of the tri-unit feeder was assembled.</li> <li>- 15% of the surface-based piping was laid.</li> </ul>
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<b>Development of the Żelazny Most Tailings Storage Facility</b>	<p>Construction of the Southern Quarter</p> <ul style="list-style-type: none"> <li>- Based on the current building permits, work continued on construction of the Southern Quarter. Commencement of the consecutive storage of tailings is planned for March 2021, and completion of construction by June 2022.</li> </ul> <p>Construction of the Tailings Segregation and Thickening Station (TSTS)</p> <ul style="list-style-type: none"> <li>- The TSTS project was advanced in that part related to hydrocyclone technology, with 70% of that part related to thickening technology being completed.</li> <li>- The foundations and technical hall of the TSTS were built along with 97% of the power building using reinforced concrete.</li> <li>- Construction was carried out involving architecture and internal installations for the hall and power building, as well as on the installation of power lines. Technological equipment for the TSTS was purchased.</li> </ul>
<b>Exploration projects in Poland</b>	<p>Concessions to explore for Retków-Ścinawa and Głogów and evaluate copper ore deposits</p> <ul style="list-style-type: none"> <li>- Work continued on advancing stage 2 of exploration and evaluation work within the Retków-Ścinawa concession. In 2019, two surface-based drillholes were sunk and the drilling of a third commenced. In 2020, continuation of drilling is planned to continue.</li> <li>- In the first quarter of 2019, a decision was received from the Ministry of the Environment altering the Głogów concession, extending it by another three years. Further planned work within the Głogów concession involves the sinking of additional drillholes.</li> </ul> <p>Synklina Grodziecka and Konrad</p> <ul style="list-style-type: none"> <li>- Hydrogeological research continued on the terrain of the Synklina Grodziecka and Konrad concessions, which will continue to the end of August 2020.</li> </ul> <p>Bytom-Odrzański, Kulów-Luboszyce</p> <ul style="list-style-type: none"> <li>- Concession-related proceedings are underway before the Minister of Climate. The Company expects a re-assessment of the submitted concession applications and the issuance of decisions.</li> </ul>
Other concessions	<p>Puck region</p> <ul style="list-style-type: none"> <li>- In 2019, work on the terrain of the concession for the potassium-magnesium salts deposit in the Puck region involved the sinking of another drillhole, and a decision amending the concession was received, extending it to 2025. In 2020 further work and geological tasks are planned.</li> </ul> <p>Nowe Miasteczko</p> <ul style="list-style-type: none"> <li>- In 2019, a concession was received to search for and explore deposits of oil and natural gas in the region of Nowe Miasteczko, which became final in December 2019.</li> </ul>
<b>Projects involving development of the international assets</b>	<p>Victoria project</p> <ul style="list-style-type: none"> <li>- In 2019, work continued on securing existing infrastructure and project terrain, as well as preparatory work aimed at conducting additional exploratory work and work related to an application to obtain the required environmental permits.</li> <li>- In June 2019, the Canadian Environmental Assessment Agency decided that it was unnecessary to conduct an environmental assessment at the federal level, which means a positive conclusion to the process of obtaining an environmental permit. The Agency stated that the project's environmental impact was properly described in the project description, and that the methods applied in the project for restricting its impact are in compliance with law in force. The Agency's decision is a milestone in the development of the Victoria project.</li> </ul> <p>Ajax project</p> <ul style="list-style-type: none"> <li>- As a result of the negative decisions received from the Government of Canada and the provincial authorities of British Columbia against the granting of an Environmental Assessment Certificate for the Ajax project, in 2019 only necessary work related to securing existing infrastructure and required monitoring of the terrain was carried out.</li> <li>- A strategy for further action in respect of the Ajax project was defined, foreseeing the commencement of the process of re-engaging with its stakeholders, aimed at improving relations with First Nations and the local community. Under this strategy, talks were held with First Nations representatives, among others during meetings between representatives of First Nations in the Kamloops region (Canada) and representatives of the Management Board of KGHM Polska Miedź S.A. in Poland in December 2019.</li> </ul> <p>Sierra Gorda Oxide</p> <ul style="list-style-type: none"> <li>- Work continued aimed at preparing the project for realisation. This work included verifying the block model for the heaped oxide ore which has already been extracted from the mine and deposited at storage sites. Required changes for updating the project's environmental permits were reviewed. Additional work was carried out aimed at more precisely defining the technical solutions for the heaped ore's crushing and transport operations. Tests involving the leaching of the crushed ore in columns were completed and required analysis began of the post-leaching material, aimed at developing a final report.</li> </ul>

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**INNOVATION**


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**CuBR program**

Under the CuBR venture, co-financed by the National Centre for Research and Development (NCRD), R&D projects having a total value of around PLN 150 million which were selected in the four editions of the competition are being advanced.

- In 2019, 8 projects were completed.
  - 4 projects were commenced under the 4th edition of the CuBR competition, which involve subjects related to the Circular Economy concept.
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**Selected R&D initiatives**

In the first half of 2019, the Company and PGE S.A. signed an agreement on cooperation involving research with a scientific consortium under the direction of the Cardinal Stefan Wyszyński University in Warsaw. The goal of this cooperation is to build a Multi-disciplinary Research Center, aimed at developing new technology leading to development of the industrial and power sectors in Poland.

In 2019, work continued on advancing the first edition of the Implementation Doctorates Program and university recruitment was concluded under the second edition of the Implementation Doctorates Program for employees of KGHM. At the end of 2019, 50 doctoral students from the two editions participated in the Implementation Doctorates Program for employees of KGHM.

Under the KGHM 4.0 Program, projects such as those developing information technology required to collect and transfer knowledge within the KGHM Group are being advanced on schedule. The process of digitalising and modern archiving of knowledge resources at the head office of KGHM was begun. Actions were taken with respect to building and implementing a workflow system for R&D processes.

Work was completed on the construction of a battery-powered, prototype vehicle with an electric motor and, designed for the transport of people and materials in the underground mines of KGHM. The vehicle was subjected to surface testing at the Tailings Division.

Projects subsidised under **KIC Raw Materials**:

- In the first quarter of 2019, advancement of the project „Automated Microscope System for Analysing Deposits” (acronym AMCO) was completed. As a result, a prototype optical microscope system was built to enable the rapid identification of minerals.
- The project „Utrzymanie Kopalni i Sprzętu” (acronym MaMMA - Maintained Mine & Machine) was continued. The goal of the project is to build a management processes support system to maintain mine operations and mine machinery.
- In the first quarter of 2019, work commenced on the project OPMO „Monitoring pracy maszyn do kruszenia minerałów” (Operation monitoring of mineral crushing machinery), under which it is planned to build and test a pilot version of a new generation system for monitoring screening equipment in the concentrator division.
- As a result of selection to the KIC Raw Materials KAVA 6 program carried out in February 2019, three research projects were subsidised:
  - RevRis – related to the recultivation of post-industrial terrain.
  - Batterflai – related to the development of environmentally-friendly flotation reagents.
  - AMICOS – related to the development of an automated infrastructure and industrial facility inspection system.

Advancement of these projects commenced in the first quarter of 2020.

Project applications were prepared for the KAVA KIC 7 competition – under which 6 research projects were announced in the first quarter of 2020.

Projects subsidized under the **Horizon 2020 Program**:

- In the first quarter of 2019, the project „Integrated innovative metallurgical system to efficiently enrich polymetallic, complex and low-grade ores and concentrates” (acronym INTMET) was completed. Under this project, based on trials in the divisions of KGHM, semi-industrial tests of atmospheric, pressure-related and biological leaching were performed, as well as attempts to recover useful minerals from flotation tailings, among others.
- The project „FineFuture” continued, which foresees research into improving mineral particulate flotation.
- Financing was obtained for the project „illuMINEaction”, related to the integration of systems used in monitoring the condition of the Żelazny Most Tailings Storage Facility based on artificial intelligence and machine learning. Commencement of the project is planned in the first half of 2020.

**Intellectual property**

- The European patent EP2873475 "Method of manufacturing wires of Cu-Ag alloys" was validated, in respect of which KGHM Polska Miedź S.A. is a co-proprietor, under the CuBR project.
- Protection was received for the word and figurative KGHM trademark in Canada.
- Protection was received for the word trademark of KGHM by the European Union Intellectual Property Office (EUIPO) on the territory of the entire European Union.
- The international procedure was instituted for the word trademark of KGHM through the World Intellectual Property Organization (WIPO), in the following countries: the USA, India, China, Switzerland, Japan, Turkey and Ukraine.
- The Patent Office of the Republic of Poland granted the Company a patent for invention no. PAT.231928 called „Means for indicating the placement of moveable parts of equipment or objects as well as a unit for indicating the placement of moveable parts of equipment or objects“.
- Rights to patent no. PAT.220230 „Sposób kontroli stateczności warstw stropowych w kopalniach podziemnych, or Means of controlling roof stability in underground mines“ were transferred from KGHM CUPRUM Sp. z o.o. Centrum Badawczo-Rozwojowe to KGHM Polska Miedź S.A.
- A SEPIZ (System Ewidencji Patentów i Znaków, or Patents and Trademarks Recording System) program was created for all of the Group's companies, which enables in particular the monitoring of exclusive rights.
- A CRPW (Centralne Repozytorium Projektów Wynalazczych, or Central Invention Projects Repository) was created, which enables information on invention projects announced in KGHM Polska Miedź S.A. to be archived in electronic form.
- New regulations were implemented in the Company: „Regulamin wynalazczości, or Invention regulations“ and „Ramowe zasady ustalania korzyści z projektów wynalazczych i wdrożeń wyników prac badawczo – rozwojowych, or Framework principles for establishing benefits from invention projects and implementation of the results of R&D work“.
- An „Invention Market“ was held as a means of supporting innovation activities among the employees of KGHM Polska Miedź S.A., being an initiative of one of the main goals of the Strategy in the area of Innovation.

**FINANCIAL STABILITY**

**Basing the KGHM Group's financing on long-term instruments** As a result of changes carried out in the financing structure in 2019, the average weighted maturity of the debt of KGHM Polska Miedź S.A. was extended, thereby advancing the strategic goal of utilising long-term financial instruments. The following events had a significant impact on the financing structure:

- The opening of a renewable credit line under a working capital facility in the amount of USD 450 million under an agreement with the Bank Gospodarstwa Krajowego, concluded for a period of 7 years;
- The drawing of two instalments from the EIB in the amount of USD 65 million and PLN 90 million, with maturity in 2031;
- The issue of bonds, Series A, in the amount of PLN 400 million with a 5-year maturity, and Series B in the amount of PLN 1 600 million with a 10-year maturity;
- The signing of an agreement for an unsecured syndicated credit facility in the amount of USD 1 500 million with a 5-year tenor with the option of extending for another 2 years. The credit facility replaced the current revolving syndicated credit facility in the amount of USD 2 500 million dated 11 July 2014.

**Shortening of the cash conversion cycle**

The Company is engaged in actions aimed at shortening the receivables recovery period and extending the liabilities payment period. The main area of change involved factoring and debt collection instruments. An agreement was signed for reverse factoring with a factoring limit of PLN 750 million. By the end of 2019, liabilities of PLN 596 million were transferred to factoring. An agreement was signed for the utilisation of the debtor registry, in order to minimise the risk of overdue debt arising.

**Effective market and credit risk management in the KGHM Group**

As part of the advancement of the Company's strategic plan to secure against market risk, in 2019 hedging strategies were implemented on the copper market with a total notional amount of 153 thousand tonnes and a maturity period from July 2019 to December 2020 (of which: 135 thousand tonnes was in respect of hedging the copper price for 2020) and on the silver market with a total notional amount of 3.6 million ounces and a maturity period from January 2020 to December 2020. In addition, in 2019 the Company entered into transactions hedging against a change in the USD/PLN exchange rate with a total notional amount of USD 1 560 million and a maturity period from July 2019 to December 2021 (of which: USD 1 380 million was in respect of hedging the exchange rate for the years 2020-2021) as well as CIRS (Cross Currency Interest Rate Swap) transactions with a notional amount of PLN 2 billion, hedging against risk related to the issuance of bonds denominated in PLN with variable interest rates.

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**EFFICIENT ORGANISATION**


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**KGHM 4.0 Program****With respect to ICT projects** (Information and Communication Technologies):

- The following projects were completed: Modernisation of the Central Internet Unit, Modernisation of Communications, Removing work stations with unsupported operating systems, Implementation of services-oriented architecture (SOA), Implementation of an ECM/BPM-class system, Development of network engineering, analysis and management systems and access control in an edge computing network, Implementation of a Data Loss Prevention (DLP) System, Monitoring of goods in transit.
- With respect to the CRM (client relationship management) project – the first stage of implementation of the business concept was delivered – 61 of the planned 63 system functionalities have been delivered.

## With respect to Industry projects (industrial production):

- Work commenced aimed at the implementation of BigData with respect to industrial automation.
- Work is underway on integrating industrial programming with respect to the processing and metallurgical plants.
- The first data was imported from the transmission systems of the Głogów Copper Smelter and Refinery aimed at supporting the efficiency of the production processes.
- Under the project „Broadband transmission of data in underground mines” – at the Lubin mine the entire scope of work planned for 2019 was carried out. At the Rudna mine the second stage of work was completed, data transmission equipment was built. At the Polkowice-Sieroszowice mine a decision was made to cancel work in the G-63 section due to a water hazard.

## With respect to supporting projects:

- An IT system was implemented at the Company's Head Office for supporting procurement.
  - Work on the project Management System Project II was completed.
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**PEOPLE AND THE ENVIRONMENT**
**Program to adapt the technological installations of KGHM to the requirements of BAT Conclusions for the nonferrous metals industry and to restrict emissions of arsenic (BATAs)**

In 2019, under the BATAs Program, 22 projects were advanced (16 in the Głogów Copper Smelter and Refinery and 6 in the Legnica Copper Smelter and Refinery). As a result of preparatory work conducted under these projects, the decision was made to exclude six projects from the BATAs Program.

In 2019, in the Głogów Copper Smelter and Refinery work was completed involving the sealing of conveyor belts and belt pulling stations for carrying copper concentrate, and construction of a gas desulphurisation installation for the Kaldo furnace was completed.

At the Legnica Copper Smelter and Refinery, the modernised dedusting unit for three filters behind the shaft furnaces was brought on-line. In other projects, all planned agreements were signed for turn-key realisation and for the delivery of key equipment. In the case of most of the projects, work involving the preparation of opinions in respect of projects plans was either completed or is underway, and dismantling and re-assembly commenced. The process of receiving administrative decisions is underway.

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**Program to Improve Occupational Health and Safety in KGHM Polska Miedź S.A.**

In 2019, in terms of the new strategy and current conditions in the Company, initiatives implemented under the previous planning outlook of the Occupational Health and Safety Program in all of its areas were reviewed and redefined: education, health and behaviour. In the second half of 2019, selected initiatives of the Occupational Health and Safety Program in KGHM Polska Miedź S.A. were implemented and a concept for implementing the new OHS ISO 45001:2018 standard was prepared.

In the Company's Divisions a unified plan for communicating policies, the vision, mission and the golden principles of OHS was implemented, and the system for controlling access to/egress from Company terrain and individual areas of the plants was unified. To increase employee awareness of workplace threats, instructional films and reconstruction of accidents were issued, along with iconographics and numerous articles involving industrial hygiene. The anti-collision system for supporting mining vehicle operators was developed, increasing the safety of persons working outside of mining machinery, and R&D work aimed at enhancing OHS in the Company was prepared.

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## 6. ECONOMIC PERFORMANCE OF THE GROUP



### 6.1. PRODUCTION

Production of payable copper by the Group (reflecting the 55% interest in Sierra Gorda) amounted to 702 thousand tonnes, or one of the highest annual production results in the last ten years. The increase in the Group's production compared to 2018 by 11% was due to the segment KGHM Polska Miedź S.A. as a result of its higher availability of production lines, including that of the concentrate roasting installation, and to Sierra Gorda S.C.M. as a result of higher extraction and processing of higher copper-grade ore. On the other hand, geological conditions (lower copper content in ore mined in the Sudbury Basin and in the Franke mine) were the main reasons for the decrease in production by the segment KGHM INTERNATIONAL LTD.

Detailed information on production results may be found in the sections dedicated to individual segments. The Group's production is shown below.

Table 3. Production in the Group

	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
<b>Payable copper (kt)</b>							
<b>Group</b>	<b>701.6</b>	<b>633.9</b>	<b>+10.7</b>	<b>172.0</b>	<b>177.7</b>	<b>179.1</b>	<b>172.7</b>
- KGHM Polska Miedź S.A.	565.6	501.8	+12.7	138.0	141.0	144.9	141.7
- KGHM INTERNATIONAL LTD.	76.5	78.8	(2.9)	19.0	21.5	19.7	16.3
- Sierra Gorda S.C.M. <sup>(1)</sup>	59.5	53.3	+11.6	15.1	15.2	14.5	14.7
<b>TPM – precious metals (koz t)</b>							
<b>Group</b>	<b>220.1</b>	<b>174.0</b>	<b>+26.5</b>	<b>63.1</b>	<b>53.1</b>	<b>58.9</b>	<b>45.1</b>
- KGHM Polska Miedź S.A.	103.7	83.2	+24.6	32.3	20.8	30.8	19.8
- KGHM INTERNATIONAL LTD.	85.2	67.6	+26.0	22.3	24.0	21.0	17.9
- Sierra Gorda S.C.M. <sup>(1)</sup>	31.2	23.2	+34.5	8.4	8.3	7.1	7.4
<b>Silver (t)</b>							
<b>Group</b>	<b>1 417.2</b>	<b>1 204.9</b>	<b>+17.6</b>	<b>386.7</b>	<b>317.7</b>	<b>387.6</b>	<b>325.3</b>
- KGHM Polska Miedź S.A.	1 400.2	1 188.8	+17.8	382.3	313.3	383.6	321.0
- KGHM INTERNATIONAL LTD.	2.4	1.6	+50.0	0.6	0.6	0.5	0.7
- Sierra Gorda S.C.M. <sup>(1)</sup>	14.6	14.5	+0.7	3.7	3.8	3.5	3.6
<b>Molybdenum (mn lbs)</b>							
<b>Group</b>	<b>12.0</b>	<b>15.3</b>	<b>(21.6)</b>	<b>3.1</b>	<b>2.6</b>	<b>3.0</b>	<b>3.2</b>
- KGHM Polska Miedź S.A.	-	-	x	-	-	-	-
- KGHM INTERNATIONAL LTD.	0.8	0.6	+33.3	0.2	0.1	0.3	0.2
- Sierra Gorda S.C.M. <sup>(1)</sup>	11.2	14.7	(23.8)	3.0	2.5	2.7	3.0

<sup>1)</sup> 55% share of the Group

## 6.2. STRUCTURE OF CONSOLIDATED SALES REVENUE

The geographic and product structure of the consolidated sales revenue of the Group are presented in the following charts. In accordance with the adopted principle of consolidation by the equity method, sales revenue do not include revenues of the segment Sierra Gorda S.C.M. Detailed information on segment sales is presented in the sections devoted to the results of individual segments.

Chart 16. Geographic structure of Group sales

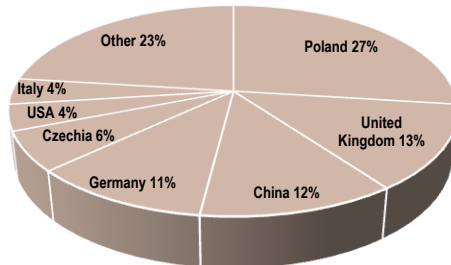
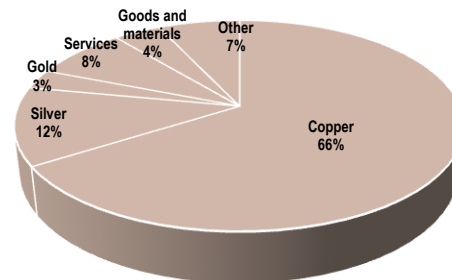


Chart 17. Product structure of Group sales



## 6.3. C1 COST IN THE GROUP

Unit costs by Group segments are presented in the table below. Detailed descriptions of individual items are presented in the sections devoted to individual segments.

Table 4. C1 cost of producing copper in concentrate in the Group (USD/lb)

	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
<b>Group</b>	<b>1.70</b>	<b>1.81</b>	<b>(6.1)</b>	<b>1.75</b>	<b>1.52</b>	<b>1.79</b>	<b>1.74</b>
- KGHM Polska Miedź S.A.	1.74	1.85	(5.9)	1.83	1.53	1.85	1.76
- KGHM INTERNATIONAL LTD.	1.74	1.92	(9.4)	1.60	1.74	1.69	1.95
- Sierra Gorda S.C.M.	1.41	1.31	+7.6	1.47	1.25	1.58	1.34

## 6.4. FINANCIAL RESULTS

### STATEMENT OF PROFIT OR LOSS

Table 5. Financial results of the Group (in PLN million)

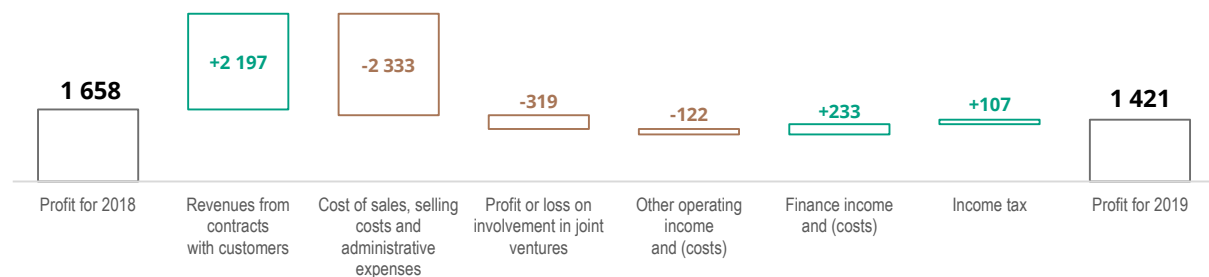
	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Revenues from contracts with customers	22 723	20 526	+10.7	5 854	5 641	5 740	5 488
Cost of sales, selling costs and administrative expenses	(20 268)	(17 935)	+13.0	(5 627)	(4 818)	(5 074)	(4 749)
<b>Profit on sales</b>	<b>2 455</b>	<b>2 591</b>	<b>(5.2)</b>	<b>227</b>	<b>823</b>	<b>666</b>	<b>739</b>
Profit or loss on involvement in joint ventures	9	328	(97.3)	(77)	(17)	21	82
Other operating income and (costs)	186	308	(39.6)	(564)	720	(167)	197
Finance income / (costs)	(528)	(761)	(30.6)	112	(554)	94	(180)
<b>Profit/loss before income tax</b>	<b>2 122</b>	<b>2 466</b>	<b>(13.9)</b>	<b>(302)</b>	<b>972</b>	<b>614</b>	<b>838</b>
Income tax expense	(701)	(808)	(13.2)	57	(276)	(196)	(286)
<b>Profit/loss for the period</b>	<b>1 421</b>	<b>1 658</b>	<b>(14.3)</b>	<b>(245)</b>	<b>696</b>	<b>418</b>	<b>552</b>
<b>Adjusted EBITDA<sup>(1)</sup></b>	<b>5 229</b>	<b>4 972</b>	<b>+5.2</b>	<b>1 117</b>	<b>1 380</b>	<b>1 278</b>	<b>1 454</b>

<sup>1)</sup> Adjusted EBITDA = profit on sales + depreciation/amortisation (recognised in profit or loss) + impairment loss (-reversal of impairment losses) on non-current assets recognised in cost of sales, selling costs and administrative expenses) according to part 2 of the consolidated financial statements - together with Sierra Gorda S.C.M.

Table 6. Main factors impacting the change in profit or loss of the Group

Item	Impact on change of profit or loss (in PLN million)	Description
<b>Revenues from contracts with customers</b>	+2 197	An increase in revenues mainly due to an increase in revenues of KGHM Polska Miedź S.A. (+ PLN 1 926 million) and KGHM INTERNATIONAL LTD. (+PLN 228 million). Detailed reasons for the change in revenues in both of the aforementioned segments are described in sections 7 and 8 of this report.
<b>Cost of sales, selling costs and administrative expenses</b>	(2 333)	The increase in costs in the consolidated result was mainly comprised of higher costs in KGHM Polska Miedź S.A. (by PLN 1 831 million) and higher costs in KGHM INTERNATIONAL LTD. (by PLN 170 million), described in greater detail in sections 7 and 8 of this report.
<b>Profit or loss on involvement in joint ventures</b>	(319)	The change in profit/loss on involvement in joint ventures from PLN 328 million to PLN 9 million was due to: <ul style="list-style-type: none"> <li>- a decrease in gains due to reversal of allowances for impairment of loans granted to joint ventures by PLN 627 million</li> <li>- a lower share of losses of joint ventures accounted for using the equity method by PLN 224 million,</li> <li>- higher interest income on loans granted to joint ventures by PLN 84 million,</li> </ul>
<b>Other operating income and (costs)</b>	(122)	The decrease in the result on other operating activities from PLN 308 million to PLN 186 million was mainly due to: <ul style="list-style-type: none"> <li>- lower foreign exchange gains on the measurement of assets and liabilities other than borrowings by PLN 422 million,</li> <li>- a higher result on the recognition and reversal of losses due to impairment of fixed assets under construction and intangible assets not yet available for use by PLN 207 million,</li> <li>- a lower negative balance of provisions recognised and released by PLN 69 million.</li> </ul>
<b>Finance income/(costs)</b>	+233	The change in finance income and costs from -PLN 761 million to -PLN 528 million was mainly due to: <ul style="list-style-type: none"> <li>- lower foreign exchange losses on the measurement and realisation of borrowings by PLN 385 million,</li> <li>- higher interest costs on borrowings by PLN 97 million,</li> <li>- a lower result on the measurement and realisation of derivatives by PLN 33 million.</li> </ul>
<b>Income tax</b>	+107	The lower tax expense results from lower profit before income tax as well as a negative adjustment of tax for prior years in the amount of PLN 160 million in 2019.

Chart 18. Change in profit/loss for the period in 2019 (in PLN million)



**CASH FLOW**

Table 7. Cash flow of the Group (in PLN million)

	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Profit or loss before income tax	2 122	2 466	(13.9)	(302)	972	614	838
Depreciation/amortisation recognised in profit or loss	1 920	1 796	+6.9	562	437	468	453
Share of losses of joint ventures accounted for using the equity method	438	662	(33.8)	269	106	63	-
Gains due to the reversal of allowances for impairment of loans granted to joint ventures	(106)	(733)	(85.5)	(106)	-	-	-
Interest on loans granted to joint ventures	(341)	(257)	+32.7	(86)	(89)	(84)	(82)
Other interest	244	109	×2.2	138	7	52	47
Impairment losses on non-current assets	51	69	(26.1)	51	-	-	-
Exchange differences	184	(36)	×	294	(157)	103	(56)
Change in provisions and employee benefits liabilities	114	244	(53.3)	137	37	(68)	8
Change in other receivables and liabilities	(176)	20	×	171	(57)	(218)	(72)
Change in derivatives	(31)	(121)	(74.4)	(33)	52	(31)	(19)
Other adjustments	(84)	42	×	(29)	(55)	(2)	2
Exclusions of income and costs, total	2 213	1 795	+23.3	1 368	281	283	281
Income tax paid	(410)	(802)	(48.9)	(76)	(77)	(191)	(66)
Change in working capital	1 123	367	×3.1	1 567	(299)	373	(518)
<b>Net cash generated from operating activities</b>	<b>5 048</b>	<b>3 826</b>	<b>+31.9</b>	<b>2 557</b>	<b>877</b>	<b>1 079</b>	<b>535</b>
Expenditures on mining and metallurgical property, plant and equipment and intangible assets	(2 872)	(2 609)	+10.1	(807)	(649)	(691)	(725)
Expenditures on other property, plant and equipment and intangible assets	(360)	(266)	+35.3	(111)	(61)	(58)	(130)
Expenditures on financial assets designated for mine decommissioning and other technological facilities	(293)	(26)	×11.3	(1)	-	(203)	(89)
Acquisition of newly - issued shares of joint ventures	(439)	(666)	(34.1)	(267)	(109)	(63)	-
Proceeds from financial assets designated for mine decommissioning and other technological facilities	335	9	×37.2	67	-	202	66
Other	(14)	19	×	(6)	(3)	(6)	1
<b>Net cash used in investing activities</b>	<b>(3 643)</b>	<b>(3 539)</b>	<b>+2.9</b>	<b>(1 125)</b>	<b>(822)</b>	<b>(819)</b>	<b>(877)</b>
Proceeds from borrowings	4 730	2 276	×2.1	333	972	280	3 145
Proceeds from the issue of debt financial instruments	2 000	-	×	-	-	2 000	-
Repayments of borrowings	(7 746)	(2 100)	×3.7	(1 364)	(1 358)	(1 957)	(3 067)
Repayment of lease liabilities	(52)	(10)	×5.2	(9)	(19)	(16)	(8)
Interest paid on borrowings	(239)	(119)	×2.0	(122)	(9)	(54)	(54)
Other	(1)	19	×	(7)	5	1	-
<b>Net cash generated from/(used in) financing activities</b>	<b>(1 308)</b>	<b>66</b>	<b>×</b>	<b>(1 169)</b>	<b>(409)</b>	<b>254</b>	<b>16</b>
<b>TOTAL NET CASH FLOW</b>	<b>97</b>	<b>353</b>	<b>(72.5)</b>	<b>263</b>	<b>(354)</b>	<b>514</b>	<b>(326)</b>
Exchange differences	(38)	18	×	5	(4)	2	(41)
Cash and cash equivalents at beginning of the period	957	586	+63.3	748	1 106	590	957
<b>Cash and cash equivalents at end of the period</b>	<b>1 016</b>	<b>957</b>	<b>+6.2</b>	<b>1 016</b>	<b>748</b>	<b>1 106</b>	<b>590</b>

Net cash generated from operating activities in 2019 amounted to PLN 5 048 million and was mainly comprised of profit before income tax of PLN 2 122 million, increased by adjusted depreciation/amortisation in the amount of PLN 1 920 million, the change in working capital in the amount of PLN 1 123 million and the adjustment in share of losses of joint ventures accounted for using the equity method of PLN 438 million. Cash generated from operating activities was mainly decreased by interest on loans granted to joint ventures of -PLN 341 million, the change in other receivables and liabilities of -PLN 176 million and income tax paid in the amount of -PLN 410 million.

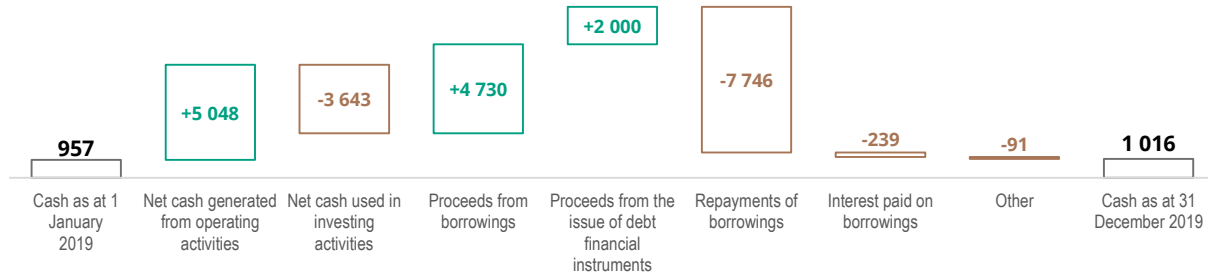
Net cash used in investing activities in 2019 amounted to -PLN 3 643 million and mainly comprised expenditures on property, plant and equipment and intangible assets in the amount of PLN 3 232 million, expenditures on the acquisition of newly-issued shares of joint ventures in the amount of PLN 439 million and expenditures on financial assets designated for mine decommissioning and other technological facilities in the amount of PLN 293 million. Proceeds from investing activities were mainly derived from proceeds from financial assets designated for mine decommissioning and other technological facilities in the amount of PLN 335 million.

Net cash used in financing activities in 2019 amounted to -PLN 1 308 million and mainly comprised proceeds from borrowings in the amount of PLN 4 730 million, proceeds from the issue of debt financial instruments of PLN 2 000 million, repayments of borrowings in the amount of PLN 7 746 million and interest paid in the amount of PLN 239 million.

After reflecting exchange differences on cash and cash equivalents, in 2019 cash and cash equivalents increased by PLN 59 million and at 31 December 2019 amounted to PLN 1 016 million.



Chart 19. Cash flow in 2019 (in PLN million)



## ASSETS

Table 8. Consolidated assets (in PLN million)

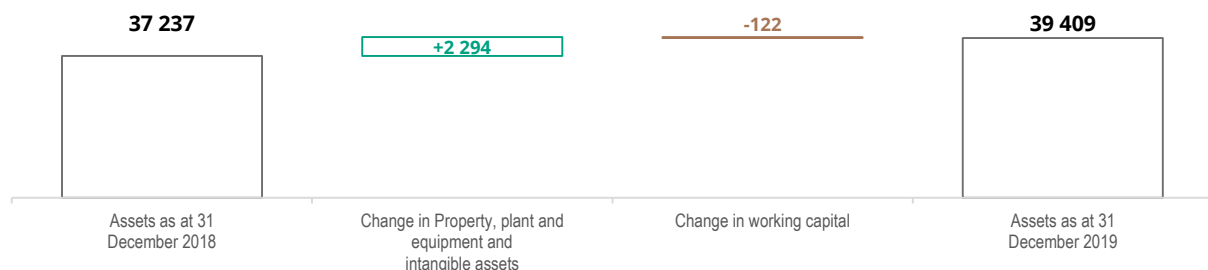
	31.12.2019	31.12.2018	Change (%)	30.09.2019	30.06.2019	31.03.2019
Mining and metallurgical property, plant and equipment	19 498	17 507	+11.4	19 221	18 632	18 126
Mining and metallurgical intangible assets	1 966	1 657	+18.6	1 826	1 715	1 654
Other property, plant and equipment	2 829	2 789	+1.4	2 968	2 945	2 930
Other intangible assets	155	224	(30.8)	155	155	287
Joint ventures accounted for using the equity method	-	4	x	4	4	4
Loans granted to joint ventures	5 694	5 199	+9.5	5 796	5 327	5 389
Derivatives	124	320	(61.3)	162	258	250
Other financial instruments measured at fair value	448	541	(17.2)	428	463	520
Other financial instruments measured at amortised cost	656	716	(8.4)	783	751	757
Deferred tax assets	157	309	(49.2)	236	223	452
Other non-financial assets	142	109	+30.3	115	108	108
<b>Non-current assets</b>	<b>31 669</b>	<b>29 375</b>	<b>+7.8</b>	<b>31 694</b>	<b>30 581</b>	<b>30 477</b>
Inventories	4 741	4 983	(4.9)	5 338	5 277	5 444
Trade receivables	688	799	(13.9)	758	723	1 011
Tax assets	571	417	+36.9	415	288	312
Derivatives	293	301	(2.7)	363	324	140
Other financial assets	280	273	+2.6	457	420	286
Other non-financial assets	151	132	+14.4	326	326	258
Cash and cash equivalents	1 016	957	+6.2	748	1 106	590
<b>Current assets</b>	<b>7 740</b>	<b>7 862</b>	<b>(1.6)</b>	<b>8 405</b>	<b>8 464</b>	<b>8 041</b>
<b>TOTAL ASSETS</b>	<b>39 409</b>	<b>37 237</b>	<b>+5.8</b>	<b>40 099</b>	<b>39 045</b>	<b>38 518</b>

At the end of 2019, total assets in the consolidated statement of financial position amounted to PLN 39 409 million and were higher as compared to 31 December 2018 by PLN 2 172 million.

Non-current assets as at 31 December 2019 amounted to PLN 31 669 million and were higher by PLN 2 294 million compared to the end of 2018. The increase in non-current assets was mainly due to property, plant and equipment and intangible assets by PLN 2 271 million and loans granted to joint ventures assets of PLN 495 million. Compared to the end of 2018, the main decreases were in derivatives, by PLN 196 million and in deferred tax assets by PLN 152 million.

Current assets decreased by PLN 122 million, mainly due to a decrease in the value of inventories by PLN 242 million and in trade receivables by PLN 111 million. Compared to the end of 2018, the main increases were in tax assets by PLN 154 million and cash and cash equivalents by PLN 59 million.

Chart 20. Change in assets in 2019 (in PLN million)



**EQUITY AND LIABILITIES**

Table 9. Consolidated equity and liabilities (in PLN million)

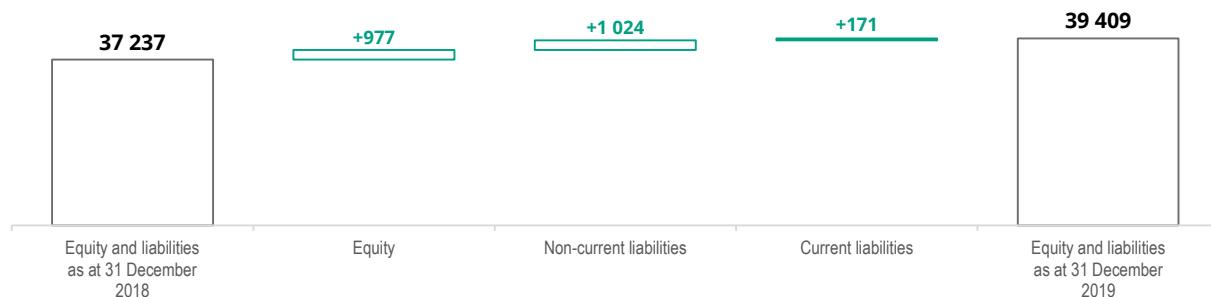
	31.12.2019	31.12.2018	Change (%)	30.09.2019	30.06.2019	31.03.2019
Share capital	2 000	2 000	-	2 000	2 000	2 000
Other reserves from measurement of financial instruments	(738)	(444)	+66.2	(767)	(468)	(682)
Accumulated other comprehensive income other than from measurement of financial instruments	1 954	2 005	(2.5)	1 845	1 897	1 906
Retained earnings	16 894	15 572	+8.5	17 137	16 442	16 124
<b>Equity attributable to shareholders of the Parent Entity</b>	<b>20 110</b>	<b>19 133</b>	<b>+5.1</b>	<b>20 215</b>	<b>19 871</b>	<b>19 348</b>
<b>Equity attributable to non-controlling interest</b>	<b>92</b>	<b>92</b>	<b>-</b>	<b>95</b>	<b>93</b>	<b>93</b>
<b>Equity</b>	<b>20 202</b>	<b>19 225</b>	<b>+5.1</b>	<b>20 310</b>	<b>19 964</b>	<b>19 441</b>
Borrowings and debt securities	7 525	6 878	+9.4	7 795	7 910	6 867
Derivatives	183	162	+13.0	395	127	171
Employee benefits liabilities	2 613	2 447	+6.8	2 573	2 649	2 534
Provisions for decommissioning costs of mines and other facilities	1 774	1 564	+13.4	1 944	1 712	1 593
Deferred tax liabilities	445	498	(10.6)	422	404	587
Other liabilities	631	598	+5.5	623	598	603
<b>Non-current liabilities</b>	<b>13 171</b>	<b>12 147</b>	<b>+8.4</b>	<b>13 752</b>	<b>13 400</b>	<b>12 355</b>
Borrowings and debt securities	348	1 071	(67.5)	1 346	1 050	1 795
Derivatives	91	43	+2.1	66	47	55
Trade and similar payables	2 766	2 053	+34.7	1 656	1 882	1 917
Employee benefits liabilities	1 150	1 044	+10.2	1 124	1 036	891
Tax liabilities	433	349	+24.1	530	453	678
Provisions for liabilities and other charges	222	271	(18.1)	148	162	265
Other liabilities	1 026	1 034	(0.8)	1 167	1 051	1 121
<b>Current liabilities</b>	<b>6 036</b>	<b>5 865</b>	<b>+2.9</b>	<b>6 037</b>	<b>5 681</b>	<b>6 722</b>
<b>Non-current and current liabilities</b>	<b>19 207</b>	<b>18 012</b>	<b>+6.6</b>	<b>19 789</b>	<b>19 081</b>	<b>19 077</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>39 409</b>	<b>37 237</b>	<b>+5.8</b>	<b>40 099</b>	<b>39 045</b>	<b>38 518</b>

Equity as at 31 December 2019 amounted to PLN 20 202 million and was higher by PLN 977 million than at the end of 2018, mainly due to an increase in retained earnings by PLN 1 322 million.

Non-current liabilities of the KGHM Polska Miedź S.A. Group as at 31 December 2019 amounted to PLN 13 171 million and were higher by PLN 1 024 million compared to the end of 2018, mainly due to an increase in liabilities due to non-current borrowings by PLN 647 million, provisions for decommissioning costs of mines and other facilities by PLN 210 million and employee benefits liabilities by PLN 166 million.

Current liabilities of the KGHM Polska Miedź S.A. Group as at 31 December 2019 amounted to PLN 6 036 million and were higher by PLN 171 million compared to the end of 2018, mainly due to an increase in trade and similar payables by PLN 713 million alongside a decrease in borrowings and other sources of financing by PLN 723 million.

Chart 21. Change in equity and liabilities in 2019 (in PLN million)

**CONTINGENT ASSETS AND LIABILITIES DUE TO GUARANTEES GRANTED**

As at 31 December 2019, the Group held contingent assets due to guarantees granted in the amount of PLN 630 million, which mainly related received guarantees for the proper performance of agreements in the amount of PLN 356 million and promissory notes receivables in the amount of PLN 120 million.

As at 31 December 2019 the Group held liabilities due to guarantees and letters of credit in the amount of PLN 2 470 million and promissory notes payables of PLN 144 million.

The most important items are collateral securing liabilities:

Sierra Gorda S.C.M.:

- a letter of credit in the amount of PLN 522 million, granted to secure the obligations due to a long-term contract for the off-take of electricity,
- corporate (financial) guarantees in the amount of PLN 60 million, granted to secure the payments from lease agreements entered into,
- corporate (financial) guarantees in the amount of PLN 803 million securing the repayment of short-term working capital facilities,
- a corporate guarantee in the amount of PLN 627 million, securing repayment of a specified part of payment to guarantees set by Sumitomo Metal Mining Co., Ltd. and Sumitomo Corporation, securing repayment of a corporate loan drawn by the joint venture Sierra Gorda S.C.M.,
- a corporate guarantee in the amount of PLN 34 million, securing claims arising from the obligation to restore post-mining terrain following mine closure.

other Group entities, including the Parent Entity:

- guarantees in the amount of PLN 190 million, securing proper performance by DMC Mining Services (UK) Ltd. and DMC Mining Services Ltd. of a contract for sinking shafts under a project underway in the United Kingdom,
- a guarantee in the amount of PLN 179 million, securing the proper performance of future environmental obligations of the Parent Entity to restore the area, following the conclusion of operations of the Źelazny Most tailings storage facility,
- guarantees and letters of credit in the total amount of PLN 23 million, securing the proper performance of agreements entered into by the Parent Entity and companies in the Group.

## 6.5. 2019 TARGETS VERSUS ACHIEVEMENTS AND TARGETS FOR 2020

KGHM Polska Miedź S.A. does not publish forecasts of financial results. However, in regulatory filings dated 10 January 2019 and 16 January 2020, the Company published its basic Budget targets respectively for 2019 and 2020. Achievement of the targets for 2019 and the targets for 2020 are presented in the table below.

Table 10. 2019 targets versus achievements and targets for 2020

		Execution 2019	Budget 2019	Execution (%)	Budget 2020	Change (%)
<b>KGHM Polska Miedź S.A.</b>						
Production of copper in concentrate	kt	398.9	397.3	+0.4	399.2	+0.1
Production of silver in concentrate	t	1 249	1 238	+0.9	1 448	+15.9
Electrolytic copper production, including:	kt	565.6	559.3	+1.1	563.0	(0.5)
- from own concentrate	kt	418.3	405.7	+3.1	410.3	(1.9)
Metallic silver production	t	1 400	1 341	+4.4	1 432	+2.3
Copper products sales volume	kt	557.0	601.4	(7.4)	565.7	+1.6
- including in concentrate	kt	-	41.4	×	4.9	×
Silver products sales volume	t	1 393	1 454	(4.2)	1 451	+4.2
- including in concentrate	t	-	97	×	14	×
Total unit cost of electrolytic copper production from own concentrate	PLN/t	18 001	20 008	(10.0)	19 297	+7.2
Capital expenditures on property, plant and equipment <sup>(1)</sup>	PLN mn	2 475	2 516	(1.6)	2 250	(9.1)
Other expenditures, including loans <sup>(2)</sup>	PLN mn	485	1 074	(54.8)	133	(72.6)
<b>KGHM INTERNATIONAL LTD.</b>						
Payable copper production	kt	76.5	75.2	+1.7	71.7	(6.3)
TPM production	koz t	85.2	87.7	(2.9)	62.8	(26.3)
<b>Sierra Gorda (55%)</b>						
Payable copper production	kt	59.5	57.1	+4.2	78.7	+32.3
Molybdenum production	mn lbs	11.2	10.6	+5.7	8.8	(21.4)

<sup>(1)</sup> excluding expenditures on development work - uncompleted

<sup>(2)</sup> acquisition of shares and investment certificates of subsidiaries and loans granted, excluding the purchase of investment certificates related to restructurisation of FIZAN funds in 2019

## ACHIEVEMENT OF TARGETS IN 2019

In 2019, production of electrolytic copper by the Company was 6.3 thousand tonnes of copper (+1%) higher than the target in the 2019 Budget, with higher production from own concentrate by 12.6 thousand tonnes and lower production from purchased metal-bearing materials by 6.3 thousand tonnes. Silver production was however higher, by 59 tonnes (+4%).

Sales of both copper and silver were lower than planned, mainly due to the decision not to sell own concentrate and to build-up inventories of goods at the end of 2019.

The total unit cost of electrolytic copper production from own concentrate was lower than planned by 10%, mainly due to the valuation of anode slimes, in which the silver content in own concentrate was higher than planned.

Capital expenditures on property, plant and equipment in 2019 amounted to PLN 41 million (-2%) lower than planned, mainly due to deferment of the investment schedule, while other expenditures were lower by PLN 589 million (-55%), mainly due to the lower level of financing provided to the international assets as a result of an improvement in the condition of Sierra Gorda.

Production of payable copper by KGHM INTERNATIONAL LTD. was higher than assumed in the Budget by 1.3 thousand tonnes (+2%) due to higher production by the Robinson and Carlota mines. Meanwhile, the production of precious metals was lower by 2.5 thousand troy ounces (-3%) as compared to the amount assumed in the Budget which was due to the lower production of these metals in the mines of the Sudbury Basin (among others due to deterioration of geological-mining conditions).

Sierra Gorda ended 2019 with payable copper production of 2.4 thousand tonnes (+4%) higher than planned in the Budget, mainly due to an increase in the volume of ore processed compared to targets, higher Cu content in ore and higher recovery.

## TARGETS FOR 2020

**Production** – higher planned copper production in 2020 by 2% (sum of segments), of which:

- KGHM Polska Miedź S.A. – production at a similar level to that achieved in 2019 (-2.6 thousand tonnes, or -0.5%),
- KGHM INTERNATIONAL LTD. – lower copper production by 4.8 thousand tonnes (-6%) due to geological conditions (copper grade),
- Sierra Gorda – higher production by 19.2 thousand tonnes (+32%) compared to 2019, mainly due to a planned increase in ore processing and a higher copper grade in mined zones in 2020.

**Sales** of KGHM Polska Miedź S.A. – copper sales higher by 8.7 thousand tonnes (+2%), due to higher production and additional sales of copper in concentrate (+4.9 thousand tonnes).

**Total unit cost of electrolytic copper production** from own concentrate (KGHM Polska Miedź S.A.) – a planned increase by 7%, mainly due to an increase in expenses by nature, including mainly fuel, energy factors, labour costs and depreciation/amortisation.

**Investments** – lower capital expenditures in KGHM Polska Miedź S.A. by PLN 225 million (-9%) due to a lower scope of material investments. The Budget for Sierra Gorda for 2020 reflects updated expenditures to increase processing capacity to 130/140 thousand tonnes of ore per day in subsequent years.

## 6.6. FINANCING IN THE GROUP

The Group manages its financial resources based on the approved Financial Liquidity Management Policy in the KGHM Group. Its primary goal is to ensure continuous operations by securing the availability of funds required to achieve the Group's business goals, while optimising incurred costs. Moreover, the Policy regulates the Group's borrowing principles, the principles of managing debt and for monitoring the level of the Group's debt, and provides for the centralisation of borrowing at the level of the Parent Entity. Financial liquidity management involves securing an appropriate amount of cash and available lines of credit in the short, medium and long term.

### NET DEBT IN THE GROUP

Liabilities due to borrowings of the Group at the end of 2019 amounted to PLN 7 873 million and decreased as compared to the end of 2018. There was also a change in the structure of debt, among others due to the issue of bonds in June 2019 in the nominal amount of PLN 2 000 million.

The Group's free cash and cash equivalents, which at 31 December 2019 amounted to PLN 981 million, are of a short term nature.

Table 11. Net debt structure of the Group (PLN million)

	31.12.2019	31.12.2018	Change (%)	30.09.2019	30.06.2019	31.03.2019
<b>Liabilities due to:</b>	<b>7 873</b>	<b>7 949</b>	<b>(1.0)</b>	<b>9 141</b>	<b>8 960</b>	<b>8 662</b>
Bank loans	2 386	5 676	(58.0)	3 514	3 852	5 854
Other loans	2 794	2 246	+24.4	2 916	2 414	2 260
Debt securities	2 001	-	×	2 018	2 001	-
Leases	692 <sup>1)</sup>	27	×25.6	693	693	548
<b>Free cash and cash equivalents</b>	<b>982</b>	<b>949</b>	<b>+3.4</b>	<b>734</b>	<b>1 097</b>	<b>583</b>
<b>Net debt</b>	<b>6 891</b>	<b>7 000</b>	<b>(1.5)</b>	<b>8 407</b>	<b>7 863</b>	<b>8 079</b>

<sup>1)</sup> Amount includes the impact of implementation of IFRS 16 in the amount of PLN 627 million

Table 12. Net debt structure of the Parent Entity (PLN million)

	31.12.2019	31.12.2018	Change (%)	30.09.2019	30.06.2019	31.03.2019
<b>Liabilities due to:</b>	<b>7 620</b>	<b>7 873</b>	<b>(3.2)</b>	<b>8 897</b>	<b>8 699</b>	<b>8 511</b>
Bank loans	2 294	5 576	(58.9)	3 422	3 758	5 754
Other loans	2 686	2 217	+21.2	2 873	2 385	2 231
Debt securities	2 001	-	×	2 018	2 001	-
Cash pooling	130	80	+62.5	80	50	135
Leases	509 <sup>d)</sup>	-	×	504	505	391
<b>Free cash and cash equivalents</b>	<b>489</b>	<b>625</b>	<b>(21.8)</b>	<b>336</b>	<b>723</b>	<b>325</b>
<b>Net debt</b>	<b>7 131</b>	<b>7 248</b>	<b>(1.6)</b>	<b>8 561</b>	<b>7 976</b>	<b>8 186</b>

1) Impact of IFRS 16: PLN 509 million

## SOURCES OF FINANCING IN THE GROUP

As at 31 December 2019, the Group held open lines of credit, loans and debt securities with a total available amount of PLN 14 567 million, out of which PLN 7 181 million had been drawn.

<b>Unsecured, revolving syndicated credit facility in the amount of USD 1.5 billion</b>	<p>Credit in the amount of USD 1 500 million (PLN 5 696 million), acquired on the basis of a financing agreement entered into by the Parent Entity with a syndicate banks group in 2019, with maturity falling on 19 December 2024 and the option of extending for a further 2 years (5+1+1). Interest is based on LIBOR plus a margin, which depends on the level of the net debt/EBITDA ratio.</p> <p>The funds acquired under this credit were used to finance general corporate goals.</p>
<b>Investment loans, including from the European Investment Bank in the total amount of PLN 2.9 billion with a financing periods of up to 12 years</b>	<p>Financing agreements signed by the Parent Entity with the European Investment Bank:</p> <ul style="list-style-type: none"> <li>- in August 2014 in the amount of PLN 2 000 million, which was drawn in the form of three instalments with maturities falling on 30 October 2026, 30 August 2028 and 23 May 2029 and used to the full available amount. The funds acquired through this loan are being used to finance the Company's investment projects related to modernisation of metallurgy and development of the Żelazny Most tailings storage facility,</li> <li>- in December 2017 in the amount of PLN 900 million, with availability of instalments of 34 months from the date the agreement was signed. Under this loan the Company drew three instalments with maturities falling on 28 June 2030, 23 April 2031 and 11 September 2031. As at 31 December 2019, the available, undrawn limit amounted to PLN 62 million. The funds acquired through this loan are being used to finance the Parent Entity's development and replacement projects at various stages of the production line. Interest on the instalments drawn is based on a fixed interest rate.</li> </ul>
<b>Debt securities in the amount of PLN 2.0 billion</b>	<p>The program to issue bonds on the Polish market was established under an issue agreement dated 27 May 2019.</p> <p>The first issue of bonds with a nominal value of PLN 2 000 million took place in June 2019, under which 5-year bonds were issued in the amount of PLN 400 million with maturity falling on 27 June 2024 and 10-year bonds in the amount of PLN 1 600 million with maturity falling on 27 June 2029. Interest is based on WIBOR plus a margin.</p> <p>The funds obtained from the bond issue will be used to finance general corporate goals.</p>
<b>Bilateral bank loans in the amount of up to PLN 3.9 billion</b>	<p>The Group has open lines of credit in the form of bilateral agreements in the total amount of PLN 3 887 million. These are working capital facilities and overdraft facilities with availability of up to 4 years. Interest is based on a fixed interest rate or on the variable interest rates WIBOR, LIBOR, EURIBOR plus a margin.</p> <p>The funds obtained under the aforementioned bank loan agreements are a tool supporting the management of current financial liquidity.</p>

Detailed information on the above loans is presented in notes 8.4.3 of the financial statements.

The aforementioned sources fully cover the current, medium- and long-term liquidity needs of the Group.

## DEBT POSITION AS AT 31 DECEMBER 2019

The following table presents the structure of borrowings used by the KGHM Polska Miedź S.A. Group and the extent to which they were utilised.

Table 13. Amount available and drawn by the Group (PLN million)

	Amount drawn as at 31.12.19 <sup>d)</sup>	Amount drawn as at 31.12.18 <sup>e)</sup>	Change (%)	Amount available as at 31.12.19	Amount drawn (%)
Unsecured, revolving syndicated credit facility	18	4 136	(99.6)	5 696	0.3%
Loans	2 794	2 246	+24.4	2 984	93.6%
Bilateral bank loans	2 368	1 555	+52.3	3 887	60.9%
Debt securities	2 001	-	+100.0	2 000	100.0%
<b>Total</b>	<b>7 181</b>	<b>7 937</b>	<b>(9.5)</b>	<b>14 567</b>	<b>49.3%</b>

<sup>d)</sup> amount drawn includes accrued interest, unpaid as at the reporting date and costs related to entering a syndicated credit facility in 2019

<sup>e)</sup> amount drawn includes accrued interest, unpaid as at the reporting date and excludes costs related to entering a syndicated credit facility agreement in 2014, which decrease the initial value of liabilities due to the bank loan

As at 31 December 2019, 69% of the Group's debt came from loans drawn in USD, 30% in PLN and 1% in EUR.

### EVALUATION OF FINANCIAL RESOURCES MANAGEMENT

In 2019, the KGHM Polska Miedź S.A. Group was fully capable of meeting its obligations with respect to liabilities drawn. The cash and cash equivalents held by the Group along with the external financing obtained ensure that liquidity will be maintained and enable the achievement of investment goals.

As at 31 December 2019, the Group held PLN 981 million of free cash and cash equivalents and had open credit lines for total available financing of PLN 14 567 million, out of which PLN 7 181 million had been drawn.

In 2019, the Group continued activities aimed at ensuring long-term financial stability by basing the financing structure on diversified, long-term sources of financing.

In December 2019, an unsecured, revolving syndicated credit facility in the amount of USD 1 500 million (PLN 5 696 million) was entered into with a five-year tenor and the option of extending for a further 2 years (5+1+1). This credit replaced the revolving syndicated credit facility in the amount of USD 2 500 million (PLN 9 494 million) dated 11 July 2014.

Other significant events affecting the financing structure include among others the opening of a working capital credit facility in the amount of USD 450 million (PLN 1 709 million) under an agreement signed with the Bank Gospodarstwa Krajowego with a 7-year tenor; drawing instalments from the EIB loan in the total amount of USD 155 million (PLN 589 million) with maturity falling in 2031; and the issue of Series A bonds in the amount of PLN 400 million with a 5-year maturity and Series B bonds in the amount of PLN 1 600 million with a 10-year maturity.

In order to efficiently manage working capital in the Group, in 2019 a Reverse Factoring Program was implemented, which was structured in such a manner as to reflect the expectations of the Group and its suppliers. As at 31 December 2019, the balance of trade receivables transferred to reverse factoring amounted to PLN 596 million.

Under the unsecured, syndicated credit facility, the two bilateral bank loans and the investment loans from the European Investment Bank, the Group is obliged to maintain financial covenants at specified levels. At the balance sheet date, during the financial year and following the balance sheet date, as at the date of publication of the Management Board's Report on activities, the level of reportable financial covenants as at 30 June and 31 December met the amounts specified in agreements.

Table 14. Net debt / EBITDA of the Group

	31.12.19	31.12.18	Change (%)	30.09.19	30.06.19	31.03.19
<b>Net debt / EBITDA<sup>1)</sup></b>	<b>1.5</b>	<b>1.6</b>	<b>(6.3)</b>	<b>1.8</b>	<b>1.8</b>	<b>1.8</b>

<sup>1)</sup> adjusted EBITDA for the 12 month period, ending on the last day of the reporting period, excluding EBITDA of the joint venture Sierra Gorda S.C.M.

### LOANS GRANTED BY GROUP COMPANIES

In 2019, KGHM Polska Miedź S.A. granted the following loans:

- to the company Quadra FNX FFI S.à r.l. in the total amount of USD 112.75 million (or PLN 428.2 million at the average exchange rate announced by the NBP as at 31 December 2019), for the purpose of increasing the share capital of Sierra Gorda S.C.M. Interest on the loan is based on a fixed interest rate, with maturity of 31 December 2024,
- to the company Zagłębie Lubin S.A. in the amount of PLN 5 million with maturity by 31 December 2020. Interest on the loan is based on the variable interest rate WIBOR 3M plus a margin.

The following table presents the major loans granted between Group companies together with the balance of receivables due to loans granted as at the end of 2019 (including accrued interest, write-offs and measurement in accordance with IFRS 9).

Table 15. Loans granted by companies of the Group as at 31 December 2019

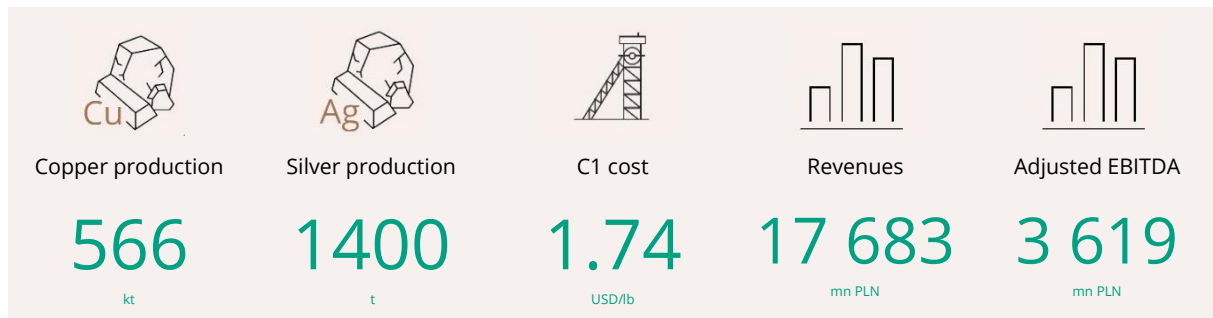
<i>Lender</i>	<i>Borrower</i>	<i>Year granted</i>	<i>Total amount of loans</i>	<i>Total balance of receivables due to loans granted (including accrued, unpaid interest) as at 31.12.2019</i>		<i>Maturity</i>
<b>Loans granted within the Group</b>						
KGHM Polska Miedz S.A.	Zagłębie Lubin S.A.	2014-2016	PLN 19 mn		PLN 13 mn	31.12.2026
KGHM Polska Miedz S.A.	Zagłębie Lubin S.A.	2019	PLN 5 mn		PLN 5 mn	31.12.2020
KGHM Polska Miedz S.A.	PGE EJ 1	2017-2018	PLN 8 mn		PLN 3 mn PLN 5 mn	06.11.2020 02.03.2021
KGHM Polska Miedz S.A.	KGHM INTERNATIONAL LTD.	2014-2017	USD 142 mn	USD 161 mn	PLN 610 mn	31.12.2024 31.12.2027
KGHM Polska Miedz S.A.	Future 1 Sp. z o.o.	2013-2016 2017	USD 874 mn PLN 9 mn	USD 1 153 mn	PLN 4 379 mn PLN 10 mn	31.12.2024 31.12.2024
KGHM Polska Miedz S.A.	Quadra FNX Holdings Chile Limitada	2015-2017	USD 442 mn	USD 0 mn	PLN 0 mn	31.12.2024
KGHM Polska Miedz S.A.	KGHM Chile SpA	2015	USD 3 mn	USD 4 mn	PLN 17 mn	31.12.2024
KGHM Polska Miedz S.A.	Quadra FNX FFI S.à r.l.	2017-2019	USD 841 mn	USD 565 mn	PLN 2 147 mn	15.12.2024 31.12.2024
Future 1 Sp. z o.o.	KGHM INTERNATIONAL LTD.	2012	USD 453 mn	USD 506 mn	PLN 1 921 mn	31.12.2027
Future 1 Sp. z o.o.	Quadra FNX FFI S.à r.l.	2017	USD 1 419 mn	USD 973 mn	PLN 3 696 mn	15.12.2024
KGHM INTERNATIONAL LTD.	Sociedad Contractual Minera Franke	2010	USD 100 mn	USD 88 mn	PLN 334 mn	on demand
KGHM INTERNATIONAL LTD.	0899196 B.C.Ltd.	2011	CAD 0.01 mn	CAD 0.008 mn	PLN 0.022 mn	on demand
KGHM INTERNATIONAL LTD.	FNX Mining Company Inc.	2015	USD 140 mn	USD 81 mn	PLN 308 mn	on demand
FNX Mining Company Inc.	KGHM Chile SpA	2012	USD 56 mn	USD 65 mn	PLN 248 mn	on demand
FNX Mining Company Inc.	KGHM INTERNATIONAL LTD.	2014	USD 200 mn	USD 117 mn	PLN 444 mn	on demand, no later than to 30.06.2025
FNX Mining Company Inc.	Quadra FNX Holdings Chile Limitada	2015	USD 3 mn	USD 3 mn	PLN 11 mn	on demand
KGHM AJAX MINING INC.	Sugarloaf Ranches Ltd.	2012	CAD 3 mn	CAD 3 mn	PLN 9 mn	on demand
Carlota Copper Company	Robinson Holdings USA Ltd.	2016	USD 10 mn	USD 2 mn	PLN 9 mn	on demand
Robinson Nevada Mining Company	Robinson Holdings USA Ltd.	2016	USD 200 mn	USD 109 mn	PLN 414 mn	on demand
Wendover Bulk Transshipment Company	Robinson Holdings USA Ltd.	2016	USD 10 mn	USD 2 mn	PLN 7 mn	on demand
Robinson Holdings USA Ltd.	KGHM INTERNATIONAL LTD.	2018	USD 100 mn	USD 20 mn	PLN 75 mn	30.06.2025
Quadra FNX Holdings Chile Limitada	KGHM Chile SpA	2016-2017	USD 5 mn	USD 7 mn	PLN 27 mn	31.12.2024
Sociedad Contractual Minera Franke	KGHM Chile SpA	2017	USD 14 mn	USD 12 mn	PLN 47 mn	on demand
Sociedad Contractual Minera Franke	Aguas de la Sierra Limitada	2017	USD 1 mn	USD 0.2 mn	PLN 1 mn	on demand
Sociedad Contractual Minera Franke	Quadra FNX Holdings Chile Limitada	2018	USD 5 mn	USD 2 mn	PLN 7 mn	on demand
Quadra FNX FFI S.à r.l.	Quadra FNX Holdings Chile Limitada	2018-2019	USD 294 mn	USD 313 mn	PLN 1 190 mn	31.12.2024
DMC Mining Services Ltd.	DMC Mining Services Chile SpA	2019	USD 1 mn	USD 1 mn	PLN 4 mn	on demand
<b>Loans granted to other entities</b>						
Quadra FNX FFI S.à r.l.	Sierra Gorda S.C.M.	2012	USD 1 700 mn	USD 1 471 million	PLN 5 588 million	on demand, no later than 15.12.2024
KGHM INTERNATIONAL LTD.	Abacus Mining & Exploration Corporation	2015	CAD 12 mn	CAD 17 mn	PLN 51 mn	31.12.2020

The above table presents loans granted by the Parent Entity and other companies of the Group. As at 31 December 2019, the balance of receivables due to loans granted by the Parent Entity, in accordance with IFRS 9, amounted to PLN 7 227 million, while the balance of receivables due to loans granted by the Group, in accordance with IFRS 9, amounted to PLN 5 720 million.

### CASH POOLING IN THE GROUP

In managing its financial liquidity, the Group utilises tools which support its efficiency. One of the basic instruments used by the Group is the cash pooling management system - domestically in PLN, USD and EUR and abroad in USD, and additionally in CAD in the KGHM INTERNATIONAL LTD. Group. The cash pooling system is aimed at optimising cash management, limiting interest costs, the effective financing of current needs in terms of working capital and supporting short term financial liquidity in the Group.

## 7. ECONOMIC RESULTS OF KGHM POLSKA MIEDŹ S.A.



### 7.1. PRODUCTION

The main goals set by the Management Board in terms of production and occupational health and safety for 2019 were: optimal utilisation of the resource base and of the production capacity of the Company, and optimisation of Cu content in ore and concentrate.

The goals set required completion or continuation of the following actions:

<b>in mining</b>	<ul style="list-style-type: none"> <li>- expanding mining operations within the Deep Głogów (Głogów Głęboki-Przemysłowy) area,</li> <li>- improvement of the ore extraction technology, greater mining efficiency and improved occupational health and safety, by:               <ul style="list-style-type: none"> <li>- adapting the geometry of mining systems to local geological and mining conditions,</li> <li>- improving the efficiency of technological and active methods of limiting the threat of rock bursts and of other associated natural threats, and</li> </ul> </li> <li>- proper barren rock management in mining areas (selective extraction, siting of rock, mechanical ore mining),</li> <li>- a greater scope of work with respect to identifying gas-related threats and the use of new technical solutions and means of prevention to counteract this threat,</li> <li>- commencing work related to assessing the Retków copper ore deposit in the Grodziszczce area,</li> <li>- continued work on connecting the T/W-169 tunnel network with the projected sub-shaft area of the GG-1 shaft,</li> <li>- construction of the GG-1 shaft, shaft sinking has reached a depth of 1099.3 meters,</li> <li>- commencement of construction of the central air conditioning station at the GG-1 shaft,</li> <li>- advancement of Stage 1 of the Project „Construction of the GG-2 shaft” – an agreement was signed with the Gmina (municipality) of Żukowice and work related to planning commenced,</li> <li>- maintaining the efficiency of mining vehicles in an assortment required to execute production tasks, and</li> <li>- realisation of the planned scope of mine development and access work using the commissioning system at the level of 61.3 thousand meters,</li> </ul>
<b>in ore processing</b>	<ul style="list-style-type: none"> <li>- maintaining the production capacity of individual Concentrators Division Areas to process the amount and quality of ore supplied,</li> <li>- maintaining the production of concentrates in an amount and quality necessary for optimal use of the production capacity of the furnace sections of the smelters and refineries,</li> <li>- continuation at the Rudna Concentrator Division of separating the concentrate produced into two concentrates with varied organic carbon content,</li> <li>- improving flotation technology,</li> </ul>
<b>in metallurgy</b>	<ul style="list-style-type: none"> <li>- optimum utilisation of infrastructure enabled production targets to be fully met with respect to basic products,</li> <li>- Metallurgy Development Program (MDP), with respect to:               <ul style="list-style-type: none"> <li>- continued construction and assembly work on key technological links under the program's component investment tasks, including the concentrate roasting installation,</li> <li>- commencement of construction involving replacement of the roof of the tankhouse at the Głogów I Copper Smelter and Refinery,</li> </ul> </li> <li>- achievement of the targeted copper recovery level in the core flash furnace production line by implementing new technological solutions, such as improving the process of de-copperizing convertor slag,</li> <li>- increasing the availability of revolving-reverberatory furnaces at the Lead Section, resulting in high lead recovery alongside lower Pb content in charge materials,</li> <li>- increasing the role of recycling in production thanks to the start-up of the revolving-casting-refining (RCR) furnace for processing copper scrap at the Legnica Copper Smelter and Refinery in April 2019,</li> </ul>



<b>in occupational health and safety</b>	-	advancement, in line with the Company's new strategy, of the Program to improve occupational health and safety in KGHM Polska Miedź S.A. „Think About the Consequences“ to the year 2023,
	-	advancement of a Program to negate the most common safety hazards by using innovative technology,
	-	implementation of a uniform approach to communicating policies, the vision, mission and the golden principles with respect to OHS,
	-	constant monitoring of occupational hazards and execution of organisational and technical goals aimed at limiting occupational risks and accidents,
	-	continuous improvement of the occupational safety and hygiene management system by the Divisions of KGHM Polska Miedź S.A. and conceptualisation of the implementation of the new OHS ISO 45001:2018 standard, and
	-	commencing new organisational and research initiatives aimed at improving occupational health and safety, in particular in the Company's mines.

## MINE PRODUCTION

In 2019 extraction of ore (dry weight) amounted to 29.9 million tonnes, which was 0.4 million tonnes less than in 2018.

Average copper content in extracted ore amounted to 1.50% and was higher than the level achieved in 2018 due to mining in regions with a higher copper ore content. In the case of silver in ore, content was at a similar level and amounted to 48.7 g/t.

As a result the amount of copper in extracted ore was lower than in 2018 by 2.7 thousand tonnes of copper and amounted to 449.3 thousand tonnes. The volume of silver in ore decreased by 15.5 tonnes and amounted to 1 455.9 t.

In 2019, 29.9 million tonnes of ore (dry weight) were processed (or 364 thousand tonnes less than in 2018). The lower amount of ore extracted by the mines directly affected the amount of copper in concentrate, which amounted to 398.9 thousand tonnes.

The production of concentrate (dry weight) increased as compared to 2018 by 2.2 thousand tonnes, while the amount of silver in concentrate was lower than the amount produced in 2018 by 1%.

Table 16. Mine production of KGHM Polska Miedź S.A.

	Unit	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Mined ore (wet weight)	mn t	31.4	31.8	(1.3)	7.4	8.1	7.9	8.0
Mined ore (dry weight)	mn t	29.9	30.3	(1.3)	7.1	7.7	7.5	7.6
Copper grade	%	1.50	1.49	+0.7	1.49	1.51	1.51	1.50
Copper in ore	kt	449.3	452.0	(0.6)	105.0	116.9	113.9	113.5
Silver grade	g/t	48.7	48.6	+0.2	48.7	47.9	49.6	48.5
Silver in ore	t	1 455.9	1 471.4	(1.1)	343.9	370.1	374.6	367.3
Production of concentrate (dry weight)	kt	1 763	1 761	+0.1	418	461	446	439
Copper in concentrate	kt	398.9	401.3	(0.6)	94.1	104.7	101.0	99.2
Silver in concentrate	t	1 249.0	1 264.3	(1.2)	296.9	319.0	321.6	311.5

## METALLURGICAL PRODUCTION

The production of electrolytic copper as compared to 2018 increased by 63.8 thousand tonnes, or by 13%. The higher production of electrolytic copper was the result of the on-going optimisation of charge materials, the higher availability of production lines and the proper operation of the concentrate roasting installation. By supplementing own concentrate with purchased metal-bearing materials in the form of scrap, copper blister and imported concentrate, existing technological capacity was effectively used.

The production of other metallurgical products (silver, wire rod, OFE rod and round billets) derives from the level of electrolytic copper production and depends on the type of raw material used, and above all on market demand.

In comparison to 2018, the production of metallic gold increased by 20.5 koz t, or 25%, and metallic silver production was higher by 211.4 tonnes, closing the year at 1 400.2 tonnes.

Table 17. Metallurgical production of KGHM Polska Miedź S.A.

	Unit	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Electrolytic copper, including:	kt	565.6	501.8	+12.7	137.9	141.0	144.9	141.7
- production from own concentrates	kt	418.3	385.3	+8.6	105.2	105.6	103.3	104.2
- production from purchased metal-bearing materials	kt	147.3	116.5	+26.4	32.8	35.3	41.6	37.5
Wire rod, OFE and CuAg rod	kt	266.1	266.4	(0.1)	56.0	74.3	68.2	67.6
Round billets	kt	14.9	15.8	(5.7)	3.7	4.4	2.8	4.0
Metallic silver	t	1 400.2	1 188.8	+17.8	382.3	313.3	383.6	321.0
Metallic gold	koz t	103.7	83.2	+24.6	32.3	20.8	30.8	19.8
Refined lead	kt	30.1	30.1	-	8.0	6.7	7.8	7.6

**MAIN PRODUCTION GOALS**

The main goals set by the Management Board in terms of production and occupational health and safety for 2020 are a continuation of actions taken in 2019, i.e.:

- optimal utilisation of the resource base and of the production capacity of the Company, and
- optimisation of Cu content in ore and concentrate.

Key tasks in 2020:

<b>in mining</b>	<ul style="list-style-type: none"> <li>- access and development work to intersect the deposit in the Deep Głogów mining area,</li> <li>- continuation of work related to exploration of the Retków copper ore deposit in the Grodziszczce area,</li> <li>- continuation of work related to prevention of gas-related threats (hydrogen sulphide and methane) and the use of new scientific solutions and means of prevention to counteract this threat,</li> <li>- continuation of work related to utilising the capacity of the input and output ventilation shafts in the interconnected mine ventilation system,</li> <li>- achieving a level of dilution of the extracted ore which is adequate to the deposit's parameters,</li> <li>- continuation of the GG-1 shaft construction project,</li> <li>- continued construction of the central air conditioning system at the GG-1 shaft,</li> <li>- continuation of Stage 1 of the Project „Construction of the GG-2 shaft” – continuation of planning work, acquisition of legal title to land,</li> <li>- maintaining the efficiency of mining vehicles in an assortment required to execute production tasks,</li> <li>- realisation of the planned scope of mine development and access work using the commissioning system in 2020,</li> </ul>
<b>in ore processing</b>	<ul style="list-style-type: none"> <li>- modernising the classification systems,</li> <li>- improving the energy performance of the machinery park in the Concentrators Division,</li> <li>- optimising the concentration process in terms of decreasing the impact of changes in ore quantity-quality parameters by applying the FloVis system,</li> <li>- continued separation of concentrate produced into two products with varied organic carbon content at the Rudna Concentrator Division,</li> <li>- optimising control of the milling units based on visual product parameters and a mill's sound and vibration characteristics at the Concentrators Division (using the MillVis and ConVis systems),</li> <li>- modernising the carbonate removal installation in the flotation process of the Polkowice Concentrator,</li> <li>- optimising the milling, classification and flotation process,</li> <li>- maintaining the availability of the machine park and the production capacity of individual Concentrators Division Areas to the amount of ore supplied,</li> <li>- maintaining the production of concentrates in an amount and quality necessary for optimal use of the production capacity of the smelters and refineries,</li> </ul>
<b>in metallurgy</b>	<ul style="list-style-type: none"> <li>- minimising environmental impact by actions directed towards improving the effectiveness of the dedusting and hermetic sealing processes to decrease fugitive emissions,</li> <li>- maintaining recovery levels of copper and silver in metallurgical processes and the availability of metallurgical equipment,</li> <li>- improving the productivity of the flash furnace complex at the Głogów I Copper Smelter and Refinery as a result of testing of guarantee parameters for the concentrate roasting installation planned in the second half of 2020,</li> <li>- continuation of the investment in revitalising the tankhouse at Głogów I,</li> <li>- optimum management of half-finished products between the metallurgical facilities,</li> </ul>
<b>in occupational health and safety</b>	<ul style="list-style-type: none"> <li>- consistent implementation of the Program to improve occupational health and safety in KGHM Polska Miedź S.A. „Think About the Consequences”,</li> <li>- conducting pilot research into an anti-collision system for supporting operators (warning the machine's operator of a potential collision with people or another machine) under a Program to negate the most common safety hazards by using innovative technology,</li> <li>- constant monitoring of occupational hazards and achieving organisational and technical goals aimed at limiting occupational risks and workplace accidents,</li> <li>- constant searching for new organisational and technical solutions aimed at improving occupational safety, in particular in the Company's mines.</li> <li>- efficient implementation of the occupational safety and hygiene management system by the Divisions of KGHM Polska Miedź S.A. pursuant to the OHS ISO 45001:2018 standard, optimising health care for KGHM Polska Miedź S.A.'s employees, in particular after accidents at work,</li> <li>- efficient transposition of new European and domestic requirements with respect to OHS in the Company.</li> </ul>

## 7.2. SALES

In 2019, KGHM Polska Miedź S.A. recorded an 8-percent increase in sales of copper products, which amounted in total to 557.0 thousand tonnes, compared to 514.4 thousand tonnes in 2018. In 2019, there was a substantial increase in sales of copper cathodes to 275.7 thousand tonnes, or by 29% compared to 2018. There were no sales of copper in concentrate. Sales of copper wire rod and OFE rod remained at a similar level, which in 2019 amounted to 267.4 thousand tonnes.

Sales of metallic silver also rose in 2019 and amounted to 1 393 tonnes, meaning a 21-percent increase compared to 2018. In 2019 there were no sales of silver in concentrate.

Gold sales in 2019 amounted to 101.4 thousand troy ounces, which likewise means a substantial increase compared to 2018 (+21%).

Table 18. Sales volume of basic products of KGHM Polska Miedź S.A.

	Unit	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Cathodes and cathode parts	kt	275.7	214.3	+28.7	73.4	63.8	71.4	67.1
Copper wire rod and OFE rod	kt	267.4	264.6	+1.1	65.6	67.3	70.2	64.3
Payable copper in concentrate <sup>1</sup>	kt	-	22.3	x	-	-	-	-
Other copper products	kt	13.9	13.2	+5.3	3.3	3.7	3.2	3.7
<b>Total copper and copper products</b>	<b>kt</b>	<b>557.0</b>	<b>514.4</b>	<b>+8.3</b>	<b>142.3</b>	<b>134.8</b>	<b>144.8</b>	<b>135.1</b>
Metallic silver	t	1 392.8	1 146.8	+21.5	363.7	323.3	380.5	325.3
Payable silver in concentrate	t	-	80.6	x	-	-	-	-
Metallic gold	koz t	101.4	83.8	+21.0	32.7	18.0	30.4	20.3
Refined lead	kt	30.0	30.5	(1.6)	8.3	6.6	7.3	7.8

Total revenues from contracts with customers of KGHM Polska Miedź S.A. in 2019 amounted to PLN 17 683 million, an increase of 12% compared to 2018, when revenues reached PLN 15 757 million. Sales revenue includes the recognition of adjustments due to derivatives and hedging transactions in the amount of PLN 245 million in 2019 (compared to PLN 125 million in 2018), settled under transactions involving the sale of cathodes and cathode parts, wire rod and silver.

Revenues from copper sales in 2019 rose by 9% and amounted to PLN 13 474 million (compared to PLN 12 342 million in 2018). In 2019, there were no revenues from sales of copper in concentrate.

Revenues from metallic silver sales in 2019 were also higher (+33%) and amounted to PLN 2 789 million compared to PLN 2 101 million in 2018. In 2019, KGHM Polska Miedź S.A. did not achieve revenues from sales of silver in concentrate.

The increase in sales of metallic gold resulted in higher revenues in this regard by 43%, or PLN 543 million, compared to PLN 381 million in 2018.

Table 19. Revenues from contracts with customers of KGHM Polska Miedź S.A. (in PLN million)

	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Cathodes and cathode parts	6 533	5 097	+28.2	1 739	1 477	1 650	1 667
Copper wire rod and OFE rod	6 611	6 525	+1.3	1 612	1 647	1 747	1 605
Payable copper in concentrate <sup>1</sup>	-	400	x	-	-	-	-
Other copper products	330	320	+3.1	77	87	75	91
<b>Total copper and copper products</b>	<b>13 474</b>	<b>12 342</b>	<b>+9.2</b>	<b>3 428</b>	<b>3 211</b>	<b>3 472</b>	<b>3 363</b>
Metallic silver	2 789	2 101	+32.7	785	690	694	620
Payable silver in concentrate <sup>2</sup>	-	141	x	-	-	-	-
Metallic gold	543	381	+42.5	186	104	151	101
Refined lead	247	262	(5.7)	71	56	57	63
Other goods and services	394	345	+14.2	121	84	85	105
Merchandise and materials	236	185	+27.6	42	74	56	64
<b>Total sales revenue</b>	<b>17 683</b>	<b>15 757</b>	<b>+12.2</b>	<b>4 633</b>	<b>4 219</b>	<b>4 515</b>	<b>4 316</b>

<sup>1)</sup> value of payable copper less treatment charges (TC), Cu refining charges (RcCu) and other deductions impacting the value of Cu concentrate (apart from the Ag refining premium)

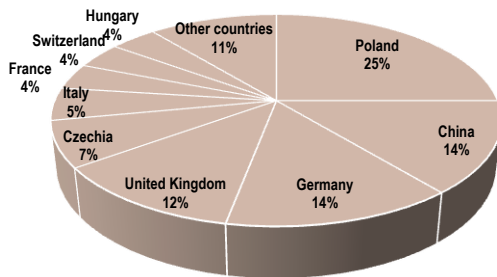
<sup>2)</sup> value of payable silver less the Ag refining premium Ag (RcAg)

## GEOGRAPHICAL BREAKDOWN OF SALES

In 2019, KGHM Polska Miedź S.A. earned most of its revenues from domestic sales, which amounted to 25% of total revenues. Amongst KGHM's other customers, the largest came from China (14%), Germany (14%), the United Kingdom (12 %) and Czechia (8%).

The following chart shows the geographic structure of revenues in 2019. Sales revenue includes the result from the settlement of hedging instruments.

Chart 22. Sales revenue of KGHM Polska Miedź S.A. by market (in PLN million)



## 7.3. COSTS

The Company's cost of sales, selling costs and administrative expenses (cost of products, merchandise and materials sold plus selling costs and administrative expenses) in 2019 amounted to PLN 15 291 million and was 14% higher as compared to 2018. The Company's cost of sales, selling costs and administrative expenses was substantially affected by the change in inventories (change in 2019: +PLN 369 million; in 2018: -PLN 236 million) and was mainly due to the higher amount of own concentrate processed.

Total expenses by nature in 2019 as compared to 2018 were higher by 9%, mainly due to higher consumption of purchased metal-bearing materials (a higher amount by 29 thousand tonnes and a higher price by 1%) as well as a lower minerals extraction tax due to a change from 1 July 2019 in the calculation formula resulting from a change in the law.

Table 20. Expenses by nature of KGHM Polska Miedź S.A. (in PLN million)

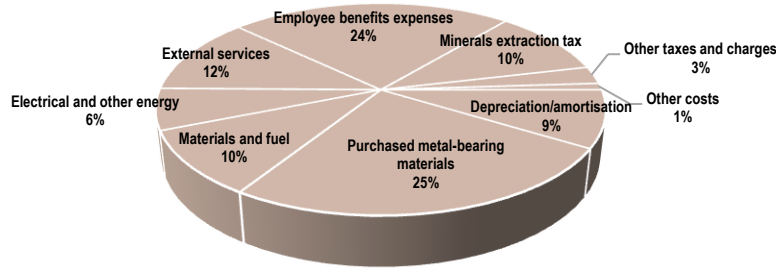
	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Depreciation of property, plant and equipment and amortisation of intangible assets	1 298	1 173	+10.7	335	330	319	314
Employee benefits expenses	3 594	3 324	+8.1	936	948	871	839
Materials and energy, including:	6 196	5 312	+16.6	1 540	1 515	1 550	1 591
- purchased metal-bearing materials	3 778	3 040	+24.3	890	900	996	992
- electrical and other energy	939	803	+16.9	255	255	195	234
External services	1 767	1 649	+7.2	486	458	434	389
Taxes and charges, including:	1 917	2 083	(8.0)	424	427	543	523
- minerals extraction tax	1 520	1 671	(9.0)	328	326	446	420
Other costs	124	92	+34.8	50	14	39	21
<b>Total expenses by nature</b>	<b>14 896</b>	<b>13 633</b>	<b>+9.3</b>	<b>3 771</b>	<b>3 692</b>	<b>3 756</b>	<b>3 677</b>

Expenses by nature, excluding purchased metal-bearing materials and the minerals extraction tax, amounted to PLN 9 598 million and were higher as compared to the corresponding period of 2018 by PLN 676 million, mainly due to:

- labour costs (+PLN 270 million) – due to an increase in remuneration and a higher provision for the annual bonus,
- cost of materials and energy consumed (+PLN 146 million) – mainly due to higher energy purchase prices and to the lack of the previous support in the form of yellow certificates due to own electricity production due to natural gas,
- depreciation /amortisation (+PLN 125 million) - an increase due to investments advanced in prior periods,
- external services (+PLN 118 million) – mainly due to an increased scope of realised transport services and costs of mine development work.

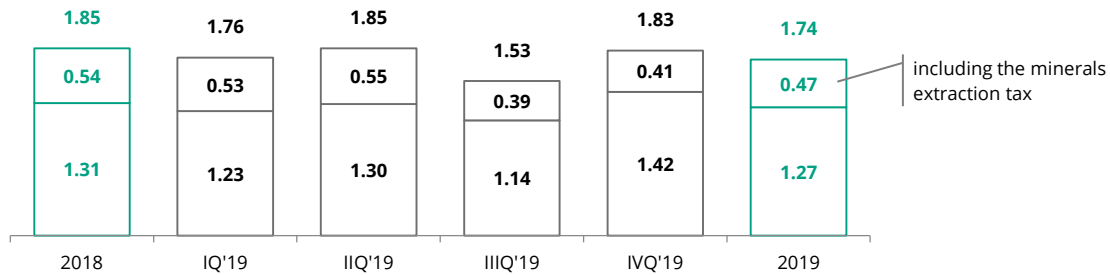
The structure of expenses by nature in 2019 is presented below. As compared to the prior year, they were at a very similar level.

Chart 23. Structure of expenses by nature in 2019



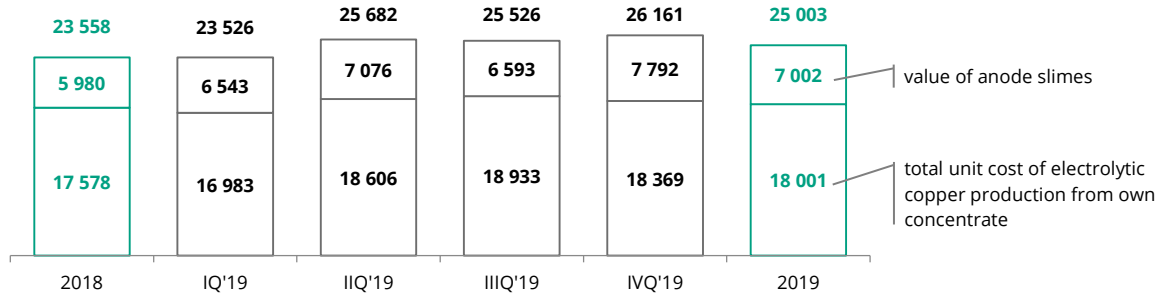
The Company's operating costs are decisively impacted by the costs of electrolytic copper production (prior to decrease by the value of by-products), whose share is about 93%.

Chart 24. Cost of producing copper in concentrate – C1 (USD/lb)



**Cost of producing copper in concentrate - C1** (unit cash cost of producing payable copper in concentrate, reflecting costs of ore extraction and processing, transport costs, the minerals extraction tax, administrative costs during the mining stage, and smelter treatment and refining charges (TC/RC), less the value of by-products) was as follows: in 2018, 1.85 USD/lb and in 2019, 1.74 USD/lb. The cost was impacted by a weakening in the PLN as compared to the USD, higher silver and gold prices and a lower minerals extraction tax.

Chart 25. Pre-precious metals credit unit cost of electrolytic copper production – from own concentrate (PLN/t)



**The pre-precious metals credit unit cost of copper production from own concentrate** (unit cost prior to decrease by the value of anode slimes containing among others silver and gold) was higher than that recorded in 2018 by 1 445 PLN/t (6%), alongside a lower minerals extraction tax (-273 PLN/t) and higher production from own concentrate by 33 thousand tonnes of copper (9%). The increase in the unit cost was mainly due to higher costs of labour, energy, depreciation/amortisation and external services.

## 7.4. FINANCIAL RESULTS

### STATEMENT OF PROFIT OR LOSS

The Company recorded a profit for 2019 in the amount of PLN 1 264 million, or PLN 761 million (-38%) lower than in the prior year.

Table 21. Basic items of the statement of profit or loss of KGHM Polska Miedź S.A. (in PLN million)

	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Revenues from contracts with customers	17 683	15 757	+12.2	4 633	4 219	4 515	4 316
- adjustment to revenues due to hedging transactions	245	125	+96.0	75	93	43	34
Cost of sales, selling costs and administrative expenses	(15 291)	(13 460)	+13.6	(4 216)	(3 577)	(3 907)	(3 591)
<b>Profit on sales</b>	<b>2 392</b>	<b>2 297</b>	<b>+4.1</b>	<b>417</b>	<b>642</b>	<b>608</b>	<b>725</b>
<b>Other operating income and (costs)</b>	<b>39</b>	<b>1 149</b>	<b>(96.6)</b>	<b>(977)</b>	<b>564</b>	<b>73</b>	<b>379</b>
- exchange differences on assets and liabilities other than borrowings	168	386	(56.5)	(340)	492	(127)	143
- interest on loans granted and other financial receivables	272	244	+11.5	60	80	66	66
- dividend income	37	239	(84.5)	-	-	37	-
- provisions (recognised)/released	(39)	(150)	(74.0)	(78)	1	37	0
- measurement and realisation of derivatives	(122)	(136)	(10.3)	(65)	(29)	(9)	(19)
- fees and charges on re-invoicing of costs of bank guarantees securing the payment of liabilities	31	53	(41.5)	(19)	22	9	19
- (recognition)/reversal of impairment losses on financial instruments	102	270	(62.2)	3	(3)	7	95
- (recognition)/reversal of impairment losses on shares and investment certificates in subsidiaries	(460)	355	×	(460)	-	-	-
- fair value gains/(losses) on financial assets measured at fair value through profit or loss	84	(63)	×	(53)	(5)	62	80
- other	(34)	(49)	(30.6)	(25)	6	(9)	(5)
<b>Finance income / (costs)</b>	<b>(504)</b>	<b>(774)</b>	<b>(34.9)</b>	<b>117</b>	<b>(548)</b>	<b>100</b>	<b>(173)</b>
- exchange differences on borrowings	(209)	(592)	(64.7)	265	(532)	165	(107)
- interest on borrowings	(183)	(127)	+44.1	(108)	5	(43)	(37)
- fees and commissions on bank and other loans	(49)	(23)	×2.1	(26)	(10)	(7)	(6)
- measurement and realisation of derivatives	(22)	11	×	(4)	(1)	(5)	(12)
- unwinding of the discount effect	(41)	(43)	(4.7)	(10)	(10)	(10)	(11)
<b>Profit before income tax</b>	<b>1 927</b>	<b>2 672</b>	<b>(27.9)</b>	<b>(443)</b>	<b>658</b>	<b>781</b>	<b>931</b>
Income tax expense	(663)	(647)	+2.5	44	(222)	(249)	(236)
<b>PROFIT/LOSS FOR THE PERIOD</b>	<b>1 264</b>	<b>2 025</b>	<b>(37.6)</b>	<b>(399)</b>	<b>436</b>	<b>532</b>	<b>695</b>
Depreciation/amortisation recognised in profit or loss	(1 220)	(1 119)	+9.0	(327)	(307)	(312)	(274)
<b>Adjusted EBITDA<sup>1)</sup></b>	<b>3 619</b>	<b>3 416</b>	<b>+5.9</b>	<b>751</b>	<b>949</b>	<b>920</b>	<b>999</b>

<sup>1)</sup> Adjusted EBITDA = profit on sales + depreciation/amortisation (recognised in profit or loss) + impairment loss (-reversal of impairment losses) on non-current assets, recognised in cost of sales, selling costs and administrative expenses

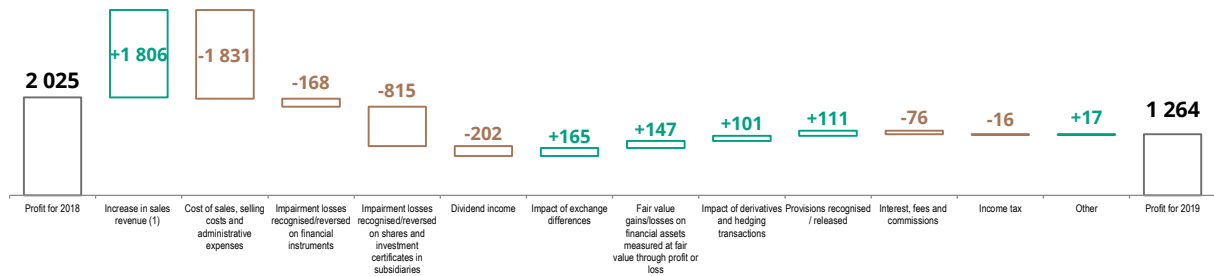
Table 22. Main reasons for the change in profit/(loss) of KGHM Polska Miedź S.A.

Item	Impact on change in profit or loss (in PLN million)	Description
<b>Increase in revenues from contracts with customers by PLN 1 806 million</b> (excluding the impact of hedging transactions in the amount of + PLN 120 million)	+1 393	An increase in revenues due to a higher volume of sales of copper (+42.6 kt, +8%), silver (+165 t, +13%) and gold (+18 koz t, +21%).
	+1 029	An increase in revenues from sales of basic products (Cu, Ag, Au) due to a more favourable average annual USD/PLN exchange rate (a change from 3.61 to 3.84 USD/PLN).
	(717)	A decrease in revenues due to lower prices of copper (-523 USD/t, -8%) alongside higher prices of gold (+125 USD/oz t, +10%) and silver (+0,50 USD/oz t, +3%).
	+101	An increase mainly in other revenues from sales, including revenues from the sale of merchandise and materials (+PLN 51 million) and an increase the amount from the fair value measurement of receivables from M+ type sales (+PLN 17 million).
<b>An increase in cost of sales, selling costs and administrative expenses<sup>1)</sup> (-PLN 1 831 million)</b>	(738)	Higher consumption of purchased metal-bearing materials by 29 thousand tonnes of copper at a comparable purchase price
	(605)	Utilisation of inventories (change in 2019: +PLN 369 million; in 2018: -PLN 236 million) due to higher processing of own concentrate.
	(488)	Including an increase in other expenses by nature by PLN 549 million, mainly due to a change in costs: employee benefits (-PLN 270 million), energy and energy factors (-PLN 136 million), depreciation/amortisation (-PLN 125 million) and external services (-PLN 118 million) alongside a lower minerals extraction tax (+PLN 151 million).

<b>Impairment losses (recognised)/reversed on shares and investment certificates in subsidiaries</b>	(815)	Change in the balance of impairment losses recognised/ reversed on shares in subsidiaries from +PLN 355 million in 2018 to -PLN 460 million in 2019.
<b>Impairment losses (recognised)/reversed on financial instruments</b>	(168)	Change in the balance of impairment losses recognised/ reversed on financial instruments from +PLN 270 million in 2018 to +PLN 102 million in 2019.
<b>Dividend income</b>	(202)	A decrease in dividend income from PLN 239 million to PLN 37 million.
<b>Impact of exchange differences (+PLN 165 million)</b>	(218)	A change in the result due to exchange differences from measurement of assets and liabilities other than borrowings - in other operating activities.
	+383	A change in the result due to exchange differences on the measurement of borrowings (presented in finance costs).
<b>Fair value gains/(losses) on financial assets measured at fair value through profit or loss</b>	+147	An improvement in fair value gains/losses on financial assets measured at fair value through profit or loss, from -PLN 63 million to +PLN 84 million.
<b>Impact of derivatives and hedging transactions (+PLN 101 million)</b>	+120	A change in adjustments to revenues from contracts with customers due to the settlement of hedging transactions from PLN 125 million to PLN 245 million.
	+14	A change in the result due to the measurement and realisation of derivatives in other operating activities, from -PLN 136 million to -PLN 122 million.
	(33)	A change in the result due to the measurement and realisation of derivatives in finance activities, from +PLN 11 million to -PLN 22 million.
<b>Provisions (recognised)/released (+PLN 111 million)</b>	+55	A decrease in provisions recognised, from -PLN 162 million to -PLN 107 million.
	+56	An increase in provisions released, from PLN 12 million to PLN 68 million.
<b>Change in the balance of income and costs due to interest on borrowings (-PLN 76 million)</b>	+28	An increase in income due to interest on loans granted.
	(56)	Higher interest costs on borrowings.
	(22)	A decrease in income related to fees and commissions on re-invoicing of costs of bank guarantees securing the payment of liabilities
	(26)	Higher fees and commissions on borrowings
<b>Increase in income tax</b>	(16)	The increase in income tax results from an increase in current income tax by PLN 65 million, alongside an increase in deferred income tax by PLN 111 million and a negative adjustment of current tax for prior periods by -PLN 160 million.

<sup>1)</sup> Cost of products, merchandise and materials sold plus selling costs and administrative expenses

Chart 26. Change in profit for the period of KGHM Polska Miedź S.A. (in PLN million)



<sup>1)</sup> excluding impact of derivatives and hedging transactions

**CASH FLOWS**

Table 23. Statement of cash flows of KGHM Polska Miedź S.A. (in PLN million)

	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Profit / (loss) before income tax	1 927	2 672	(27.9)	(443)	658	781	931
Depreciation/amortisation recognised in profit or loss	1 220	1 119	+9.0	327	307	312	274
Exchange differences, of which:	200	181	+10.5	89	86	11	14
Other adjustments	188	(1 000)	x	1 007	(178)	(474)	(167)
Exclusions of income and costs, total	1 608	300	x5.4	1 423	215	(151)	121
Income tax paid	(465)	(710)	(34.5)	(70)	(74)	(258)	(63)
Changes in working capital	973	553	+75.9	1 293	(228)	381	(473)
<b>Net cash generated from operating activities</b>	<b>4 043</b>	<b>2 815</b>	<b>+43.6</b>	<b>2 203</b>	<b>571</b>	<b>753</b>	<b>516</b>
Expenditures on mining and metallurgical assets	(2 294)	(1 884)	+21.8	(584)	(456)	(465)	(789)
Expenditures on other property, plant and equipment and intangible assets	(72)	(23)	x3.1	(8)	(6)	(2)	(56)
Expenditures on the acquisition of investment certificates and shares in subsidiaries	(430)	(10)	x43.0	(2)	(37)	-	(391)
Loans granted	(445)	(682)	(34.8)	(273)	(109)	(63)	-
Proceeds from the redemption of investment certificates	404	-	x	-	13	-	391
Dividends received	37	239	(84.5)	-	27	10	-
Other	(54)	(39)	+38.5	(8)	(11)	(11)	(24)
<b>Net cash used in investing activities</b>	<b>(2 854)</b>	<b>(2 399)</b>	<b>+19.0</b>	<b>(875)</b>	<b>(579)</b>	<b>(531)</b>	<b>(869)</b>
Proceeds from borrowings	4 669	2 257	x2.1	293	953	280	3 143
Proceeds from the issue of debt financial instruments	2 000	-	x	-	-	2 000	-
Repayments of borrowings	(7 726)	(2 073)	x3.7	(1 358)	(1 352)	(1 951)	(3 065)
Interest paid	(228)	(152)	+50.0	(121)	(8)	(51)	(48)
Other	20	(80)	x	41	22	(98)	55
<b>Net cash generated from/(used in) financing activities</b>	<b>(1 265)</b>	<b>(48)</b>	<b>x26.4</b>	<b>(1 145)</b>	<b>(385)</b>	<b>180</b>	<b>85</b>
<b>TOTAL NET CASH FLOW</b>	<b>(76)</b>	<b>368</b>	<b>x</b>	<b>183</b>	<b>(393)</b>	<b>402</b>	<b>(268)</b>
Foreign exchange gains/(losses) on cash and cash equivalents	(35)	25	x	(4)	4	(3)	(32)
Cash and cash equivalents at the beginning of the period	627	234	x2.7	337	726	327	627
<b>Cash and cash equivalents at the end of the period</b>	<b>516</b>	<b>627</b>	<b>(17.7)</b>	<b>516</b>	<b>337</b>	<b>726</b>	<b>327</b>

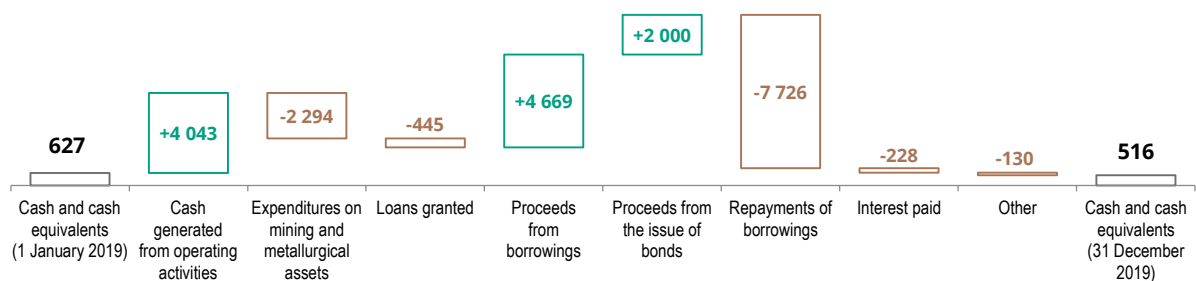
Net cash generated from operating activities in 2019 amounted to +PLN 4 043 million and mainly comprised profit before income tax in the amount of PLN 1 927 million adjusted among others by depreciation/amortisation in the amount of +PLN 1 220 million, less income tax paid in the amount of -PLN 465 million and the change in working capital in the amount of +PLN 973 million.

Net cash used in investing activities in 2019 amounted to -PLN 2 854 million and mainly comprised net expenditures on mining and metallurgical property, plant and equipment and intangible assets in the amount of -PLN 2 294 million and loans granted of -PLN 445 million. Expenditures on the acquisition of investment certificates and shares in subsidiaries in the amount of -PLN 430 million were almost entirely offset by proceeds from the redemption of investment certificates in the amount of +PLN 404 million.

Net cash used in financing activities during the same period amounted to -PLN 1 265 million and mainly comprised proceeds from borrowings in the amount of +PLN 4 669 million and from the issue of bonds, +PLN 2 000 million alongside repayments of borrowings of -PLN 7 726 million and interest paid in the amount of -PLN 228 million.

After reflecting exchange gains/losses on cash and cash equivalents, in 2019 cash and cash equivalents decreased by PLN 111 million and amounted to PLN 516 million.

Chart 27. Cash flows of KGHM Polska Miedź S.A. (in PLN million)





**ASSETS, EQUITY AND LIABILITIES**

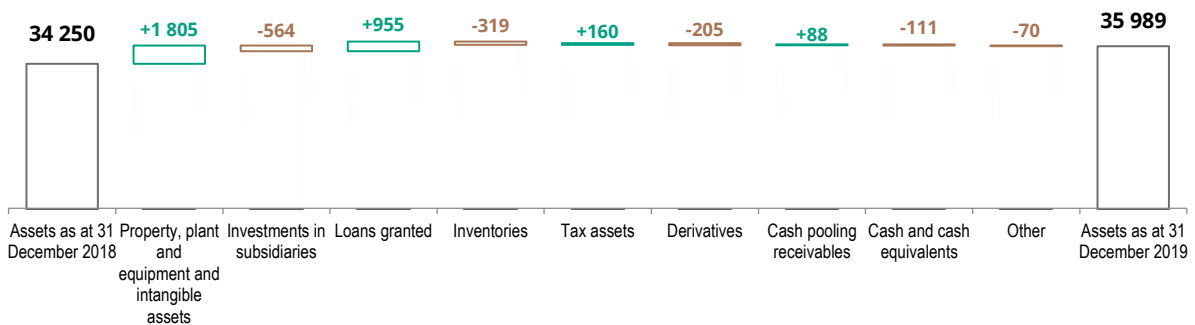
Table 24. Assets of KGHM Polska Miedź S.A. (PLN million)

	31.12.2019	31.12.2018	Change (%)	30.09.2019	30.06.2019	31.03.2019
Mining and metallurgical property, plant and equipment	18 092	16 382	+10.4	17 769	17 359	16 922
Mining and metallurgical intangible assets	651	576	+13.0	628	616	649
Other property, plant and equipment	103	92	+12.0	89	89	90
Other intangible assets	61	52	+17.3	47	48	50
Investments in subsidiaries	2 946	3 510	(16.1)	3 405	3 415	3 377
Financial instruments, including:	8 200	7 453	+10.0	8 218	7 709	7 768
- loans granted	7 217	6 262	+15.3	7 273	6 641	6 623
- derivatives	123	319	(61.4)	162	257	249
Deferred tax assets	-	9	x	12	-	93
Other non-financial assets	58	24	x2.4	34	27	28
<b>Non-current assets</b>	<b>30 111</b>	<b>28 098</b>	<b>+7.2</b>	<b>30 202</b>	<b>29 263</b>	<b>28 977</b>
Inventories	3 783	4 102	(7.8)	4 329	4 362	4 484
Trade receivables	243	310	(21.6)	242	206	540
Tax assets	435	275	+58.2	336	222	171
Derivatives	291	300	(3.0)	363	323	139
Cash pooling receivables	335	247	+35.6	464	403	285
Other financial assets	221	242	(8.7)	389	348	221
Other non-financial assets	54	49	+10.2	126	194	117
Cash and cash equivalents	516	627	(17.7)	337	726	327
<b>Current assets</b>	<b>5 878</b>	<b>6 152</b>	<b>(4.5)</b>	<b>6 586</b>	<b>6 784</b>	<b>6 284</b>
<b>TOTAL ASSETS</b>	<b>35 989</b>	<b>34 250</b>	<b>+5.1</b>	<b>36 788</b>	<b>36 047</b>	<b>35 261</b>

As at 31 December 2019, total assets amounted to PLN 35 989 million, or an increase as compared to the end of 2018 by PLN 1 739 million, or by 5%, mainly due to increases in the following items:

- property, plant and equipment and intangible assets by PLN 1 805 million, including mining and metallurgical property, plant and equipment by PLN 1 710 million, arising from the realisation of investments – expenditures on property, plant and equipment and intangible assets in 2019 amounted to PLN 2 481 million,
  - non-current financial instruments by PLN 747 million, including mainly loans granted (+PLN 955 million) alongside a lower amount of derivatives (-PLN 196 million),
  - tax assets by PLN 160 million,
  - cash pooling receivables by PLN 88 million,
- alongside a decrease in the value of investments in subsidiaries by PLN 564 million as well as inventories by PLN 319 million, including mainly half-finished products and work in progress (-PLN 472 million) alongside an increase in finished products (+PLN 111 million).

Chart 28. Change in assets of KGHM Polska Miedź S.A. in 2019 (PLN million)



The carrying amounts of equity and liabilities as at 31 December 2019 are presented below.

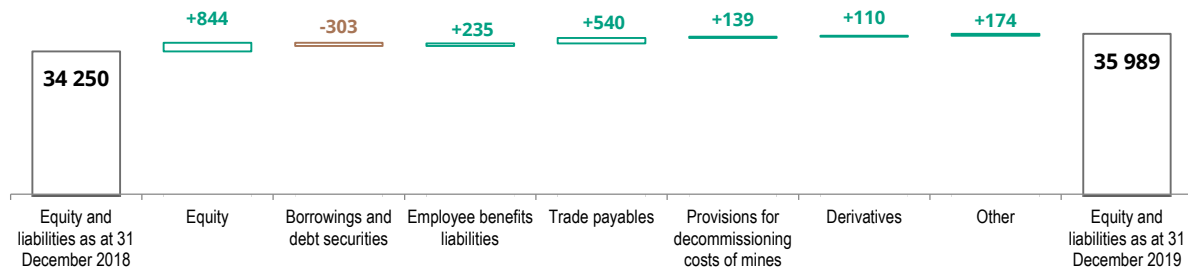
Table 25. Equity and liabilities of KGHM Polska Miedź S.A. (PLN million)

	31.12.2019	31.12.2018	Change (%)	30.09.2019	30.06.2019	31.03.2019
Share capital	2 000	2 000	-	2 000	2 000	2 000
Other reserves from measurement of financial instruments	(698)	(307)	+2.3	(730)	(437)	(552)
Accumulated other comprehensive income	(622)	(593)	+4.9	(616)	(713)	(645)
Retained earnings	19 209	17 945	+7.0	19 608	19 172	18 640
<b>Equity</b>	<b>19 889</b>	<b>19 045</b>	<b>+4.4</b>	<b>20 262</b>	<b>20 022</b>	<b>19 443</b>
Borrowings, lease and debt securities	7 215	6 758	+6.8	7 525	7 652	6 637
Derivatives	131	68	+92.6	324	52	84
Employee benefits liabilities	2 363	2 235	+5.7	2 347	2 425	2 311
Provisions for decommissioning costs of mines and other technological facilities	1 119	980	+14.2	1 270	1 099	982
Other non-current liabilities	277	199	+39.2	191	201	193
<b>Non-current liabilities</b>	<b>11 105</b>	<b>10 240</b>	<b>+8.4</b>	<b>11 657</b>	<b>11 429</b>	<b>10 207</b>
Borrowings, lease and debt securities	275	1 035	(73.4)	1 290	996	1 740
Cash pooling liabilities	130	80	+62.5	80	50	135
Derivatives	60	13	+4.6	29	14	19
Trade payables	2 460	1 920	+28.1	1 439	1 610	1 631
Employee benefits liabilities	890	783	+13.7	841	770	696
Tax liabilities	258	233	+10.7	424	360	516
Provisions for liabilities and other charges	158	190		82	87	190
Other current liabilities	764	711	+7.5	684	709	684
<b>Current liabilities</b>	<b>4 995</b>	<b>4 965</b>	<b>+0.6</b>	<b>4 869</b>	<b>4 596</b>	<b>5 611</b>
<b>Non-current and current liabilities</b>	<b>16 100</b>	<b>15 205</b>	<b>+5.9</b>	<b>16 526</b>	<b>16 025</b>	<b>15 818</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>35 989</b>	<b>34 250</b>	<b>+5.1</b>	<b>36 788</b>	<b>36 047</b>	<b>35 261</b>

There was an increase in equity and liabilities, mainly due to increases in the following items:

- equity by PLN 844 million, including with respect to the profit for 2019 in the amount of PLN 1 264 million,
  - trade payables (+PLN 540 million),
  - employee benefits liabilities (+PLN 235 million),
  - an increase in provisions for decommissioning costs of mines and other technological facilities (+PLN 139 million)
- alongside a decrease in borrowings, lease and debt securities by PLN 303 million, mainly due to: cash flows (-PLN 1 437 million), changes in accounting policies - implementation of IFRS 16 (+PLN 511 million), accrued interest (+PLN 381 million) and exchange differences (+PLN 214 million).

Chart 29. Change in equity and liabilities of KGHM Polska Miedź S.A. in 2019 (PLN million)



## CONTINGENT ASSETS AND LIABILITIES DUE TO GUARANTEES GRANTED

At the end of 2019, contingent assets amounted to PLN 731 million and related mainly to promissory notes receivables (PLN 347 million) and guarantees received by the Company (PLN 256 million).

At the end of 2019, liabilities due to guarantees granted amounted to PLN 2 813 million and due to promissory notes payable PLN 16 million, including:

- a security for the performance of contracts entered into by Sierra Gorda S.C.M. in the amount of PLN 2 046 million,
- a security for the costs of restoring the areas of the Robinson mine, Podolsky mine and the Victoria project, PLN 375 million (USD 90 million, CAD 12 million),
- a security for the proper performance by DMC Mining Services (UK) Ltd. and DMC Mining Services Ltd. of a contract for sinking shafts under a project underway in the United Kingdom in the amount of PLN 190 million (USD 50 million),

- a security for the proper performance by KGHM Polska Miedź S.A. of future environmental obligations to restore the area, following the conclusion of operations of the Żelazny Most tailings storage facility in the amount of PLN 179 million.

As far as the Company is aware, at the end of the reporting period the Company determined the probability of paying the amounts related to the contingent liabilities of Sierra Gorda S.C.M. as relatively low, and that of the remaining entities of the Group as low.

Other liabilities not recognised in the statement of financial position represent liabilities towards local government entities due to expansion of the tailings storage facility in the amount of PLN 107 million.

### 7.5. CAPITAL EXPENDITURES

In 2019, capital expenditures on property, plant and equipment amounted to PLN 2 475 million and were higher than in the previous year by 16%. Together with expenditures incurred on uncompleted development work, capital expenditures amounted to PLN 2 481 million.

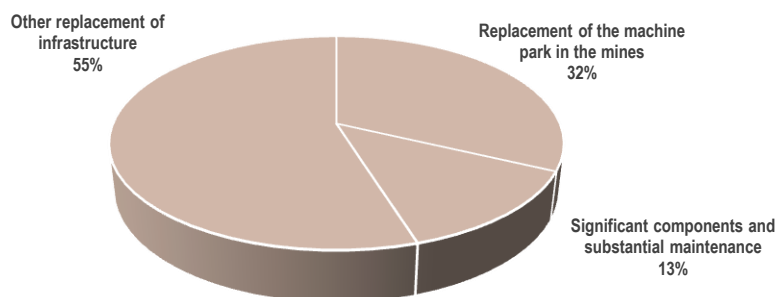
Table 26. Structure of expenditures on property, plant and equipment and intangible assets of KGHM Polska Miedź S.A. (in PLN million)

	2019	2018	Change%	IV Q '19	III Q '19	II Q '19	I Q '19
Mining	1 683	1 483	+13.5	480	423	412	368
Metallurgy	660	573	+15.2	328	138	111	83
Other activities	74	71	+4.2	53	10	7	4
Development work - uncompleted	6	5	+20.0	2	3	1	-
Leases per IFRS 16	58	-	x	7	17	17	17
<b>Total</b>	<b>2 481</b>	<b>2 132</b>	<b>+16.4</b>	<b>870</b>	<b>591</b>	<b>548</b>	<b>472</b>
<i>including borrowing cost</i>	<i>135</i>	<i>133</i>	<i>+0.8</i>	<i>-48</i>	<i>17</i>	<i>60</i>	<i>106</i>

Investment activities comprised projects related to the replacement of equipment and maintaining mine production, as well as development projects:

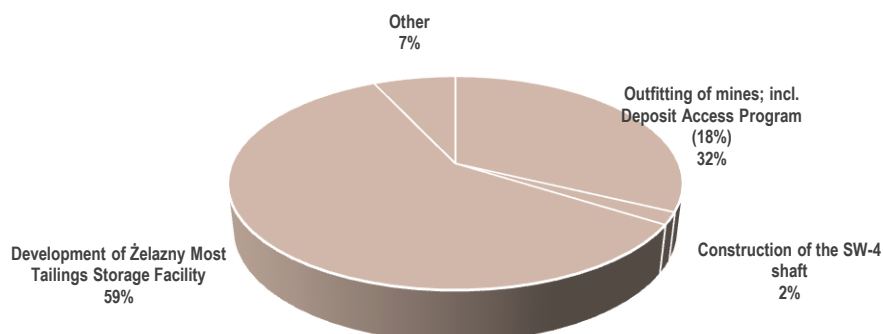
**Projects related to the replacement of equipment** aimed at maintaining production equipment in an undeteriorated condition, represent 36% of total expenditures incurred.

Chart 30. Structure of expenditures on the replacement of equipment



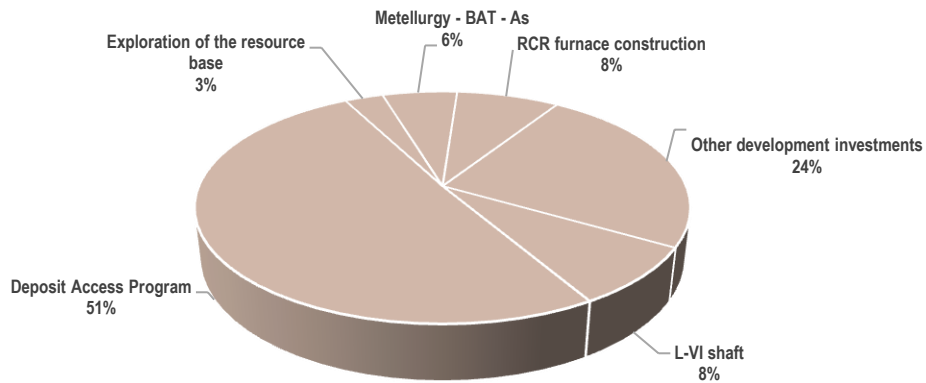
**Projects related to maintaining mine production** aimed at maintaining mine production on the level set in approved Production Plan (development of infrastructure to match mine advancement) represent 31% of total expenditures incurred.

Chart 31. Structure of expenditures on maintaining mine production



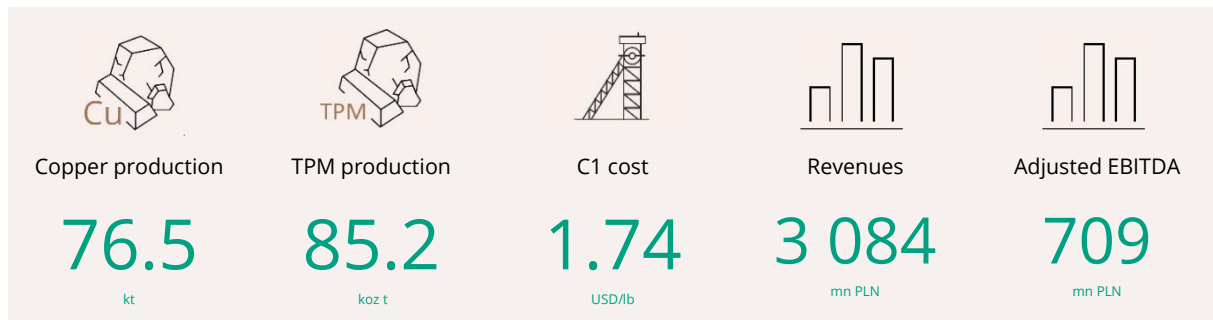
**Development projects** aimed at increasing production volume of the core business, implementation of technical and technological activities optimising use of existing infrastructure, maintaining production costs and adaptation of the company's operations to changes in standards, laws and regulations (conformatory projects and those related to environmental protection) represent 33% of total expenditures incurred.

Chart 32. Structure of expenditures on development



Detailed information on the advancement of key investment projects may be found in part 5 of this Report in the section on advancement of the Strategy in 2019.

## 8. ECONOMIC RESULTS OF KGHM INTERNATIONAL LTD.



### 8.1. PRODUCTION

Table 27. Production of KGHM INTERNATIONAL LTD.

	Unit	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Payable copper, including:	kt	76.5	78.8	(2.9)	19.0	21.5	19.7	16.3
- Robinson mine (USA)	kt	48.8	48.0	+1.7	12.1	14.9	13.2	8.6
- Sudbury Basin mines (CANADA) <sup>(1)</sup>	kt	4.2	7.4	(43.2)	0.8	0.8	0.7	1.9
Payable nickel	kt	0.7	0.9	(22.2)	0.2	0.1	0.1	0.3
Precious metals (TPM), including:	koz t	85.2	67.6	+26.0	22.3	24.0	21.0	17.9
- Robinson mine (USA)	koz t	47.9	37.1	+29.1	11.2	15.3	13.5	7.9
- Sudbury Basin mines (CANADA) <sup>(1)</sup>	koz t	37.3	30.5	+22.3	11.1	8.7	7.5	10.0

<sup>1)</sup> Comprised of the Morrison and McCreedy West mines in the Sudbury Basin

Copper production in the segment KGHM INTERNATIONAL LTD. in 2019 amounted to 76.5 thousand tonnes, or a decrease by 2.3 thousand tonnes (-3%) as compared to 2018.

The increase in copper production by the Robinson mine by 0.8 thousand tonnes (+2%) was the result of extracting higher copper grade ore as well as higher recovery of this metal. The increase in precious metals production by 10.8 thousand troy ounces (+29%) was due to higher gold content in mined ore, which was partially offset by lower gold recovery.

In the mines of the Sudbury Basin copper production decreased by 3.2 thousand tonnes (-43%) due to the lower content of this metal in mined ore. This factor was partially offset by a higher extraction volume (+23%). The increase in extraction led to higher precious metals production by 6.8 thousand troy ounces (+22%).

### 8.2. SALES REVENUE

Table 28. Volume and sales revenue of KGHM INTERNATIONAL LTD. (USD mn)

	Unit	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Revenues from contracts with customers <sup>1</sup> , including:	USD mn	802	788	+1.8	201	228	194	179
- copper	USD mn	407	460	(11.5)	115	89	99	104
- nickel	USD mn	10	12	(16.7)	2	3	1	4
- TPM – precious metals	USD mn	114	95	+20.0	36	25	26	27
Copper sales volume	kt	74.1	78.0	(5.0)	20.7	16.9	18.5	18.0
Nickel sales volume	kt	0.7	0.9	(22.2)	0.2	0.1	0.1	0.3
TPM sales volume	koz t	77.7	66.0	+17.7	24.2	18.4	17.9	17.2

<sup>1)</sup> reflects processing premium

Table 29. Sales revenue of KGHM INTERNATIONAL LTD. (PLN million)

	Unit	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Revenues from contracts with customers <sup>(1)</sup> , including:	PLN mn	3 084	2 856	+8.0	773	897	738	676
- copper	PLN mn	1 565	1 666	(6.1)	439	356	375	395
- nickel	PLN mn	38	44	(13.6)	7	12	4	15
- TPM – precious metals	PLN mn	438	344	+27.3	138	99	99	102

<sup>1)</sup> reflects processing premium

The sales revenue of the segment KGHM INTERNATIONAL LTD. in 2019 amounted to USD 802 million, and increased by USD 14 million (+2%), mainly due to an increase in revenues from the sale of precious metals and of services of companies operating under the brand of DMC Mining Services („DMC”).

Revenues from TPM sales increased by USD 19 million (+20%) due to an increase in the volume of sales by 11.7 thousand troy ounces (+18%) and higher effective prices.

Revenues from sales of services by DMC were higher by USD 46 million and mainly related to the realisation of a contract in the United Kingdom.

Revenues from sales of copper decreased by USD 53 million (-12%) due to a lower volume of copper sales (-5%) as well as a lower effective price (6 018 USD/t in 2019 compared to 6 423 USD/t in 2018).

### 8.3. COSTS

Table 30. C1 unit cost of KGHM INTERNATIONAL LTD.

	Unit	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
C1 unit cost <sup>1</sup>	USD/lb	1.74	1.92	(9.4)	1.60	1.74	1.69	1.95

<sup>1</sup> C1 unit production cost of copper - cash cost of payable copper production, reflecting costs of ore extraction and processing, the minerals extraction tax, transport costs, administrative expenses during the mining phase and smelter treatment and refining charges (TC/RC) less by-product value

The average weighted unit cash cost of copper production for all operations in the segment KGHM INTERNATIONAL LTD. in 2019 amounted to 1.74 USD/lb, or a decrease by 9% compared to 2018. The decrease in C1 resulted from lower operating costs as well as to higher revenues from sales of associated metals (+39%), which decrease C1.

### 8.4. FINANCIAL PERFORMANCE

Table 31. Financial results of KGHM INTERNATIONAL LTD. (USD million)

	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Revenues from contracts with customers	802	788	+1.8	201	228	194	179
Cost of sales, selling costs and administrative expenses, including: <sup>1</sup>	(719)	(716)	+0.4	(176)	(202)	(174)	(167)
- recognition/reversal of impairment losses on non-current assets	5	-	x	5	-	-	-
<b>Profit/(loss) on sales</b>	<b>83</b>	<b>72</b>	<b>+15.3</b>	<b>25</b>	<b>26</b>	<b>20</b>	<b>12</b>
<b>Profit/(loss) before taxation, including:</b>	<b>(118)</b>	<b>(85)</b>	<b>+38.8</b>	<b>(13)</b>	<b>(44)</b>	<b>(31)</b>	<b>(30)</b>
- share of losses of Sierra Gorda S.C.M. accounted for using the equity method	(113)	(182)	(37.9)	(69)	(27)	(17)	-
Income tax	(27)	(8)	x3.4	(17)	(4)	(3)	(3)
<b>PROFIT/LOSS FOR THE PERIOD</b>	<b>(145)</b>	<b>(92)</b>	<b>+57.6</b>	<b>(30)</b>	<b>(47)</b>	<b>(35)</b>	<b>(33)</b>
Depreciation/amortisation recognised in profit or loss	(106)	(127)	(16.5)	(30)	(19)	(24)	(33)
<b>Adjusted EBITDA<sup>2</sup></b>	<b>184</b>	<b>199</b>	<b>(7.5)</b>	<b>50</b>	<b>45</b>	<b>44</b>	<b>45</b>

Table 32. Financial results of KGHM INTERNATIONAL LTD. (PLN million)

	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Revenues from contracts with customers	3 084	2 856	+8.0	773	897	738	676
Cost of sales, selling costs and administrative expenses, including: <sup>1</sup>	(2 765)	(2 595)	+6.6	(677)	(794)	(663)	(631)
- recognition/reversal of impairment losses on non-current assets	19	-	x	19	-	-	-
<b>Profit/(loss) on sales</b>	<b>319</b>	<b>261</b>	<b>+22.2</b>	<b>96</b>	<b>103</b>	<b>75</b>	<b>45</b>
<b>Profit/(loss) before taxation, including:</b>	<b>(453)</b>	<b>(280)</b>	<b>+61.8</b>	<b>(51)</b>	<b>(170)</b>	<b>(121)</b>	<b>(111)</b>
- share of losses of Sierra Gorda S.C.M. accounted for using the equity method	(433)	(658)	(34.2)	(264)	(106)	(63)	-
Income tax	(102)	(28)	x3.6	(63)	(15)	(12)	(12)
<b>PROFIT/LOSS FOR THE PERIOD</b>	<b>(555)</b>	<b>(308)</b>	<b>+80.2</b>	<b>(114)</b>	<b>(184)</b>	<b>(134)</b>	<b>(123)</b>
Depreciation/amortisation recognised in profit or loss	(409)	(461)	(11.3)	(117)	(76)	(91)	(125)
<b>Adjusted EBITDA<sup>2</sup></b>	<b>709</b>	<b>722</b>	<b>(1.8)</b>	<b>194</b>	<b>179</b>	<b>166</b>	<b>170</b>

<sup>1</sup> Cost of products, merchandise and materials sold, selling costs and administrative expenses

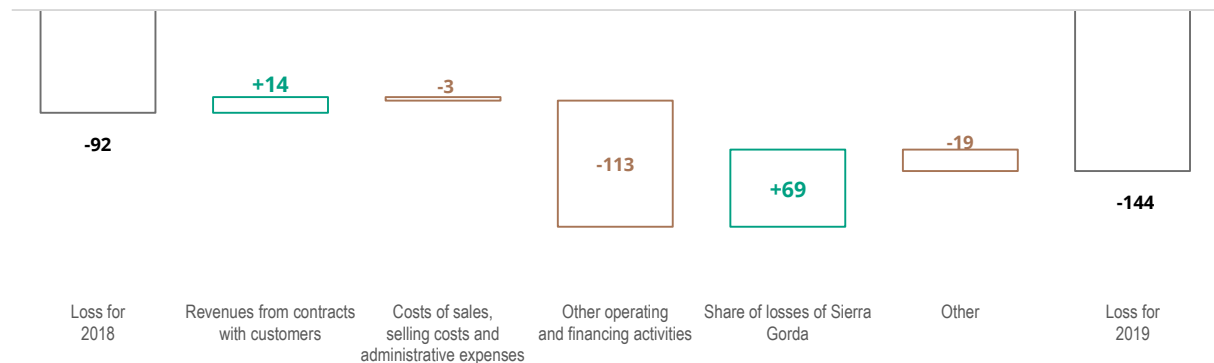
<sup>2</sup> Adjusted EBITDA = profit on sales + depreciation/amortisation (recognised in profit or loss) + impairment losses (-reversal of impairment losses) on non-current assets, recognised in cost of sales, selling costs and administrative expenses

Table 33. Key factors impacting the change in financial result of KGHM INTERNATIONAL LTD.

Item	Impact on change of profit or loss (USD million)	Description
	+46	Higher revenues realised by companies operating under the DMC brand.
<b>Higher sales revenue by USD 14 million</b>	(13)	Lower revenues due to lower sales volumes, including copper (-USD 25 million), partially offset by higher sales volumes of TPM (+USD 12 million).
	(18)	Lower revenues from the streaming contract in the Sudbury Basin mines.
	(5)	Lower revenues due to lower prices of basic products (including due to copper, by -USD 32 million, offset by higher TPM prices, by +USD 26 million).
	+4	Other factors.
<b>Higher cost of sales, selling costs and administrative expenses by USD 3 million</b>	+34	Lower depreciation/amortisation mainly concerns the Robinson mine. In 2018, part of the mine's deposit with higher depreciation/amortisation was mined as compared to the part of the deposit mined in 2019.
	+26	Lower costs of labour (+USD 12 million) and materials and energy (+USD 14 million).

	(34)	Higher costs of external services due to an increased scope of work carried out by subcontractors of DMC.
	+5	Reversal of impairment losses on assets.
	(29)	Change in inventories.
	(5)	Other factors.
<b>Impact of other operating activities and financing activities (-USD 113 million)</b>	(167)	Impact of reversal of allowances for impairment of loans for mine construction of Sierra Gorda (the amount of reversal as at 31 December 2019 amounted to USD 28 million as compared to USD 195 million as at 31 December 2018).
	+40	Reversal of impairment loss (on intangible assets not brought into use).
	+14	Other factors.
<b>Share of losses of joint ventures accounted for using the equity method</b>	+69	Share of the loss of Sierra Gorda S.C.M. recognised in 2019 in the amount of the increase in capital, i.e. in the amount of USD 113 million (in 2018 the share of the loss of Sierra Gorda S.C.M. was also recognised in the amount of the increase in capital, i.e. in the amount of USD 182 million).
<b>Income tax</b>	(19)	Changes mainly due to deferred income tax.

Chart 33. Change in profit or loss of KGHM INTERNATIONAL LTD. (USD million)



## 8.5. CASH EXPENDITURES

Table 34. Cash expenditures of KGHM INTERNATIONAL LTD. (USD million)

	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Victoria project	4	5	(20.0)	1	1	1	1
Sierra Gorda Oxide project	2	2	0.0	1	0	1	0
Pre-stripping and other	164	164	0.0	44	41	45	34
Ajax project	0	-	0.0	0	-	-	-
<b>Total</b>	<b>170</b>	<b>171</b>	<b>(0.6)</b>	<b>46</b>	<b>42</b>	<b>47</b>	<b>35</b>
Financing for Sierra Gorda S.C.M. – increase in the share capital	113	182	(37.9)	69	27	17	-

Table 35. Cash expenditures of KGHM INTERNATIONAL LTD. (PLN million)

	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Victoria project	15	19	(21.1)	3	4	4	4
Sierra Gorda Oxide project	8	6	+33.3	4	0	4	0
Pre-stripping and other	631	595	6.1	169	162	172	128
Ajax project	0	0	-	0	-	-	-
<b>Total</b>	<b>654</b>	<b>620</b>	<b>+5.5</b>	<b>176</b>	<b>166</b>	<b>180</b>	<b>132</b>
Financing for Sierra Gorda S.C.M. – increase in the share capital	433	658	(34.2)	264	106	63	-

Cash expenditures by the segment KGHM INTERNATIONAL LTD. in 2019 remained at a similar level to the prior year and amounted to USD 170 million.

Around 80% of cash expenditures were incurred by the Robinson mine and were mainly due to pre-stripping work.

Cash expenditures on the Victoria project amounted to USD 4 million and involved among others work related to securing existing infrastructure and project terrain. USD 2 million was incurred on the Sierra Gorda Oxide project (among others completion of tests involving the column leaching of crushed ore and of review of the block model for the oxide ore heap). Expenditures on exploration in the vicinity of the Franke mine (Franke, San Guillermo, Pelusa) amounted to USD 8 million.

Financing for the Sierra Gorda mine (in the form of increases in the share capital) in the amount of USD 113 million in 2019 was used among others for repayment of the mine's financial liabilities due to Project Finance.

## 9. ECONOMIC RESULTS OF SIERRA GORDA S.C.M.



The segment Sierra Gorda S.C.M. is a joint venture (under the JV company Sierra Gorda S.C.M.) of KGHM INTERNATIONAL LTD. (55%) and Sumitomo Group companies (45%).

The following production and financial data are presented on a 100% basis for the joint venture and proportionally to the interest in the company Sierra Gorda S.C.M. (55%), pursuant to the methodology of presentation of data in note 2 of the consolidated financial statements.

### 9.1. PRODUCTION

In 2019, Sierra Gorda S.C.M. produced a higher amount of copper than the levels recorded in 2018, while molybdenum production was lower.

Table 36. Production of copper, molybdenum and precious metals by Sierra Gorda S.C.M.

	Unit	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Copper production <sup>(1)</sup>	kt	108.2	96.9	11.7	27.6	27.4	26.4	26.8
Copper production – segment (55%)	kt	59.5	53.3	11.7	15.1	15.2	14.5	14.7
Molybdenum production <sup>(1)</sup>	mn lbs	20.3	26.7	(24.0)	5.3	4.7	4.8	5.5
Molybdenum production – segment (55%)	mn lbs	11.2	14.7	(24.0)	3.0	2.5	2.7	3.0
TPM production – gold <sup>(1)</sup>	koz t	56.7	42.2	34.4	15.3	15.0	13.0	13.4
TPM production – gold -segment (55%)	koz t	31.2	23.2	34.4	8.4	8.3	7.1	7.4

<sup>1)</sup> Payable metal in concentrate

The higher production of copper (an increase by 11.3 thousand tonnes, or by 12%) was due to the higher extraction and processing of ore with a higher copper grade compared to the ore processed in 2018. Moreover, on an annual basis there was a one percent increase in copper recovery.

Despite the higher processing of ore there was a drop in molybdenum production by 6.4 million pounds, or by 24% compared to 2018, as a result of lower molybdenum content in ore included in the mining areas plan.

### 9.2. SALES

In 2019, sales revenues amounted to USD 947 million (on a 100% basis), or PLN 2 002 million respectively to the 55% interest held by KGHM Polska Miedź S.A.

Table 37. Sales volume and revenues of Sierra Gorda S.C.M.

	Unit	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
<b>Revenues from contracts with customers, <sup>(1)</sup> including from the sale of:</b>	<b>USD mn</b>	<b>947</b>	<b>978</b>	<b>(3.2)</b>	<b>227</b>	<b>237</b>	<b>225</b>	<b>258</b>
- copper	USD mn	620	535	15.9	163	144	147	166
- molybdenum	USD mn	230	380	(39.5)	37	67	56	70
- TPM (gold)	USD mn	83	51	62.7	23	23	19	18
Copper sales volume	kt	111.3	94.7	17.5	27.3	28.7	29.3	26.0
Molybdenum sales volume	mn lbs	21.2	30.8	(31.2)	4.9	5.8	4.4	6.1

<sup>1)</sup> reflecting treatment/refining and other charges

The decrease in revenues by USD 31 million (-3%) as compared to 2018 was mainly due to revenues from the sale of molybdenum and was the result of the aforementioned plan to mine from areas with lower content of this metal. Revenues for other metals were higher.

The impact of the factors on sales revenue is described in the section discussing the financial results of Sierra Gorda S.C.M.



### 9.3. COSTS

The cost of sales, selling costs and administrative expenses incurred by Sierra Gorda S.C.M. amounted to USD 882 million, of which USD 60 million were selling costs and USD 38 million administrative expenses. Proportionally to the interest owned (55%) the costs of the segment Sierra Gorda amounted to PLN 1 864 million.

Table 38. Costs (prior to the impairment loss on non-current assets) and unit production cost of copper (C1) of Sierra Gorda S.C.M.

	Unit	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Cost of sales, selling costs and administrative expenses	USD mn	882	934	(5.6)	229	223	225	205
Cost of sales, selling costs and administrative expenses – segment (55% interest)	PLN mn	1 864	1 861	0.2	483	485	469	427
<b>C1 unit cost<sup>(1)</sup></b>	<b>USD/lb</b>	<b>1.41</b>	<b>1.31</b>	<b>7.6</b>	<b>1.47</b>	<b>1.25</b>	<b>1.58</b>	<b>1.34</b>

<sup>1)</sup> C1 unit production cost of copper - cash cost of payable copper production, reflecting costs of ore extraction and processing, the minerals extraction tax, transport costs, administrative expenses during the mining phase and smelter treatment and refining charges (TC/RC) less by-product value

Compared to the corresponding period of 2018, the cost of sales, selling costs and administrative expenses expressed in million USD was 6% lower than in 2018, despite higher processing of ore and a higher copper sales volume.

Improvement was recorded mainly in the following expenses by nature (prior to the change in inventories and the exclusion of capitalised pre-stripping costs). The percentage changes refer to costs in USD million:

- depreciation/amortisation – a decrease in costs by 10%, mainly due to a change in the mining plan for individual mine areas, impacting the level of amortisation of capitalised pre-stripping costs,
- energy costs – lower by 3% due to lower consumption per tonne of ore resulting from the processing of softer material,
- costs of fuel, lubricants and oils – lower by 14% due to a decrease in diesel prices,
- third-party molybdenum processing costs - lower by 36% due to the lower volume of production and sales of molybdenum,
- selling costs – lower by 12%, mainly due to lower molybdenum sales.

On the other hand labour costs were higher (+27%) due to the conclusion in the first half of 2019 of wage negotiations and the resulting bonus paid in this regard. Costs of spare parts were also higher (+23%) due to a greater scope of maintenance and replacement of equipment, among others due to increased extraction of ore and waste rock, an increase in the number of machines and in unplanned shutdowns due to breakdowns.

The aforementioned changes in respect of costs resulted in lower unit mining and ore processing costs respectively by 2% and 7%.

The unit cash cost of copper production (C1) amounted to 1.41 USD/lb, or an increase over 2018 (1.31 USD/lb), due to lower revenues from sales of associated metals which decrease C1 cost. The decrease in sales of metals other than copper was the direct result of mining in areas with a lower molybdenum grade, which led directly to a lower volume of sales of this metal compared to 2018. It should be noted that the level of C1 cost prior to deduction by the sale of associated metals was lower than in 2018.

### 9.4. FINANCIAL RESULTS

#### STATEMENT OF PROFIT OR LOSS

In 2019, adjusted EBITDA amounted to USD 312 million, of which proportionally to the interest held (55%) PLN 660 million is attributable to the KGHM Group.

Table 39. Results of Sierra Gorda S.C.M. in USD million (on a 100% basis)

	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Revenues from contracts with customers	947	978	(3.2)	227	237	225	258
Cost of sales, selling costs and administrative expenses	(882)	(934)	(5.6)	(229)	(223)	(225)	(205)
Profit/(loss) on sales	65	44	47.7	(2)	14	-	53
<b>PROFIT/LOSS FOR THE PERIOD</b>	<b>(263)</b>	<b>(385)</b>	<b>(31.7)</b>	<b>(78)</b>	<b>(67)</b>	<b>(76)</b>	<b>(42)</b>
Depreciation/amortisation recognised in profit or loss	(247)	(274)	(9.9)	(67)	(66)	(62)	(52)
<b>Adjusted EBITDA<sup>(1)</sup></b>	<b>312</b>	<b>318</b>	<b>(1.9)</b>	<b>65</b>	<b>80</b>	<b>62</b>	<b>105</b>

Table 40. Results of the segment Sierra Gorda S.C.M. proportionally to the interest held (55%) in PLN million

	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Revenues from contracts with customers	2 002	1 948	2.8	480	515	471	536
Cost of sales, selling costs and administrative expenses	(1 864)	(1 861)	0.2	(483)	(485)	(469)	(427)
Profit/(loss) on sales	138	87	58.6	(3)	30	2	109
<b>PROFIT/LOSS FOR THE PERIOD</b>	<b>(556)</b>	<b>(767)</b>	<b>(27.5)</b>	<b>(166)</b>	<b>(144)</b>	<b>(159)</b>	<b>(87)</b>
Depreciation/amortisation recognised in profit or loss	(522)	(546)	(4.4)	(141)	(143)	(129)	(109)
<b>Adjusted EBITDA<sup>(1)</sup></b>	<b>660</b>	<b>633</b>	<b>4.3</b>	<b>138</b>	<b>173</b>	<b>131</b>	<b>218</b>

<sup>1)</sup> Adjusted EBITDA = profit on sales + depreciation/amortisation (recognised in profit or loss) + impairment loss (-reversal of impairment losses) on non-current assets recognised in cost of sales, selling costs and administrative expenses

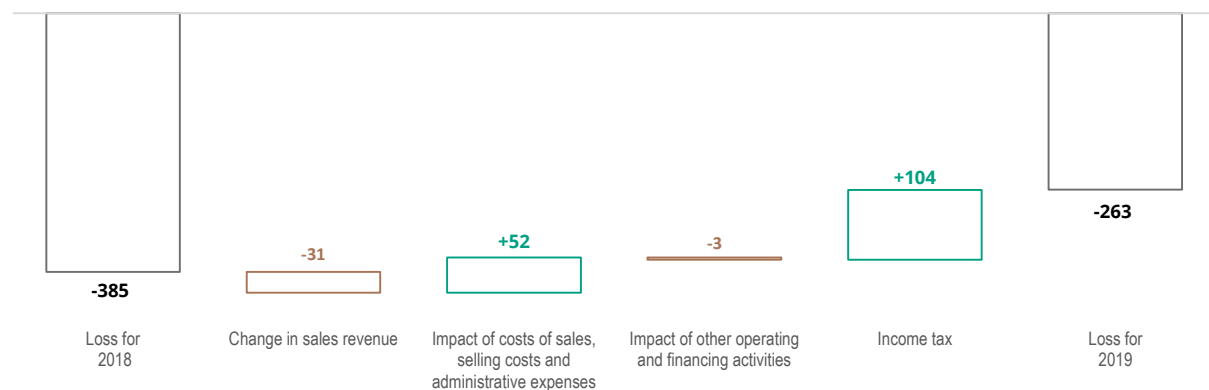
The decrease in EBITDA (in USD) by 2% compared to 2018 was mainly due to lower molybdenum content in mined ore and to a weaker macroeconomic situation (lower copper and molybdenum prices). The resulting decrease in revenues was not offset by higher production of copper, silver and gold and lower costs.

A summary of the major factors affecting revenues and costs, and therefore EBITDA, is presented in the following list of the major factors responsible for the lower net loss of Sierra Gorda S.C.M. by USD 122 million.

Table 41. Main factors impacting the change in the financial result of the segment Sierra Gorda S.C.M.

Item	Impact on change of profit or loss (USD million)	Description
<b>Lower sales revenue by USD 31 million</b>	(148)	Impact of lower volume of molybdenum sales by 10 million pounds and lower molybdenum prices
	+90	Increase in copper sales volume by 17 kt, alongside lower copper prices
	+27	Other factors, mainly higher revenues from gold and silver sales
<b>Lower cost of sales, selling costs and administrative expenses by USD 52 million</b>	+67	Lower costs, mainly: depreciation/amortisation, energy, fuel, molybdenum enrichment
	(43)	Higher costs, mainly: labour costs and spare parts
	+10	Change in inventories
	+18	Higher capitalised pre-stripping costs which at the same time lower costs in profit or loss
<b>Impact of other operating activities – a decrease in the result by USD 6 million</b>	(6)	Mainly a lower result on exchange rate differences
<b>An increase in the result on finance activities by USD 2 million</b>	+2	Among others a lower level of interest on loans drawn to build the mine due to the continued repayment of borrowings in this regard
<b>Income tax</b>	+104	Mainly impact of an impairment loss on the deferred tax asset (USD 110 million) recognised at the end of 2018

Chart 34. Change in profit/loss (USD million)



## 9.5. CASH EXPENDITURES

In 2019, cash expenditures on property, plant and equipment and intangible assets, reflected in the statement of cash flows of Sierra Gorda S.C.M. amounted to USD 298 million, of which the majority, or USD 223 million (75%), were cash expenditures incurred on pre-stripping to gain access to further areas of the deposit, with the rest related to development work and the replacement of property, plant and equipment.

Table 42. Cash expenditures of Sierra Gorda S.C.M.

	Unit	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Cash expenditures on property, plant and equipment	USD mn	298	287	3.8	79	78	75	66
Cash expenditures on property, plant and equipment – segment (55% interest)	PLN mn	629	572	10.0	166	169	157	137

The increase in cash expenditures (expressed in USD) by 4% was due to capitalised pre-stripping costs due to the greater scope of work carried out.

The main source of financing investments was the inflow from operating activities. In 2019, Owner financing of Sierra Gorda amounted to USD 205 million, or a decrease year-on-year by USD 125 million (-38%).

## 10. FINANCIAL RESULTS OF OTHER SEGMENTS

Companies in the remaining segments are very diversified in their operations. They include companies supporting the core business and others of an equity investment nature, as well as companies playing an important role in fulfilling the policy of corporate social responsibility. The segment in addition includes closed-end non-public investment funds and their portfolio companies (including those forming the Polska Grupa Uzdrowisk).

Table 43. Financial results of other segments (prior to consolidation adjustments)

	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Sales revenue	7 448	6 990	6.6	1 973	1 815	1 874	1 786
- including from external clients	2 301	2 202	4.5	540	548	583	630
Profit/loss on sales	(203)	(33)	×6.2	(232)	20	1	8
<b>Profit/loss for the period</b>	<b>(275)</b>	<b>(41)</b>	<b>×6.7</b>	<b>(287)</b>	<b>14</b>	<b>2</b>	<b>(4)</b>
Depreciation/amortisation recognised in profit or loss	(242)	(225)	7.6	(64)	(59)	(60)	(59)
<b>Adjusted EBITDA<sup>(1)</sup></b>	<b>241</b>	<b>201</b>	<b>19.9</b>	<b>34</b>	<b>79</b>	<b>61</b>	<b>67</b>

<sup>1)</sup> Adjusted EBITDA = profit/(loss) on sales + depreciation/amortisation (recognised in profit or loss) + impairment loss (-reversal of impairment losses) on non-current assets (recognised in cost of sales, selling costs and administrative expenses)

In 2019, other segments recorded a loss on sales, prior to recognition of consolidation adjustments, in the amount of -PLN 203 million, or a deterioration as compared to 2018 by PLN 170 million. The loss on sales for 2019 was mainly due to an impairment loss of PLN 190 million due to impairment recognised on the property, plant and equipment and intangible assets of the company „Energetyka” sp. z o.o.

The loss for the period amounted to -PLN 275 million, compared to a loss of -PLN 41 million in 2018. The loss for 2019 was mainly due to the aforementioned impairment loss on the assets of the company „Energetyka” sp. z o.o.

## 11. SHAREHOLDERS AND THE CAPITAL MARKET



### 11.1. SHAREHOLDER STRUCTURE OF KGHM POLSKA MIEDŹ S.A.

As at 31 December 2019, the share capital of the Company, in accordance with the entry in the National Court Register, amounted to PLN 2 000 million and was divided into 200 million shares, series A, fully paid, having a face value of PLN 10 each. All shares are bearer shares. Each share grants the right to one vote at the General Meeting. The Company has not issued preference shares.

In 2019, there was no change in either registered share capital or in the number of outstanding shares issued.

During this time there was a change in the ownership structure of significant blocks of shares of KGHM Polska Miedź S.A. The pension fund Otwarty Fundusz Emerytalny PZU "Złota Jesień", as a result of the sale of shares, on 15 February 2019 reduced its interest in the share capital of the Company and in the total number of votes to a level below 5%.

The Company's shareholder structure as at 31 December 2019 and at the date this report was signed, established on the basis of notifications received by the Company pursuant to art. 69 of the Act on public offerings and conditions governing the introduction of financial instruments to organised trading, and on public companies, is as follows:

Table 44. Shareholder structure as at 31 December 2019 and at the date this report was signed

Shareholder	Number of shares/votes	% of share capital /total number of votes
State Treasury <sup>1)</sup>	63 589 900	31.79%
Nationale-Nederlanden Otwarty Fundusz Emerytalny <sup>2)</sup>	10 104 354	5.05%
Aviva Otwarty Fundusz Emerytalny Aviva Santander <sup>3)</sup>	10 039 684	5.02%
Other shareholders	116 266 062	58.14%
<b>Total</b>	<b>200 000 000</b>	<b>100.00%</b>

<sup>1)</sup> based on a notification received by the Company dated 12 January 2010

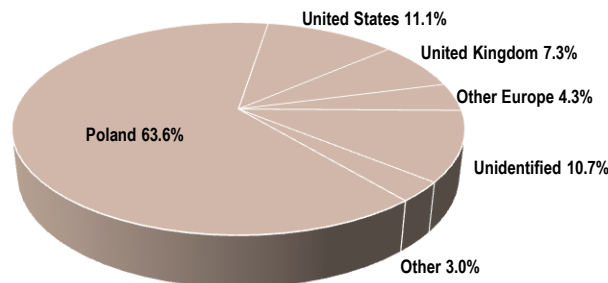
<sup>2)</sup> based on a notification received by the Company dated 18 August 2016

<sup>3)</sup> based on a notification received by the Company dated 17 July 2018

Other shareholders, whose combined interest in the share capital and in the total number of votes amounts to 58%, are mainly institutional investors, both international and domestic.

Following is the geographic distribution of the shareholder structure of KGHM Polska Miedź S.A. The data is based on research into the Company's shareholder structure performed in November 2019.

Chart 35. Geographic shareholder structure of KGHM Polska Miedź S.A. (%)



Source: CMI2i, November 2019

The Company does not hold any treasury shares.

The Management Board of the Company is unaware of any agreements which could result in changes in the proportion of the Company's shares held by present shareholders in the future and bondholders. Moreover, the Management Board is unaware of any agreements between bondholders, which could result in changes in the number of bonds held by them.

Based on information held by KGHM Polska Miedź S.A., as at 31 December 2019 and at the date this report was signed, no Member of the Management Board of the Company held shares of KGHM Polska Miedź S.A. or rights to them.

Amongst the Members of the Company's Supervisory Board, as at 31 December 2019 and at the date this report was signed, only Józef Czyczerski held 10 shares of KGHM Polska Miedź S.A. with a total nominal value of PLN 100. Based on information held by the Company, the remaining Members of the Company's Supervisory Board did not hold shares of KGHM Polska Miedź S.A. or rights to them.

As far as the Company is aware, Members of the Management Board and Supervisory Board did not hold shares of the related entities of KGHM Polska Miedź S.A. as at 31 December 2019 and at the date this report was signed.

The Company did not have an employee share incentive program in 2019.

## 11.2. KGHM POLSKA MIEDŹ S.A. ON THE STOCK EXCHANGE

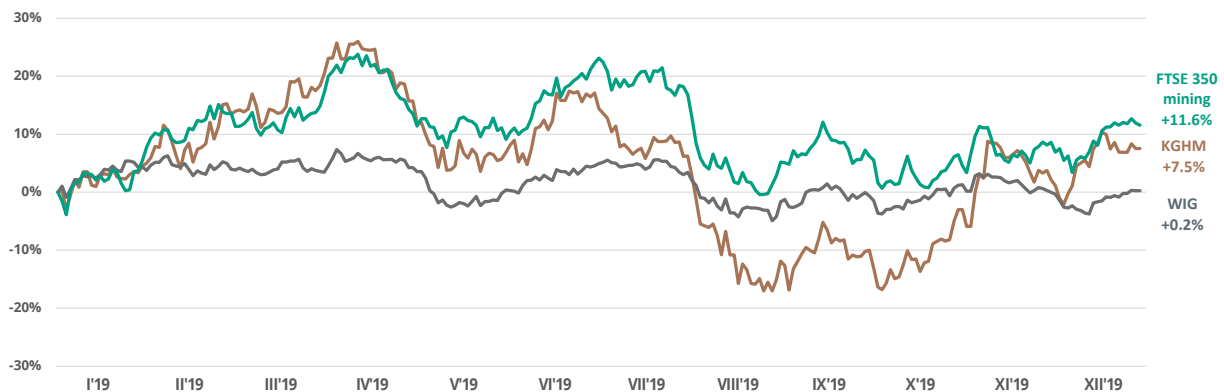
### THE SHARES OF KGHM POLSKA MIEDŹ S.A. ON THE WARSAW STOCK EXCHANGE

KGHM Polska Miedź S.A. debuted on the Warsaw Stock Exchange (WSE) in July 1997. The Company's shares are traded on the primary market of the WSE in the continuous trading system and are a component of the WIG, WIG20 and WIG30 main indices as well as the WIG – ESG index published since 3 September 2019, comprising listed companies which adhere to the principles of corporate social responsibility. The Company was also a permanent component of the RESPECT Index, from 19 November 2009 until 1 January 2020 when it ceased to be calculated and published. KGHM Polska Miedź S.A. is also a component of the sector index WIG-Mining. Moreover, KGHM Polska Miedź S.A. is a component company of the FTSE4Good Index Series. The FTSE4Good Index Series is part of the group of ethical investment indicators, reflecting criteria of corporate social responsibility and ESG risk management.

In 2019, the share price of KGHM Polska Miedź S.A. on the WSE rose by 7.5% and at the close of trading on 30 December 2019 amounted to PLN 95.58. During the same period the price of copper – the Company's main product – recorded an increase of 3.2%, alongside an increase in the average USD/PLN exchange rate by 1.0%. At the same time the WIG index recorded a slight rise – by 0.2%, while the WIG20 and WIG30 indices fell respectively by 5.6% and 4.2%. The FTSE 350 mining index also rose, by 11.6% - an index comprised of companies from the mining sector, listed on the London Stock Exchange.

On 10 April 2019, the Company's shares reached their maximum closing price for the year of PLN 112.00. The minimum closing price of PLN 73.76 was recorded on 26 and 28 August 2019.

Chart 36. Percentage change of share price of KGHM Polska Miedź S.A. versus the WIG index and FTSE 350 mining index (compared to the quotations from the last trading day in 2018)



Key share price data of KGHM Polska Miedź S.A. on the Warsaw Stock Exchange in the years 2018-2019 are presented in the following table:

Table 45. Key share price data of the Company on the Warsaw Stock Exchange

Symbol: KGH, ISIN: PLKGHM000017	Unit	2019	2018
Number of shares issued	million	200	200
Market capitalisation of the Company at year's end	PLN bn	19.1	17.8
Average trading volume per session	000' shares	575	601
Turnover value	PLN mn	13 180	13 890
Change in share price from the end of the prior year	%	+7.5	-20.1
Highest closing price during the year	PLN	112.00	115.00
Lowest closing price during the year	PLN	73.76	82.56
Closing price from the last day of trading in the year	PLN	95.58	88.88

Source: Own work based on WSE Statistic Bulletin for 2018 and 2019

## BONDS OF KGHM POLSKA MIEDŹ S.A. ON THE CATALYST MARKET

On 27 May 2019 an issue agreement was signed under which the Management Board of KGHM Polska Miedź S.A. established a bond issue program to the amount of PLN 4 billion. The Parties to the Issue Agreement were KGHM Polska Miedź S.A. as Issuer and Powszechna Kasa Oszczędności Bank Polski Spółka Akcyjna, Bank Handlowy w Warszawie Spółka Akcyjna, Bank Polska Kasa Opieki Spółka Akcyjna and Santander Bank Polska Spółka Akcyjna as Organizers and Dealers. The issue took place in June 2019, the maximum total nominal value of bonds amounted to PLN 2 billion. Under the Bond Issue Program, Series A and Series B bonds were issued. The bond issue was made through a private placement, was directed toward no more than 149 investors and was offered exclusively in Poland.

On 20 September 2019, by a resolution of the Management Board of the Warsaw Stock Exchange (Giełda Papierów Wartościowych w Warszawie S.A.) bearer bonds Series A and Series B of KGHM Polska Miedź S.A. were introduced to the alternative trading system on the Catalyst bond market. The first day of trading of the bonds on the Alternative Trading System was set at 3 October 2019.

Detailed information is available on the Company's website, [www.kghm.com](http://www.kghm.com) in the section Investors – Investor Information– Fixed income investors.

## ALLOCATION OF PROFIT

In accordance with a Resolution of the Ordinary General Meeting of KGHM Polska Miedź S.A. dated 7 June 2019 regarding the allocation of profit from financial year 2018 and a Resolution of the Ordinary General Meeting of KGHM Polska Miedź S.A. dated 6 July 2018 regarding the allocation of profit from financial year 2017, all of the profit from these periods was transferred to the Company's share capital.

The final decision regarding the amount of dividends paid is made by the General Meeting of KGHM Polska Miedź S.A.

## 11.3. INVESTOR RELATIONS

The investor relations team maintains an on-going dialogue with the capital market pursuant to its policy of ensuring a transparent company and adherence to stock exchange Best Practices. For KGHM Polska Miedź S.A., as a global company operating on four continents, it is a priority to ensure equal access to information to all members of the global capital markets. KGHM Polska Miedź S.A.'s actions are aimed at maintaining regular communication and transparent dialogue with analysts, institutional and individual investors as well as at ensuring conformance with our regulatory legal obligations. The Company fulfils its disclosure obligations by publishing regulatory filings and periodic reports via the official reporting system (ESPI).

2019 was another year of intense activities by KGHM Polska Miedź S.A. in terms of communicating with investors. Following are the main actions taken by KGHM Polska Miedź S.A. with respect to investor relations:

<b>Investor conferences in Poland and abroad</b>	The Company actively meets with investors and analysts in Poland and abroad during conferences organised by brokers. In 2019, the Company took part in more than a dozen investor conferences and more than 100 meetings.
<b>Results conferences</b>	The Company organises group meetings with the Management Board to discuss the financial results of the Company and Group. Publication of the Company's financial results is accompanied by a results conference open to all stakeholders, with a webcast in Polish and English, with the possibility of submitting questions by email as well as listening in by phone. Video recordings of these conferences are available on the Company's website, <a href="http://www.kghm.com">www.kghm.com</a> , in the section <i>Investors</i> .
<b>Capital Market Day</b>	The Investor Relations Department regularly organises events for the capital market. This type of meeting is aimed at familiarising investors with the degree of advancement of the development strategy as well as with the current operating and financial situation of the KGHM Group and its individual assets. In 2019, the Company organised both an Analyst Day and an Individual Investor Day in Lubin, with highlights of these events along with accompanying presentations provided in the section <i>Investors – Investor Events</i> .
<b>WallStreet conference</b>	In 2019, representatives of KGHM Polska Miedź S.A. once again took active part in the 3-day WallStreet conference – the largest organised event in the region for individual investors and one of the largest such events on the Polish capital market. Apart from a presentation by a Management Board Member, individual investors had the opportunity of meeting with the IR team, including during a so-called Shareholders Fair.
<b>Investor chats</b>	Representatives of the Company are available to individual investors during on-line chats. These are organised on a regular basis following the publication of the Company's financial statements. In 2019, four investor chats were held.
<b>Active Investor Relations section on the Company website</b>	The IR section is continuously updated with new information and documents. Among others these include regulatory filings and periodic reports, information on the shareholder structure, documents related to General Meetings and corporate governance, as well as presentations and video material for investors. In 2019, the IR section was enhanced to include a page on IR Events, which shows the present and past initiatives engaged in for the capital market.
<b>Quarterly IR Newsletter</b>	In 2019, the <i>Investors</i> pages added a section called <i>Newsletter dla Inwestorów</i> , which summarises the most important events of the past quarter and is distributed by email.

In 2019, sell-side reports on KGHM Polska Miedź S.A. were published by 10 analysts based in Poland and 6 based abroad.

Table 46. Brokerages which prepare reports on KGHM Polska Miedź S.A.

Poland*		
Biuro Maklerskie mBanku	Dom Maklerski BOŚ	Santander Biuro Maklerskie
JP Morgan	Erste Group	IPOPEMA Securities
Vestor Dom Maklerski	Pekao Investment Banking	Trigon Dom Maklerski
Biuro Maklerskie PKO BP		
Abroad		
Bank of America Merrill Lynch	BMO	Goldman Sachs
Morgan Stanley	UBS	WOOD & Company

\* Biuro Maklerskie, Dom Maklerski = brokerage

#### AWARDS AND DISTINCTIONS IN 2019 FOR ACTIVITIES RELATED TO COMMUNICATING WITH INVESTORS AND BEING PRESENT ON THE CAPITAL MARKET:

- KGHM Polska Miedź S.A. won The Best of The Best award in the competition Annual Report 2018, organised by the Polish Institute of Accountancy and Taxes. The award is presented to companies which maintain a continuously high standard of reporting and communicating with the market and which, during all of the competition's editions, win first place three times. The purpose of the competition is to promote annual reports with the highest utility for shareholders and investors.
- KGHM Polska Miedź S.A. was distinguished by the market newspaper Gazeta Giełdy i Inwestorów "Parkiet" in the ranking "Transparentna Spółka", or Transparent Company. This distinction by „Parkiet” was presented for the third time to companies listed on the Warsaw Stock Exchange which present information on their activities to the public in the most open manner. The list was developed by the newspaper in cooperation with the Institute of Accountancy and Taxes, based on the results of a survey in which 140 companies listed on the WSE participated – from the WIG 20, mWIG40 and SWIG80 indices. The survey asked questions about financial reporting, investor relations and corporate governance.



## 12. RISK MANAGEMENT IN THE GROUP

### Risk categories



Technology



Value chain



Market



External



Internal

#### 12.1. COMPREHENSIVE RISK MANAGEMENT SYSTEM IN THE KGHM POLSKA MIEDŹ S.A. GROUP

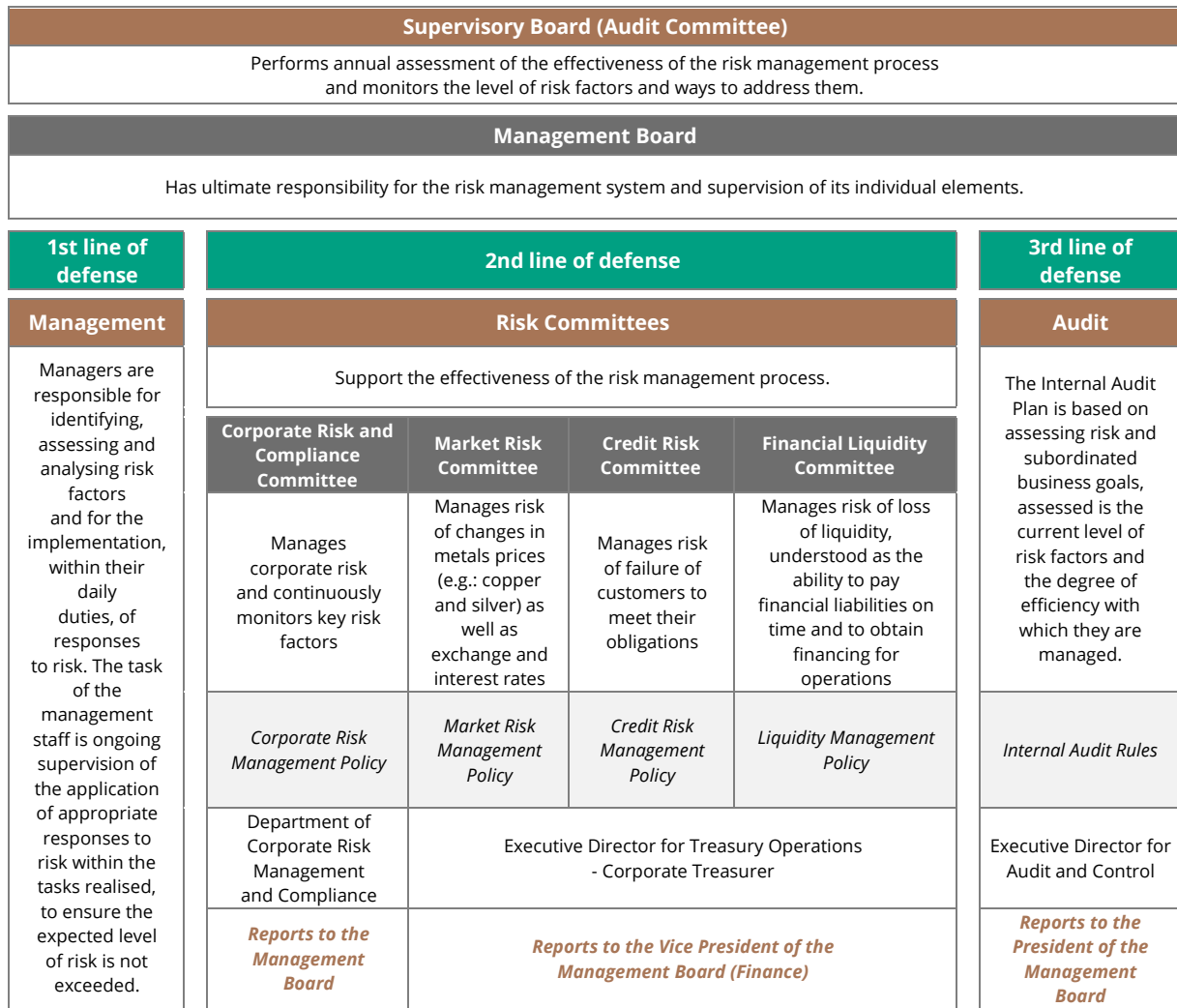
The KGHM Polska Miedź S.A. Group defines risk as uncertainty, being an integral part of the activities conducted and having the potential to result in both opportunities and threats to achievement of the business goals. The current and future, actual and potential impact of risk on the KGHM Polska Miedź S.A. Group's activities is assessed. Based on this assessment, management practices are reviewed and adjusted in terms of responses to individual risk factors.

Under the Corporate Risk Management Policy and Procedure and the Rules of the Corporate Risk and Compliance Committee updated in 2019, the process of corporate risk management in the Group is consistently performed. KGHM Polska Miedź S.A. oversees the process of managing corporate risk in the Group, while in the companies of the Group, documents regulating the management of corporate risk are consistent with those of the Parent Entity. Each year, the process of managing corporate risk is subjected to an efficiency audit (compliant with the guidelines of Best Practice for WSE Listed Companies 2016).

Risk factors in various areas of the Group's operations are continuously identified, assessed and analysed in terms of their possible limitation. Key risk factors in the Group undergo in-depth analysis in order to develop a Risk Response Plan and Corrective Actions. Other risk factors undergo monitoring by the Department of Corporate Risk Management and Compliance, and in terms of financial risk by the division of the Executive Director for Treasury Operations - Corporate Treasurer.

The breakdown of rights and responsibilities applies best practice principles for Corporate Governance and the generally recognised model of three lines of defense.

Diagram 8. Organisational structure of risk management in KGHM Polska Miedź S.A

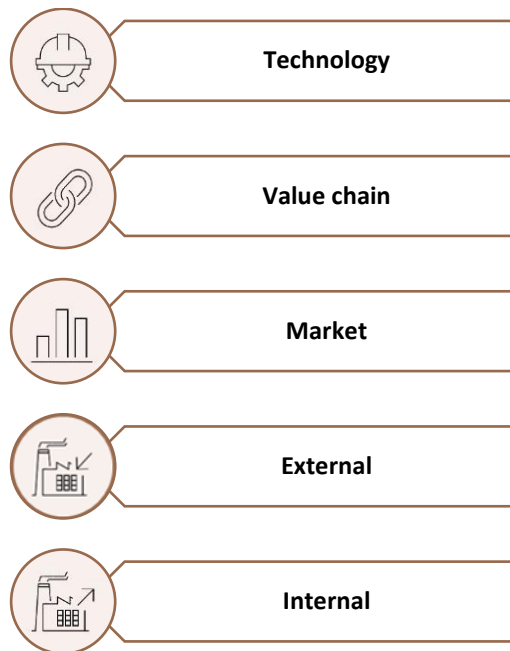


**12.2. CORPORATE RISK – KEY RISK FACTORS AND THEIR MITIGATION**

A tool used in identifying risk in the KGHM Polska Miedź S.A. Group is the Risk Model. Its structure is based on a given risk's source and is divided into the following 5 categories: **Technological, Values chain, Market, External and Internal**. Several dozen sub-categories have been identified and defined covering particular areas of the operations or management.

Following is the description of the key risk factors in the KGHM Polska Miedź S.A. Group in 2019, broken down into individual categories along with means for their mitigation, including identification of specific risks for the Parent Entity and the KGHM INTERNATIONAL LTD. Group.

Diagram 9. Risk categories in the Risk Model of KGHM Polska Miedź S.A.



The table below uses the following abbreviations: for the KGHM Polska Miedź S.A. Group – the KGHM Group, for the KGHM INTERNATIONAL LTD. Group – the KGHM INTERNATIONAL LTD. Group, for KGHM Polska Miedź S.A. – the Parent Entity.

#### Risk and description of risk factors

#### Mitigation

### CATEGORY – TECHNOLOGY

#### (Parent Entity)

#### Risk of failure to adhere to the efficient working time parameter and of failure to fully utilise the capacity of metallurgical installations to process own concentrate.

Sources of risk include potential breakdowns of key elements of the core production line and failure to adapt technology to production requirements, which could affect the availability of metallurgical infrastructure. An important risk factor is the need to maintain the production of concentrates in an amount and quality required to optimise the utilisation of the metallurgical facilities. Exposure to risk is also associated with the need to ensure required utilities to maintain the expected level of infrastructure availability.

Optimum utilisation of infrastructure, maintaining an appropriate mix of concentrates, R&D initiatives and advancement of the Metallurgy Development Program (MDP) at the Głogów Smelter and Refinery to adapt metallurgical structure and technology to ensure higher processing capacity for own concentrates, imported copper-bearing materials and purchased scrap. Actions undertaken are aimed at maintaining the availability of metallurgical equipment at the expected level and improving the productivity parameters of metallurgical infrastructure, as well as limiting the negative impact of this risk on KGHM's operations.

### CATEGORY – VALUE CHAIN

#### (KGHM Group)

#### Risk related to an ineffective process of monitoring and providing early warning to management staff on deviations from the budget and financial plans as well as with respect to adopting inappropriate economic parameters related to production, investments, macroeconomics and finance, for forecasts of company results.

An ineffective process of monitoring and providing early warning to management staff on deviations from the budget and financial plans may impede or delay the appropriate early identification of deviations in respect of forecasted results, at the same time shortening the time for taking appropriate corrective actions. Sources of risk are related to the possibility of ineffective mechanisms to control these processes.

Forecasts related to specific areas of the operations prepared by appropriate specialised units and ensuring the uniformity of operating plans with strategic plans. Monthly reporting of execution on forecasts in all critical areas. Regular contacts with and systematic streamlining of the communication process together with setting criteria enabling the identification of symptoms of potential deviations from the expected results of the KGHM Group.

**(KGHM INTERNATIONAL LTD. Group)****Risk related to the precision of estimated costs of decommissioning certain mines.**

With respect to risk factors related to the precision of estimated costs of decommissioning certain mines, there are questions related to the need to meet obligatory environmental conditions connected with realistic concepts for such liquidation.

Estimated costs of restoration and mine decommissioning based on expert reports and providing guarantees of future environmental obligations related to the closure and restoration of mining areas in accordance with existing laws and regulations.

**(KGHM INTERNATIONAL LTD. Group)****Risk related to exhaustion of ore resources and reserves prior to gaining familiarity with the parameters and characteristics of new planned deposits.**

The risk of changes in the evaluation and management of ore resources involves, among others, geological factors related to the reliable estimation of resources or mining conditions. Risk factors related to the limited reliability and completeness of data, based on which new resource projects are evaluated, may lead to the taking of less than optimal decisions on advancing or suspending a particular project.

Preliminary modeling data are collected in accordance with geological documentation held and prepared based on existing law as well as reviewed and consulted internally with experienced staff. Detailed analyses are performed on the results of on-going work, with a project's initial assumptions being updated. Incurring expenditures on exploration and evaluation enables the assessment of ore resources and research into geological-mining conditions, aimed at planning subsequent mining activities.

**(Parent Entity)****Risk of the inability to store mine tailings.**

The KGHM Group is exposed to the risk of a lack of sufficient tailings storage capacity due to delays in the expansion of the Żelazny Most Tailings Storage Facility. Risk factors involve the management and control of the project and may affect its budget, schedule and assumed results and may lead to a failure to adhere to the technological regime for designing and execution. Another source of risk are external factors in terms of suppliers of materials and services and administrative bodies, as for the advancement of such a project it is necessary to obtain required administrative decisions. Exposure to risk is also related with eventual unplanned shutdowns resulting from infrastructure breakdowns, which could impact the continuity of KGHM's operations.

Operating, building and expanding the storage facility in accordance with the operating instructions. Cooperation with a team of international experts (TIE) and a General Designer during the investment process. Applying observational methods based on assessing the geotechnical parameters obtained on the basis of evaluations of the results of monitoring, enabling a picture of the behaviour of the facility built or operated. Systematic supervision and control over the entire investment process of the expansion of the Żelazny Most Tailings Storage Facility.

**(KGHM Group)****Risk related to the lack of availability of required power sources.**

The KGHM Group is exposed to the risk of lack of availability of power sources for its operations. Potential disruptions in the supply of key power sources is mainly related to risk on the part of external suppliers and breakdowns of their distribution infrastructure as well as *force majeure*. Amongst internal factors, the most important involve questions of maintaining operations, utilisation and investments and modernisation work.

Ensuring back-up power/gas systems and on-going assessment of the security of the power network. Conducting a variety of investments aimed at strengthening energy security. A framework agreement with the company Polskie Górnictwo Naftowe i Gazownictwo S.A. for the sale of natural gas to increase the security of natural gas supply. Systematic limitation of energy consumption under the implemented, PN-EN ISO50001:2012-compliant Energy Management System and Energy Savings Program (POE). Planned increase in the efficiency and flexibility of the KGHM Group in terms of its Polish and international assets, among others by partially satisfying the needs for electricity from its own sources as well as from renewable energy sources („RES”) by the end of 2030. Start of the project Monitoring of Electricity, Gas and Water under the KGHM 4.0 program with respect to INDUSTRY, to improve the efficiency of the core business in Poland.

**(KGHM Group)****Risk related to infrastructure breakdowns which disrupt the core production operations, related to natural hazards as well as internal factors related to the applied technology.**

The KGHM Group is exposed to risk related to the technological potential and efficiency of its infrastructure to meet the needs of the production process. By utilising infrastructure required to maintain its operations, KGHM is exposed to the risk of industrial breakdowns resulting in unplanned shutdowns. Such breakdowns could result both from natural hazards, i.e. catastrophic natural events and *force majeure* as well as internal factors dependent on the KGHM Group (on-going operations, maintaining production, key suppliers, servicing).

Preventive management of key infrastructure elements affecting production continuity. Appointment of a task and expert teams of with respect to counteracting breakdowns of metallurgical infrastructure. On-going analysis of geotechnical risk and the verification of planned recoveries. In terms of ICT (information-communication technology) separating groups of projects related to reducing technological debt. Gradual replacement of older technology with newer solutions, reflecting the corporate architecture standard.

**(KGHM Group)****Risk related to the cost efficiency of the production process, mining projects, processing of copper-bearing materials, reflecting the risk of a substantial rise in prices of materials, services, electricity, gas and water and restoration costs.**

The KGHM Group is exposed to the risk of external and internal factors, such as metals prices, exchange rates, costs of supply of purchased metal-bearing materials, TC/RCs, selling premiums and costs of services and of electricity, gas and water. This risk is also related to the estimation of costs of provisions for the restoration of mining terrain based on existing law for the territories in which the KGHM Group operates.

On-going control of processing costs, monitoring the market situation, optimising costs, including supplies of purchased metal-bearing materials, hedging transactions and management of the net position. Hedging, securing the Company against changes in the USD/PLN exchange rate and metals prices (mainly copper). Creating multi-year plans and budgets enabling the achievement of profitability under conditions prevailing on the market.

**CATEGORY - MARKET****(KGHM Group)****Market risk related to volatility in metals prices and risk of changes in exchange rates and interest rates.**

Market risk is understood as the possibility of a negative impact on the results of the KGHM Group resulting from changes in the market prices of goods, exchange rates and interest rates, as well as changes in the value of debt securities and in the share prices of listed companies.

This risk is actively managed by the Parent Entity, in accordance with the Market Risk Management Policy. A basic technique for managing market risk in the company are hedging strategies utilising derivative instruments. Natural hedging is also applied.

More in section 12.3. Market, credit and liquidity risk

**(KGHM Group)****Credit risk related to trade receivables.**

The KGHM Group sells some of its products to commercial entities with deferred payment terms, as a result of which there may arise the risk of late payments for products delivered. The companies of the KGHM Group have for many years cooperated with a large number of customers, leading to the geographic diversification of trade receivables.

This risk is actively managed by the Parent Entity, in accordance with the Credit Risk Management Policy. Exposure to credit risk is limited by evaluating and monitoring the financial condition of customers, setting credit limits and applying creditor security.

More in section 12.3. Market, credit and liquidity risk

**(KGHM Group)****Liquidity risk.**

Management of the risk of loss of liquidity, understood as the ability to pay liabilities on time and to obtain financing for operations.

This risk is actively managed in the Parent Entity in accordance with the updated Financial Liquidity Management Policy.

More in section 12.3. Market, credit and liquidity risk

**CATEGORY - EXTERNAL RISKS****(KGHM Group)****Risk of seismic tremors and associated roof collapses or distressings of the rock mass, and the occurrence of uncontrolled rock bursts.**

The KGHM Group is exposed to the risk of natural hazards and *force majeure* and related insufficient geological knowledge of the rockmass. Key risk factors which affect the materialisation of such risk also involves the results of periodic analyses of the mining situation and the state of hazard and applied measurement methods. Natural hazards associated with the underground mining of copper ore deposits, in particular hazards related to mining tremors and their potential effects in the form of roof and wall collapses. These factors affect safety, as their occurrence can lead to serious or even fatal injuries as well as damage to underground machinery, equipment and infrastructure, along with production downtimes.

Actions aimed at preventing rock bursts and roof collapses, such as systematic seismological observations, on-going assessment of the rock mass and the marking off of areas of particular threat of roof collapse. Use of active methods of preventing rock bursts and roof collapses based on provoking dynamic events through mass blasting of mining faces and through blasting to release stress in the orebody or its roof. Preparation of reserve fields in the orebody which could handle limited production.

**(Parent Entity)****Risk related to gas hazards (mainly hydrogen sulphide).**

KGHM is exposed to the specific risk of natural hazards and *force majeure* (gas-related geodynamic hazards and the occurrence of naturally-occurring hazardous gases) leading to restrictions in realising production plans and the advance of preparatory work. These factors affect safety, as their occurrence can lead to serious or even fatal injuries as well as damage to underground machinery, equipment and infrastructure, along with production downtimes.

The risk of gas hazards occurring is being assessed and principles are being developed for working under the risk of such hazards. Individual employee safety measures are applied as well as equipment and means for reducing concentrations of hydrogen sulphides and neutralising oppressive odours.

**(Parent Entity)****Risk related to underground climate risk, which increases in tandem with increasing mine depth.**

KGHM is exposed to risk related to the underground climate,

The use of solutions to counteract underground climate risk using neutral means (e.g. the use of short airways and directing air from the lowest temperature rockmass, high-speed air) and through the use of central, workplace and personal air conditioning. The

limiting activities or increasing costs, involving geological conditions, the temperature of the air sent into the mines and underground mining conditions.

use of shortened working time.

**(Parent Entity)**

**Risk related to underground water hazards.**

KGHM is exposed to the risk of natural hazards and *force majeure* in the form of underground water hazards resulting from breakdowns of the main dewatering equipment, human error (actions contrary to the project or technology) or mistaken geological conclusions.

Research into hydrogeological conditions and water hazards, measuring water inflow to the mines, conducting mining operations pursuant with technology for the safe conduct of mining operations in underground mines. Systematic control of mining areas threatened by water inflow, control of water flow pathways and dams according to a set schedule. Review and updating of the Rescue Plan in case of water inflow. Development of regional pumps and the piping system, construction of water dams aimed at restricting water inflow, drilling exploratory holes to stabilise uncontrolled water inflow.

**(KGHM Group)**

**Risk of failure to uphold air quality standards (including with respect to arsenic).**

The KGHM Group is exposed to the risk of negative impact on various components of the natural environment resulting from the mining of copper ore, followed by its processing at all stages of the production process, which could lead to the breaching of permissible emissions limits.

Undertaking actions under the Air Protection Programs and R&D work. Advancement of the Program to adapt the technological installations of KGHM to BAT conclusions for the non-ferrous metals industry together with restriction of arsenic emissions (BAT'As).

**(Parent Entity)**

**Risk of restrictions to the ability to sell sulphuric acid (due to loss of market/customers and/or a drop in demand).**

Risk related to macro- and microeconomic factors involving political actions which result in privileges for a specific group of producers or the introduction of additional fees/legal restrictions. Risk related to unfavourable prices (volatility to the disadvantage of KGHM), high requirements in terms of market parameters for selling sulphuric acid and lower demand for the product on international markets, including as a result of the deterioration in the financial condition of a key customer.

Increase the number of internal storage facilities at the metallurgical plants as well as of warehouses in Szczecin. Search for new sales markets. Long term contracts. Incur costs of additional storage. Payments to customers and incur transport costs. Search for alternative ways to manage the acid and utilise it in the Concentrators.

**(KGHM Group)**

**Risk of failure to adhere to established principles and standards of behaviour with respect to counteracting corruption and with respect to the procurement process as well as the risk of incurring losses from actions which are harmful to KGHM.**

The KGHM Group is exposed to the risk of actions which are harmful to KGHM taken by external entities participating in the processes of procurement, sales and investment. Threats are in the form of potential losses by the KGHM Group resulting from the intentional actions of external entities, i.e. collusion over minimum pricing, the insufficient technical and economic potential of contractors, falsification of documentation, fictional contractors, conflicts of interest. Other important risk factors include threats as regards all types of improprieties related to breaching anti-corruption and ethical standards by employees of the KGHM Group (such as corruption, conflicts of interest, abuse, discrimination, illegality, nepotism).

Implementation of the Code of Ethics of the KGHM Polska Miedz S.A. Group as the main tool in the corporate culture of the KGHM Group, and other appropriate policies and procedures ensuring the efficiency of implemented principles and values. Meeting global corporate governance standards and increased stakeholder expectations, including above all those of customers and financial institutions. Application under the Responsible Supply Chain Policy of guarantees of the selection of responsible suppliers, especially in the case of acquiring so-called conflict minerals and ensuring that the goods and services acquired by the KGHM Group will not be used to finance terrorism, and that they will be manufactured or provided while respecting human rights, labour standards, environmental protection and counteracting corruption. Proactive monitoring and analysis of procurement processes in terms of identifying abuse and threats of corruption within the organisation and the supply chain, as well as undertaking actions with respect to ethics and counteracting corruption along with the implementation of corrective actions. Internal control with respect to the identification and uncovering of fraud, abuse and corruption in KGHM Group entities and the prevention of such based on the Internal Control Procedure in order to eliminate risk at the level of prevention.

**(KGHM Group)****Risk of changes to laws and regulations (including with respect to energy and tax law).**

The KGHM Group operates in unstable regulatory environments in many jurisdictions. A consequence of the need for technological and organisational adaptation to a volatile legal environment may be higher operating costs or restriction of such activities. The risk of interruptions to operations or the need to reorganise work due to new legislation may have a substantial impact on the operations of the KGHM Group.

Active cooperation with the academic environment, which issues opinions on changes to legal acts, and the on-going providing of positions and opinions with respect to numerous areas subject to legislative change (including as part of membership of national and international organisations). Cooperation with renowned law firms and the creation of specialised organisational units which monitor the regulatory environment. Taking preventive actions aimed at adapting to organisational, infrastructural and technological changes. In the Parent Entity an energy management system was implemented and a certificate of compliance with ISO 50001 standard was received.

**CATEGORY – INTERNAL RISKS****(KGHM Group)****The risk of serious accidents or industrial illnesses caused by improper workplace organisation, the failure to follow procedures or the use of improper protective measures.**

The failure to adhere to occupational health and safety rules and procedures, as well as the employment of persons lacking an appropriate psychophysical predisposition, could be a source of potential accidents. Exposure to unfavourable natural conditions together with associated natural hazards requires, apart from the high requirements in terms of essential professional preparation, that employees possess appropriate qualifications in terms of health, physical ability and psychological fitness. Risk is also associated with the possibility of temporary production stoppages caused by serious accidents, which could potentially affect the operations of the KGHM Group financially, legally and image-wise. The KGHM Group is also exposed to the risk of industrial illnesses as a consequence of the effect of the working environment on people. Enhanced exposure to risk is also related to external factors in terms of sub-contractors and their safety culture.

A detailed division of obligations between management and supervisory staff on the one hand and entities providing services to the Company on the other, to ensure safe working conditions and the proper coordination of work. Systematic discussion of workplace safety with the participation of representatives of sub-contractors and mining oversight authorities. Engaging employees and sub-contractors in campaigns carried out in the KGHM Group aimed at improving OHS standards. Advancement of development initiatives based on the idea of sustainable development and safety and enhancing the Group's image as being socially responsible under the new Strategy adopted in 2018. Actions involving on-going improvement consistent with the cycle of self-improvement in order to continuously seek and prepare for implementation the catalogue of initiatives aimed at further improvement of OHS, to advance the long-term goal of the Company, „Zero accidents due to human and technical errors“. Optimisation of health care for employees, in particular following workplace accidents and systematic searching for new organisational and technical initiatives to enable the achievement of a higher level of safety of employees in the Divisions of KGHM Polska Miedz S.A.

**(KGHM Group)****The risk of lack of acceptance by the public, local governments or other stakeholders for the conduct of development and exploration work.**

The KGHM Group is exposed to the risk of exposure to external factors involving the environment in which it operates and consequently, exposure to changes in the image of the organisation and its products or services. Risk of ineffective management of relations with stakeholders, which affects the willingness of the environment and the taking of actions towards the Group. In extreme cases, the materialisation of this risk may lead to the blocking of development plans.

Advancement of CSR Strategy and close cooperation with government bodies. Meetings and negotiations with stakeholders, informational campaigns, conferences, publications. Cooperation with academic and sector bodies and authorities in order to meet the highest communication-public relations standards.

**(KGHM Group)****The risk of not being able to secure appropriate staff to advance the Group's business goals.**

The risk of not being able to acquire and keep human resources, among others to support on-going operations and development projects. The KGHM Group is exposed to risk related to the availability of qualified staff in the market as well as on-going identification of staffing needs in terms of required qualifications and supplying them while reflecting staffing fluctuations. Of significance is access to qualified employees in the future in the context of an aging society and a market deficit of certain professions.

Advancing a variety of HR projects, identification of potential successors for key positions (including in terms of mobility) and preparations for advancement. On-going comparison of remuneration packages (including in relation to working conditions) to offers on the market. Cooperation with schools and universities to promote the company as an employer and to ensure qualified employees. Implementation of programs to develop employee skills and to secure funds for this purpose. Development of recruiting tools and the identification of key skills to advance the company's business goals.

**(KGHM Group)****Risk that the confidentiality, integrity or availability of informational assets which have been collected, stored or processed on IT resources may be compromised, as well as cybernetic threats.**

The KGHM Group, due to its well-developed IT structure, is exposed to the risk of a breach in the confidentiality, integrity or availability of informational assets which have been collected, stored or processed on IT resources. The sources of this risk are both forces of nature (e.g. fires, construction catastrophes, downpours) as well as hazards arising from human activities (intentional or not). The KGHM Group is exposed to the risk of an

Strict adherence to and application of principles arising among others from the IT Security Policy and from Facility Protection Plans. The systematic evaluation of risk loss of the confidentiality, integrity or availability of informational assets which have been collected, stored or processed on IT resources. On-going monitoring of the usefulness of existing infrastructure as well as the analysis of and planning for the implementation of teleinformatic solutions to increase security, in accordance with global trends and best practice in this regard. Implementation of security systems and adequate organisational solutions at various levels of the company's infrastructure, aimed at staying ahead of any decrease in the utility of systems at risk and minimising the potential losses of the KGHM Group.

unauthorised loss, change or destruction of critical data and information as well as loss of the possibility of the operational control of equipment and systems as a result of cybernetic attacks on the infrastructure of the KGHM Group. Such incidents could generate the risk of production shutdowns, leading to production and financial losses and claims due to the loss/disclosure of personal data. This risk has a large impact on the reputation of the KGHM Group.

**(KGHM Group)**

**The risk of exceeding project/program budgets and schedules, deviating from defined scopes and failing to meet defined quality parameters as a result of the improper management of portfolios and projects. Risk related to the operational management and development of key mining projects, reflecting the question of incurred costs, permits and infrastructural requirements.**

The KGHM Group is exposed to risk related to the advancement of projects and programs as a result of their improper management. The risk of changes in budgets, schedule, scope and deviations from the expected quality of project products and/or programs is related to a variety of factors of an internal nature involving both the methodical approach and the projected structure of management and supervision. Improperly selected tools and techniques, lack of established criteria and principles for evaluating projects, or inconsistency in their application or adherence to them may restrict or prevent the achievement of the KGHM Group's strategic goals. In terms of external factors, there remains the question of meeting legal and formal requirements which could generate deviations from the assumed schedule, and in extreme instances may halt the advancement of a project/program.

Improve standards in the management of portfolios and projects and implement a projects management system aimed at supporting the organisation in the planning and management of portfolios and projects. Standardisation of planning and preparation processes and in the advancement of investment projects, comprising such aspects as scheduling, preparing costs projections, technical designing, project review, investment handover documentation, risk analysis of projects/programs. Management of projects in accordance with international standards and conducting on-going monitoring of progress. On-going evaluation of the economic feasibility of existing and anticipated development projects.

### 12.3. MARKET, CREDIT AND LIQUIDITY RISK

The goal of market, credit and liquidity risk management in the KGHM Polska Miedź S.A. Group is to restrict the undesired impact of financial factors on cash flow and results in the short and medium terms and to enhance the Group's value over the long term. The management of risk includes both the elements of risk identification and measurement as well as its restriction to acceptable levels. The process of risk management is supported by an appropriate policy, organisational structure and procedures. In the Parent Entity these issues are covered in the following documents:

- Market Risk Management Policy and the Rules of the Market Risk Committee,
- Credit Risk Management Policy and the Rules of the Credit Risk Committee, and
- Financial Liquidity Management Policy and the Rules of the Financial Liquidity Committee.

The „Market Risk Management Policy in the KGHM Polska Miedź S.A. Group” covers selected mining companies in the Group (KGHM Polska Miedź S.A., KGHM INTERNATIONAL LTD., FNX Mining Company Inc., Robinson Nevada Mining Company, KGHM AJAX MINING Inc. and Sociedad Contractual Minera Franke), with representatives of the Parent Entity and KGHM INTERNATIONAL LTD. serving as members of the Market Risk Committee.

Financial liquidity management is carried out in accordance with the „Financial Liquidity Management Policy in the KGHM Group” which in a comprehensive manner regulates financial liquidity management in the Group carried out by individual Group companies, while its organisation and coordination as well as the supervision thereof is performed in the Parent Entity.

Credit risk management in the Parent Entity is carried out in accordance with the Management Board-approved Credit Risk Management Policy. The Parent Entity serves as an advisor to the Group's companies with respect to managing credit risk. The „Credit Risk Management Policy in the KGHM Polska Miedź S.A. Group” applies to selected Group companies, the goal of which is to introduce a comprehensive, joint approach and the most important elements of the credit risk management process.



## 12.4. MARKET RISK MANAGEMENT

Market risk is understood as the possible negative impact on the Group's results arising from changes in the market prices of commodities, exchange rates and interest rates, as well as from changes in the value of debt securities and share prices of listed companies.

In terms of market risk management (in particular the risk of changes in metals prices and exchange rates) of greatest significance and impact on the results of the Group are the scale and nature of the activities of the Parent Entity and the mining companies of KGHM INTERNATIONAL LTD.

The Parent Entity actively manages market risk, undertaking actions and decisions in this regard within the context of the global exposure throughout the KGHM Polska Miedź S.A. Group.

The Management Board is responsible for market risk management in the Parent Entity and for adherence to policy in this regard. The main body involved in performing market risk management is the Market Risk Committee, which makes recommendations to the Management Board in this area.

### Commodity risk, currency risk

In 2019, the Group was mainly exposed to the risk of the changes in the prices of metals it sells: copper and silver. Of major significance for the Parent Entity was the risk of changes in currency rates, in particular the USD/PLN exchange rate. The Group's companies are additionally exposed to the risk of volatility in the prices of other metals. Market risk related to changes in metals prices arises from the formula for setting prices in physical metals sales contracts, which are usually based on the average monthly market prices for the relevant future month.

In accordance with the Market Risk Management Policy, in 2019 the Parent Entity continuously identified and measured market risk related to changes in metals prices, exchange rates and interest rates (analysis of the impact of market risk factors on the Parent Entity's activities – profit or loss, statement of financial position, statement of cash flows), and also analysed the metals and currencies markets. These analyses, along with assessment of the internal situation of the Parent Entity and Group, represented the basis for taking decisions on the application of hedging strategies on the metals, currency and interest rates markets.

With respect to strategic management of market risk, in 2019 the Parent Entity implemented copper price hedging transactions with a total notional amount of 153 thousand tonnes and maturity falling from July 2019 to December 2020 (including: 135 thousand tonnes hedging the copper price in 2020), as well as on the silver market with a total notional amount of 3.6 million ounces and maturity falling from January 2020 to December 2020. Moreover, in terms of management of the net trading position, in 2019 so-called QP adjustment swap transactions were entered into on the copper and gold markets with maturities of up to June 2020. As a result, as at 31 December 2019, the Parent Entity held open positions in derivatives on the copper market for 199.5 thousand tonnes (including: 189 thousand tonnes from strategic market risk management, while 10.5 thousand tonnes were entered into under management of the net trading position) and 3.6 million troy ounces of silver.

In 2019, the Parent Entity implemented transactions hedging against a change in the USD/PLN exchange rate for the total notional amount of USD 1 560 million with maturity from July 2019 to December 2021 (of which USD 1 380 million in respect of transactions hedging the exchange rate for the years 2020-2021). Put options were purchased as well as collar and seagull options structures (European options). Moreover, in 2019 the Parent Entity entered into CIRS (Cross Currency Interest Rate Swap) transactions for the notional amount of PLN 2 billion, hedging against market risk related to the issue of bonds in PLN with a variable interest rate. Debt due to bonds denominated in PLN generate currency risk due to the fact that most of the Parent Entity's sales revenue is denominated in USD.

In terms of managing currency risk, the Parent Entity applies natural hedging by borrowing in currencies in which it has revenues. The value of bank and investment loans as at 31 December 2019 drawn in USD, following their translation into PLN, amounted to PLN 4 980 million (as at 31 December 2018: PLN 7 655 million).

As at 31 December 2019, KGHM INTERNATIONAL LTD. did not hold open derivative positions on the metals and currency markets.

Some of the Group's Polish companies managed the currency risk related to their core businesses by opening derivative transactions on the EUR/PLN and USD/PLN markets.

### Interest rate risk

Interest rate risk is the possibility of the negative impact of changes in interest rates on the Group's position and results. In 2019, the Group was exposed to such risk due to loans granted, free cash invested on deposits, the reverse factoring program and borrowings.

As at 31 December 2019, the following positions were exposed to interest rate risk by impacting the amount of interest income and costs:

- cash and cash equivalents: PLN 1 373 million, including the deposits of special purpose funds: the Mine Closure Fund and the Tailings Storage Facility Restoration Fund,
- borrowings: PLN 3 873 million,
- trade and similar payables: PLN 596 million.

As at 31 December 2019, the following positions were exposed to interest rate risk due to changes in the fair value of instruments with fixed interest rates:

- receivables due to loans granted by the Group: PLN 17 million,

	<ul style="list-style-type: none"> <li>- liabilities due to borrowings (i.e. due to bank and other loans drawn and leases with fixed interest rates): PLN 4 000 million.</li> </ul> <p>In terms of strategic management of market risk, in 2019 the Parent Entity entered into CIRS (Cross Currency Interest Rate Swap) transactions for the notional amount of PLN 2 billion, securing against market risk related to the issue of bonds in PLN with a variable interest rate.</p>
<b>Price risk related to the change in share prices of listed companies</b>	<p>Price risk related to the shares of listed companies held by the Group is understood as the change in their fair value due to changes in their quoted share prices.</p> <p>As at 31 December 2019, the carrying amount of shares of companies which were listed on the Warsaw Stock Exchange and on the TSX Venture Exchange amounted to PLN 326 million.</p>
<b>Result on derivatives and hedging transactions</b>	<p>The total impact of derivatives and hedging instruments (transactions on the copper, silver, currency and interest rate markets as well as embedded derivatives and USD-denominated loans designated as a hedge against a change in the exchange rate) on the Group's profit or loss for 2019 amounted to PLN 143 million, of which:</p> <ul style="list-style-type: none"> <li>- PLN 245 million adjusted revenues from contracts with customers,</li> <li>- -PLN 1 million adjusted interest on borrowings,</li> <li>- PLN 79 million decreased the result on other operating activities, and</li> <li>- PLN 22 million decreased the result on financing activities.</li> </ul> <p>Moreover, in 2019 other comprehensive income decreased by PLN 389 million (impact of hedging instruments).</p> <p>As at 31 December 2019, the fair value of open positions in derivatives of the Group (on the metals, currency and interest rate markets and in embedded derivatives) amounted to PLN 143 million.</p>

## CREDIT RISK MANAGEMENT

Credit risk is defined as the risk that counterparties will not be able to meet their contractual liabilities.

The Management Board is responsible for credit risk management in the Parent Entity and for compliance with policy in this regard. The main body involved in actions in this area is the Credit Risk Committee.

In 2019, the KGHM Polska Miedź S.A. Group was exposed to this risk, mainly in four areas:

<b>Credit risk related to trade receivables</b>	<p>The Group's companies have been cooperating for many years with a large number of customers, which affects the geographical diversification of trade receivables.</p> <p>The Parent Entity limits its exposure to credit risk related to trade receivables by evaluating and monitoring the financial standing of its customers, setting credit limits, using debtor security and non-recourse factoring. An inseparable element of the credit risk management process realised by the Parent Entity is the on-going monitoring of receivables and the internal reporting system.</p> <p>Buyer's credit is only provided to proven, long-term customers. In the case of new customers, an effort is made to ensure that sales are based on prepayments or trade financing instruments which wholly transfer the credit risk to financial institutions.</p> <p>In 2019, the Parent Entity secured its receivables by promissory notes, registered pledges, bank guarantees, corporate guarantees, mortgages and documentary collection. Moreover, the majority of customers who hold buyer's credit on contracts have ownership rights confirmed by a date certain.</p> <p>To reduce the risk of insolvency by its customers, the Parent Entity has a receivables insurance contract, which covers receivables from entities with buyer's credit which have not provided strong collateral or have provided collateral which does not cover the total amount of the receivables. Taking into account the collateral held and the credit limits received from the insurance company, as at 31 December 2019 the Parent Entity had secured 64% of its trade receivables (as at 31 December 2018: 75%).</p> <p>The concentration of credit risk in the Group is related to the terms of payment granted to key clients. Consequently, as at 31 December 2019 the balance of receivables from 7 of the Group's largest clients, in terms of trade receivables at the end of the reporting period, represented 29% of the trade receivables balance (as at 31 December 2018: 28%). Despite the concentration of this type of risk, it is considered that due to the availability of historical data and the many years of experience cooperating with clients, as well as above all due to the security used, the level of credit risk is low.</p>
<b>Credit risk related to cash and cash equivalents and bank deposits</b>	<p>The Group allocates periodically free cash in accordance with the requirements to maintain financial liquidity and limit risk and in order to protect capital and maximise interest income.</p> <p>Credit risk related to deposit transactions is continuously monitored by the on-going review of the credit ratings of those financial institutions with which the Group cooperates, and by limitation of the level of concentration in individual institutions. As at 31 December 2019, the maximum share of a single entity in terms of credit risk arising from financial institutions in which the Group has deposited funds amounted to 19% (as at 31 December 2018: 24%).</p>

**Credit risk related to derivatives transactions** All of the entities with which the Group enters into derivative transactions (with the exception of embedded derivatives) operate in the financial sector. These are mainly financial institutions, with a medium-high rating. According to fair value as at 31 December 2019, the maximum share of a single entity with respect to credit risk arising from open derivative transactions entered into by the Group and from unsettled derivatives amounted to 15% (31 December 2018: 22%). Due to diversification of risk in terms both of the nature of individual entities and of their geographical location, as well as taking into consideration the fair value of assets and liabilities arising from derivative transactions, the Group is not materially exposed to credit risk as a result of derivative transactions entered into.

**Credit risk related to loans granted** As at 31 December 2019, the balance of loans granted by the Parent Entity amounted to PLN 7 227 million. The most important of these are long-term loans in the total amount of PLN 7 201 million granted to the company Future 1 and to the KGHM INTERNATIONAL LTD. Group. Detailed information on the loans granted by KGHM Polska Miedź S.A. is presented in the Financial Statements, Note 6.2.

As at 31 December 2019, the balance of loans granted by the Group amounted to PLN 5 720 million. The most important of these are long-term loans in the total amount of PLN 5 694 million, or USD 1 499 million, granted by the KGHM INTERNATIONAL LTD. Group for the financing of a mining joint venture in Chile.

Credit risk related to the loans granted to the joint venture Sierra Gorda S.C.M. is dependent on the risk related to mine project advancement and is determined by the Management Board of the Parent Entity as moderate.

## MANAGEMENT OF FINANCIAL LIQUIDITY RISK AND OF CAPITAL

The management of capital in the Group aims at securing funds for development and at securing relevant liquidity.

**Financial liquidity management** Management of the Group's liquidity is conducted in accordance with the Financial Liquidity Management Policy in the KGHM Group. This document describes the process of financial liquidity management in the Group, which is realised by the Group's companies, while its organisation and coordination as well as the supervision thereof is performed in the Parent Entity.

The basic principles resulting from this document are:

- the need to ensure stable and effective financing for the Group's operations,
- constant monitoring of the Group's level of debt, and
- effective management of working capital.

The principles of the Policy for managing liquidity of the Company and Group are described in detail in Note 8.3 respectively of the separate and consolidated financial statements.

Borrowing by the Group is based on the following pillars:

- an unsecured, revolving syndicated credit facility, obtained by the Parent Entity in the amount of USD 1 500 million with a 5-year tenor with the option of extending for another 2 years (5+1+1). The credit facility replaced the revolving syndicated credit facility in the amount of USD 2 500 million dated 11 July 2014,
- two investment loans granted to the Parent Entity by the European Investment Bank in the amount of PLN 2 000 million and PLN 900 million with financing periods of up to 12 years from the date the instalments are drawn,
- bilateral bank loans to the amount of PLN 3 887 million, supporting both the management of liquidity of companies, for the financing of working capital as well as of investments,
- the bond issue program of the Parent Entity on the Polish market, based on an issue agreement dated 27 May 2019. On 27 June 2019 the first issue was made in the nominal amount of PLN 2 000 million, under which 5-year bonds were issued in the amount of PLN 400 million and 10-year bonds in the amount of PLN 1 600 million.

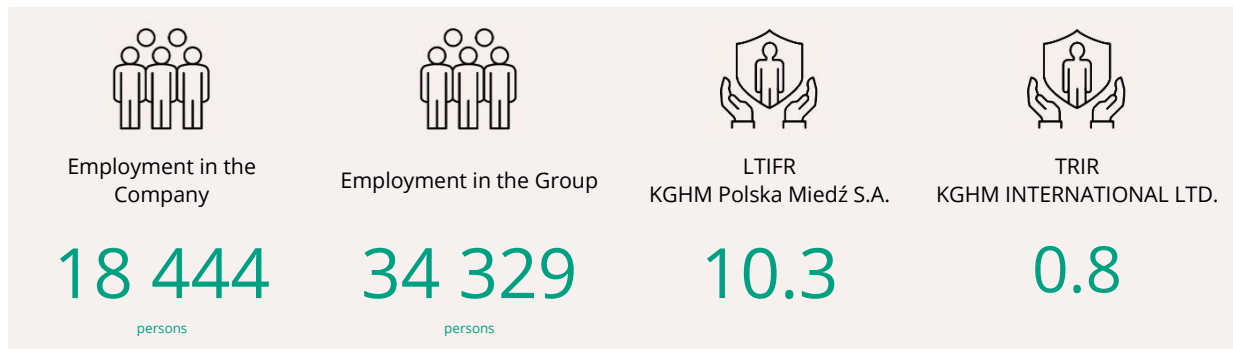
Detailed information regarding available sources of financing and their utilisation in 2019 may be found in Section 6.6 of this report.

The aforementioned sources of financing fully cover the liquidity needs of the Parent Entity and the Group. During 2019, the Group made use of borrowing which was available from all of the above categories, while liabilities of the Group due to bank and other loans drawn and to bonds issued as at 31 December 2019 amounted to PLN 7 181 million.

**Management of capital** In order to maintain the ability to operate, taking into consideration the execution of planned investments, the Group manages capital so as to be able to generate returns for shareholders and provide benefits for other stakeholders.

The Group aims to maintain the equity ratio, in the long-term, at a level of not less than 0.5, and the ratio of Net Debt/EBITDA at a level of up to 2.0.

## 13. HUMAN RESOURCES IN THE COMPANY AND GROUP



### 13.1. EMPLOYMENT

#### KGHM POLSKA MIEDŹ S.A.

Employment in KGHM Polska Miedź S.A. at the end of 2019 amounted to 18 539 people, and was 0.2% higher than at the end of the prior year. Average annual employment in KGHM Polska Miedź S.A. amounted to 18 444 and was higher than the level of employment in 2018 by 113 people.

Table 47. Average employment in KGHM Polska Miedź S.A.

	2019	2018	Change (%)
Mines	12 440	12 433	+0.1
Metallurgical plants	3 635	3 600	+1.0
Other divisions	2 369	2 298	+3.1
<b>KGHM Polska Miedź S.A.</b>	<b>18 444</b>	<b>18 331</b>	<b>+0.6</b>

The increase in employment was mainly due to:

- increased need for qualified employees in order to develop and implement application and infrastructural projects for the entire Group (among others the KGHM 4.0 Program, implementation of the ECM/BPM platform, implementation of the Integration platform, the SKD CCTV System and the Printing System),
- increased need for qualified employees in order to continue development of the Żelazny Most Tailings Storage Facility.

#### GROUP

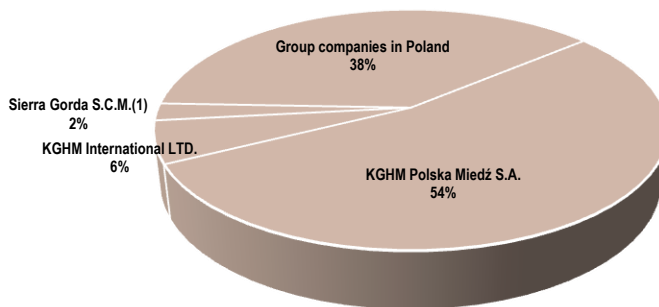
In 2019, the companies of the Group employed 34 328 people, or a decrease by 0.2% as compared to the prior year. The employment structure is shown in the following table and chart:

Table 48. Average employment in the Group

	2019	2018	Change (%)
KGHM Polska Miedź S.A.	18 444	18 331	+0.6
KGHM INTERNATIONAL LTD.	1 944	2 037	(4.6)
Sierra Gorda S.C.M. <sup>(1)</sup>	794	790	+0.5
Other international Group companies	9	10	(10.0)
Group companies in Poland	13 137	13 228	(0.7)
<b>Total</b>	<b>34 328</b>	<b>34 396</b>	<b>(0.2)</b>

<sup>1)</sup> Sierra Gorda S.C.M. – employment proportional to share in the company (55%)

Chart 37. Structure of employment in the Group in 2019



<sup>1)</sup> Sierra Gorda S.C.M. – employment proportional to share in the company (55%)

## COMPANIES IN POLAND

In 2019, average employment in the companies of the KGHM Polska Miedź S.A. Group in Poland decreased as compared to 2018 by 91 positions (or by 0.7%). This change was mainly in respect of blue-collar positions and was due to difficulties in securing properly-qualified workers, as well as to adapting employment to current needs.

## COMPANIES ABROAD

In the companies outside Poland, average employment in 2019 decreased as compared to 2018 by 90 positions (or by 3.2%). This was the result of a drop in employment by 93 people in **KGHM INTERNATIONAL LTD.**

The reason for the decrease in employment in KGHM INTERNATIONAL LTD. was the reorganisation in the Sudbury mines, and mainly the suspension of mining from the Morrison deposit.

## 13.2. HUMAN RESOURCES PROJECTS

### KGHM Polska Miedź S.A.

<b>Competent in the mining-metallurgical sector. KGHM – a key partner in professional education</b>	<p>In 2019, KGHM Polska Miedź S.A. continued cooperation with secondary schools involved in technical and sector education, and expanded the program „Competent in the sector” to include an additional two schools from the Polkowice <i>powiat</i> (county). In classes where KGHM is a patron, in academic year 2019/2020 more than 1650 students are being educated which, thanks to cooperation on the employer-school line, have the opportunity to engage in practical vocational training, participate in lessons taught by experts and visits to the Divisions of KGHM to enhance their professional knowledge, as well as access to a scholarship program.</p> <p>As a result of the introduction of this program the area of education has been adapted, in terms of professional training, to the needs of the workplace, and in particular to those of KGHM Polska Miedź S.A. The measurable effect of this cooperation was the expansion by the Ministry of National Education in 2019 to include the mine-related professions „underground miner of minerals other than bituminous coal” and „technician of underground mines of minerals other than bituminous coal”, whose educational profiles have been adapted to the technology of extracting metals ores.</p>
<b>Dual education</b>	<p>In 2019, based on a letter of intent entered into by KGHM Polska Miedź S.A., Katowicka Specjalna Strefa Ekonomiczna S.A. and the Powiat (County) of Głogów, under the project „POWER KSZTAŁCENIE DUALNE – DOBRY START W ZAWODACH BRANŻY GÓRNICZO – HUTNICZEJ” (Power dual education – a good start in professions in the mining-metallurgical sector), a pilot Model Program of practical professional education in the profession of Metallurgical Technician was carried out. Lectures and workshops were conducted throughout the school year on the grounds of the Głogów Copper Smelter and Refinery by supervisory personnel from individual areas and comprised the entire copper production line as well as those of the crude lead and precious metals production lines. The Program concluded in June 2019 with an examination and the presentation of assessments. The conclusions generated by the program were sent to the Katowice Special Economic Zone in the form of a report.</p>
<b>La Serena</b>	<p>KGHM Polska Miedź S.A., in the process of strengthening its global position and expanding its business and social contacts, decided to initiate educational and technical cooperation with the University of La Serena in Chile. A result of this was the organisation in July 2019 of a summer school for mining students. More than a dozen students participated in activities organised by the AGH University of Science and Technology in Kraków and the Earth Sciences Faculty of the University of Wrocław. While in Poland, the students also had the opportunity to visit the Divisions of KGHM Polska Miedź S.A.</p>
<b>eKariera (e-Career)</b>	<p>Work continues on enabling external access to the entire eKariera system. Two further modules were added to the already existing eRekrutacja (eRecruitment) module: Probationary period employment (Staże) and graduate theses work (prace dyplomowe).</p> <p>Implementation of the remaining modules - individual and group internships (praktyki i praktyki grupowe) - and completion of the work is expected in the first half of 2020.</p>
<b>4E skills academy</b>	<p>The program <b>Developing strategically - 4E Skills Academy</b> trains leaders in KGHM Polska Miedź S.A.</p> <p>The four key directions of development defined in the Company's strategy of flexibility, efficiency, ecology and e-industry were the inspiration for creating the 4E Skills Academy. This academy is aimed at supporting managers in developing the skills required to advance the strategic goals of KGHM Polska Miedź S.A.</p> <p>The first meeting covered trends and their impact on the economy as well as on employers. The inaugural Academy's workshops were dedicated to „Skills of the future”. A team of experts from various areas in our organisation looked at factors of change and developed, under the direction of specialists in research into the future of the labor market, key directions for our organisation.</p> <p>Subjects of subsequent meetings were leadership in challenging times and the pressures which are a permanent feature of business reality. The challenges facing managers in a variable, rapidly-changing environment require the skill to recognise and predict cause-and-effect factors, to comprehend global economic, cultural and political trends and critical thinking, and are included in the tasks of the 4E Skills Academy for 2020.</p>

## Group

### Companies in Poland

In 2019, actions were taken in terms of global projects introduced in prior years, comprising all of the companies in Poland, such as recruitment principles using the e-Rekrutacja system.

In addition, each of the companies advanced its own HR projects. These involved areas such as enhancing professional abilities and qualifications, skills and improving productivity, alongside the utilisation of motivational tools. In terms of addressing problems related to acquiring employees, cooperation was instituted with external institutions: vocational schools, schools of higher learning and employment offices.

### KGHM INTERNATIONAL LTD.

In 2019, the following HR projects were advanced in the companies of the KGHM INTERNATIONAL LTD. Group:

<b>in Canada and the USA</b>	<ul style="list-style-type: none"> <li>- support of the HR function in the process of reorganisation in the Sudbury mines as a result of suspending mining from the Morrison deposit,</li> <li>- support of the HR function in the process of replacing the entity which provides medical services for employees in the USA (Robinson and Carlota mines),</li> <li>- replacement of the entity providing tax advisory services in employment-related matters.</li> </ul>
<b>in Chile</b>	<ul style="list-style-type: none"> <li>- migration to a new HR system, SAP – a project aimed at optimising HR activities and ensuring better informational services or support for employees (concluded in December 2019),</li> <li>- an application program for student internships in 2019, aimed at assisting the children or relatives of employees, who complete their academic education (15 students),</li> <li>- a program of professional integration compliance, pursuant to legal requirements in Chile – these laws serve a social function and require companies to employ people with certain disabilities. The company met this requirement with the support of an advisory firm by determining which employees have a certain degree of disability (7 employees).</li> </ul>

## 13.3. RELATIONS WITH THE TRADE UNIONS

### KGHM POLSKA MIEDŹ S.A.

In 2019, the following major events with respect to relations with the trade unions took place in the Company:

<b>22 January 2019</b>	<p>Additional Protocol No. 23 to the Collective Labour Agreement (CLA) for the Employees of KGHM Polska Miedź S.A. was signed. With effect from 1 January 2019, it introduced the following:</p> <ul style="list-style-type: none"> <li>- an increase in basic wage rates by 5.6%;</li> <li>- an increase in the basis for calculating shift bonuses, from category 8 to category 10;</li> <li>- inclusion in the employment periods granting entitlement to bonuses and benefits of breaks in working time, in the case of a court-ordered return to work;</li> <li>- inclusion in the employment periods granting entitlement to pension rights and jubilee bonuses of un-paid holiday time, granted to the employee for the purpose of working at another employer for a period set forth in the agreement reached between the employers in this regard.</li> </ul>
<b>27 August 2019</b>	An agreement was signed regarding pre-payments of the annual bonus for the first half of 2019.
<b>22 January 2020</b>	Negotiations were initiated regarding the new level of remuneration elements and employee benefits set forth in the CLA.
<b>26 February 2020</b>	<p>The parties to the Collective Labour Agreement for the Employees of KGHM Polska Miedź S.A. signed an agreement regarding remuneration and employee benefits in 2020, comprised of:</p> <ol style="list-style-type: none"> <li>1. Additional Protocol No. 24 to the CLA which will be concluded and will cover the following areas: <ul style="list-style-type: none"> <li>- an increase in basic wage rates from 1 January by 6%,</li> <li>- an increase in the basis for calculating bonuses for work in harmful and hazardous conditions from the 8<sup>th</sup> to the 10<sup>th</sup> category,</li> <li>- an update of the clauses respecting school accessories equivalents,</li> <li>- recognition in the CLA of a healthcare packet,</li> <li>- an update of additional holidays,</li> <li>- clauses respecting rescue bonuses for fire fighters,</li> <li>- a change in the source of financing the equivalent for holiday travel and healthcare holidays, in respect of which the number of healthcare holidays to the amount of 445 broken down by Division will be entered into the wording of the CLA,</li> </ul> </li> <li>2. Assuming there are no unusual macroeconomic events, the increase in basic wage rates by 6% will result in an increase in the average total wage at a level of no lower than 6%. Should the aforementioned events occur, the parties to the agreement will reach an appropriate understanding.</li> <li>3. Changes in pay grades in the Divisions will include at least 15% of employees.</li> </ol>

Relations with the trade unions in KGHM Polska Miedź S.A. were mainly shaped by meetings between the parties to the Collective Labour Agreement. In 2019, the parties held 21 meetings. In terms of dialogue with the trade unions, there were also many bilateral meetings with individual unions. Positive relations involving on-going activities are also shaped by the trade unions active in the Company's Divisions.

### GROUP COMPANIES IN POLAND

In 2019, the domestic companies of the Group engaged in negotiations with the trade unions regarding questions of remuneration, rules for granting bonuses, employment conditions and social matters. In most cases they concluded with the signing of agreements and additional protocols to the Collective Labour Agreements and with changes to remuneration regulations.

In 2019, collective disputes were pursued in three of the domestic companies of the Group, of which one concluded with the signing of an agreement.

**PeBeKa S.A.** – from 10 December 2018 to 1 March 2019 the company was in a collective dispute with one of the trade unions active in this company. This trade union had demands involving wage rises and improving OHS conditions. During the procedural process the parties commenced negotiations, which concluded with the signing of a protocol of dispute. In the meantime the company commenced talks involving wage increases with all of the trade unions active in the company. As a result of these talks, the parties agreed a common position which also comprised the demands at the center of the dispute. On 1 March 2019, based on the Agreement reached, the trade union Związek Zawodowy Pracowników Przemysłu Miedziowego, based on art. 9 of the Act dated 23 May 1991 on resolving collective disputes, concluded the collective dispute.

**PHU „Lubinpex” Sp. z o.o.** – On 5 December 2019, one of the trade unions active in the company entered into a collective dispute with the employer, with demands involving discretionary bonuses and the annual bonus, and the introduction of additional wage regulations. On 12 December 2019 the company's Management Board initiated negotiations, aimed at concluding the dispute by reaching agreement. The parties agreed a common position regarding the monthly bonus and the annual bonus, while other wage demands remain subject to further negotiation.

**MERCUS Logistyka sp. z o.o.** – On 7 October 2019 one of the trade unions active in the company approached the employer with a letter containing several demands, including wage rises, with the warning that the failure to address these demands within the statutory deadline will be treated as the commencement of a collective dispute. On 10 October 2019, a meeting was held and an Agreement with the Representatives of the Trade Unions active in the Company was signed, although the trade union which had presented the demands did not sign the agreement. On the same day the company informed the District Labour Inspectorate in Wrocław – Legnica Branch of the commencement of a collective dispute. As part of the negotiations several meetings were held, at which the disputed questions were discussed. Despite these meetings an agreement was not reached, and on 17 December 2019 the parties declared that each of them maintains their position, and that the dispute will continue with the participation of a mediator. As a result of the fact that the parties failed to reach agreement as to who the mediator would be, it was determined that the decision would be made by the Minister of Labour from the list kept by the Ministry following the submission by the trade union of a petition on selecting a mediator. At a meeting held on 18 December 2019, the company confirmed that it cannot agree to the trade union's demand regarding an increase in the basic wage, while the trade union's representative declared that the terms proposed by the company are insufficient. The parties signed a protocol of dispute in this regard. On 9 January 2020, a letter was submitted to the Ministry of Family, Labour and Social Policy in Warsaw requesting the selection of a mediator in order to pursue mediation as regards the collective dispute.

### INTERNATIONAL COMPANIES OF THE GROUP

#### KGHM INTERNATIONAL LTD.

In the companies of the KGHM INTERNATIONAL LTD. Group **in Canada and the United States**, the interests of employees are represented only in the assets in the Sudbury Basin in Canada, while employees in the Robinson and Carlota mines and at the Ajax and Victoria projects are not represented by trade unions.

In the Sudbury Basin, 96 employees are represented by the trade union USW Local 2020. At present the current collective agreement, signed on 1 July 2014, expires on 30 June 2020. It is expected that negotiations on the new agreement will be concluded prior to the expiry of the current agreement. Both of the parties to the collective agreement have developed good relations.

In the companies of the KGHM INTERNATIONAL LTD. Group **in South America**, there is trade union representation in the Franke mine. Two independent trade unions are active at the mine, covering altogether 355 employees. Relations with the trade unions are conducted properly.

#### Sierra Gorda S.C.M.

There are 3 independent trade unions active at the Sierra Gorda mine. Sierra Gorda maintains appropriate and friendly relations with all three unions. In 2020 two trade unions are preparing to engage in elections for new Union Management Boards.

Regular official meetings are held with all of the unions, and in case of need, at the request of either a union or the company, ad hoc meetings are also organised. The trade unions offered support to and cooperation with the employer during the social crisis in Chile. Sierra Gorda S.C.M., as one of only a few mines in Chile, did not record any impact on production as a result of

social unrest. The trade unions actively participate in all campaigns and programs organised for employees, while managers at various levels participate in meetings with the trade unions as needed. Both sides monitor the obligations associated with the new collective agreements. All of the provisions have been implemented, which also encourages positive relations. The unions signed an agreement for a new 8x6 labour system for Sierra Gorda S.C.M., which facilitates work related to optimising the production line and increasing sulphide ore processing, as well as the organisation of processing plant shutdowns.

### 13.4. OCCUPATIONAL HEALTH AND SAFETY

The life and health of employees and workplace safety in general is the chief priority in the hierarchy of values of the KGHM Polska Miedź S.A. Group. For several years the Company has advanced its vision of „Zero accidents due to human and technical errors, zero occupational illnesses among our employees and contractors“. As a result of the adoption in December 2018 of a new strategy to the year 2023, in 2019 a conceptualisation of the strategy in the area of occupational safety was prepared through formulation of the Employee Safety Improvement Program – „Think About The Consequences“ as well as a Program to prevent the most common hazards to workplace safety by utilising innovative technology.

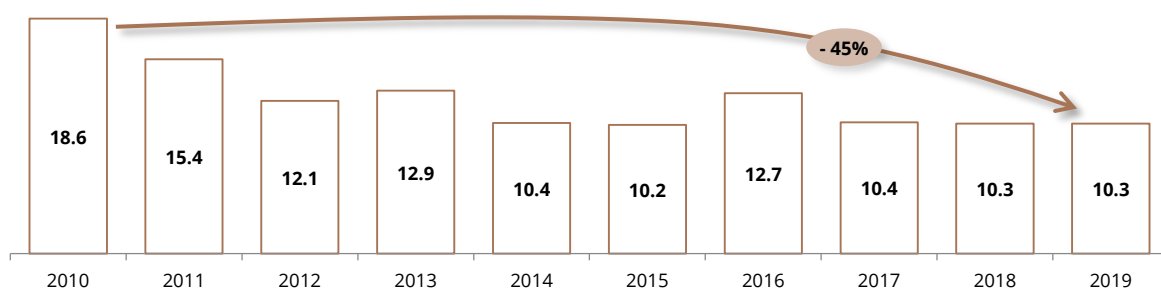
The Company applies high OHS standards, both towards its own employees as well as towards those providing services on the grounds of KGHM Polska Miedź S.A. Each of the Company's Divisions has implemented a safety management system which is compliant with standards in force to date, and in 2019 preparations commenced to implement a new OHS standard compliant with the ISO 45001:2018 standard. All work stations have identified threats. The Company has assessed occupational risks and updates them continually. Working environments are continually monitored and periodic reviews and potential threat assessments are conducted, as well as reviews of equipment and required technical checks and approvals. Employees undergo systematic training and continually enhance their qualifications.

In 2019, the Company recorded a slight increase in the total number of workplace accidents (as defined by the Act dated 30 October 2002 on social insurance due to workplace accidents and occupational illnesses), with a year-on-year increase from 297 to 299 injured (+2). At the same time the number of workplace accidents in 2019 in KGHM Polska Miedź S.A., excluding accidents due to natural causes (roof collapses, distressings, tremors, rock falls) was lower by 31 (a drop from 279 to 248). The vast majority of workplace accidents (around 98%) qualified as light injuries, caused mainly by rock falls followed by loss of balance by employees, as well as contact (striking) with or by moveable/ immoveable objects.

Natural hazards associated with the underground mining of copper ore deposits, in particular hazards related to mining tremors and their potential effects in the form of roof and wall collapses are considered as particularly important from the safety point of view, as their occurrence can lead to serious or even fatal injuries as well as damage to underground machinery, equipment and infrastructure, along with production downtimes. The Company for many years has carried out a variety of preventive actions in its mines involving the intentional provoking of roof collapses and rock falls, comprising systematic seismological observations, on-going assessment of the rock mass and the marking off of areas of particular threat of roof collapse. The size, shape and number of chambers and inter-chamber pillars is selected, as well as the most advantageous direction of mine work advance and the optimum order of ore selection to minimise local concentrations of stress in the rock mass. So-called active methods of preventing uncontrolled roof collapses and rock falls are also applied, based on provoking dynamic events through mass blasting of mining faces and through blasting to release stress in the orebody or its roof. In 2019, in the mines of KGHM Polska Miedź S.A. a total of 51 workplace accidents were recorded, resulting from natural hazards from the rockmass. These incidents represented 20% of all workplace accidents in the mines during this period. KGHM Polska Miedź S.A. is continuously improving its safety record in the mining of the copper ore deposit.

The LTIFR<sub>KGHM</sub> ratio (Lost Time Injury Frequency Rate KGHM) in 2019, or the total number of workplace accidents (as defined by the Act dated 30 October 2002 on social insurance due to workplace accidents and occupational illnesses) in the Company, being the number of accidents per million hours worked for the entire core business of KGHM Polska Miedź S.A., was at the same level as that achieved in 2018 – 10.3 – and at the same time was lower by 45% than the amount recorded in 2010.

Chart 38. LTIFR<sub>KGHM</sub> ratio in the Parent Entity





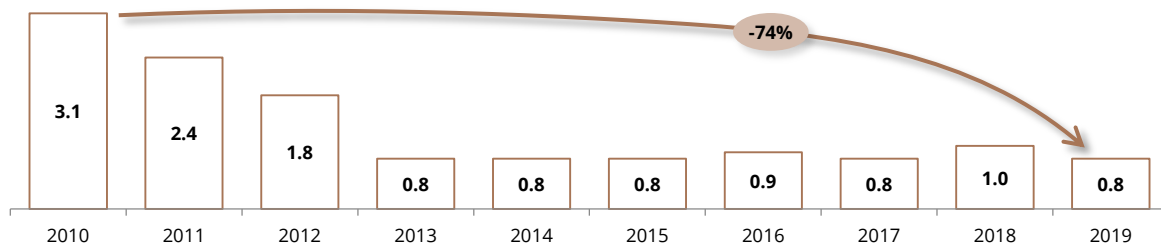
KGHM INTERNATIONAL LTD. regularly reviews the principles underlying the operations of the OHS section. It is focused on finding a means of standardising the reporting and monitoring of the state of safety in the individual international assets, in such a way as to ensure the data can be collated and comparable with one another.

In 2019, a total of 31 incidents at work were registered in the mines supervised by KGHM INTERNATIONAL LTD. in Canada and the United States of America, while the TRIR ratio amounted to 2.8. In 100% of the cases these were incidents of a minor nature without serious consequences for the employees.

In Chile, the KGHM Polska Miedź S.A. Group conducts mining operations in two entities, which have separate systems of OHS management adapted to the legal requirements and mining conditions in this country. These systems encompass both the employees in these entities as well as sub-contractors, and are aimed at achieving the long-term vision „Zero harm”. In KGHM Chile SpA, which oversees the Franke mine, and which also engages in its own exploration and other activities, three workplace accidents were recorded in 2019, with a TRIR ratio of 0.31. In the joint venture company Sierra Gorda S.C.M., 16 workplace accidents were recorded in 2019, with a TRIR ratio of 0.36.

In 2019, in the entities in which the KGHM Polska Miedź S.A. Group conducts mining operations in Canada, the United States and Chile, a total of 50 workplace accidents were recorded. The consolidated TRIR ratio (Total Recordable Incident Rate) for these operations reached 0.77. This was 0.23 lower as compared to 2018 and at the same time 74% lower than the level recorded in 2010.

Chart 39. TRIR<sup>1</sup> ratio in KGHM INTERNATIONAL LTD.



<sup>1</sup> TRIR (Total Recordable Incident Rate) calculated using accepted methodology as the number of accidents at work meeting the conditions of registration as defined in the ICMM (International Council on Mining & Metals) standard, in total for the employees of KGHM INTERNATIONAL LTD., KGHM Chile SpA and Sierra Gorda S.C.M. and sub-contractors for these entities, per 200 000 worked hours.

## 14. SIGNIFICANT CONTRACTS FOR THE COMPANY AND GROUP

In 2019, Group companies entered into the following significant contracts:

Date	Description
<b>2 January 2019</b>	<p>On 2 January 2019, the Company entered into a multi-year contract with the NKT group for the supply of copper rod in the years 2019-2021 with the possibility of extension for a subsequent 2 years. The value of the contract in the years 2019-2021 is estimated to be from PLN 3 784 million to PLN 4 126 million, depending on the usage of the quantitative option. This value was estimated based on the copper price cost curve from 2 January 2019 and on the average USD/PLN and EUR/USD exchange rates from 2 January 2019 with respect to deliveries for the years 2019-2021. The contract signed is a typical sales transaction. The terms are not significantly different from those in force in the previous contract, which expired in 2018.</p>
<b>27 February 2019</b>	<p>On 27 February 2019, the Company entered into an unsecured, working capital facility agreement with Bank Gospodarstwa Krajowego with a financing period of up to 84 months, as a renewable credit line in the amount of USD 450 million for a period of 60 months, with the option to transform it into a non-renewable credit after 60 months.</p> <p>Each repayment of the credit made during the availability period, that is until 60 months from the date of signing the credit agreement, will renew the available credit limit. Beginning from the first day after the period of 60 months from the date of signing the credit agreement has elapsed, the credit will be transformed into a non-renewable loan to be repaid in four equal, semi-annual principal instalments. Every repayment of a principal instalment will decrease the amount of the loan until it is fully repaid.</p> <p>Pursuant to the terms of the agreement, the credit may be drawn in USD.</p> <p>The financial resources acquired from the credit line will be used to finance general corporate purposes. Interest on the credit line was set based on LIBOR plus a margin, depending on the level of the financial ratio of net debt/EBITDA. Other credit terms are standard terms for these types of transactions.</p>
<b>21 March 2019</b>	<p>On 21 March 2019 the framework contract signed on 20 June 2016 between KGHM Polska Miedź S.A. and China Minmetals Corporation for the years 2017-2021 and announced by the Company via regulatory filing no. 22/2016 dated 20 June 2016 was terminated.</p> <p>The termination of the aforementioned contract fulfilled the condition precedent of the new framework contract which was signed on 6 November 2018 with China Minmetals Nonferrous Metals Co. Ltd. (a company within the China Minmetals Corporation group) for the years 2019-2023, which was announced by the Company via regulatory filing no. 42/2018 dated 6 November 2018.</p>
<b>27 May 2019</b>	<p>An issue agreement on the establishment of a bond issue program up to the amount of PLN 4 000 million on the Polish market was concluded with a consortium of banks with the following composition: Powszechna Kasa Oszczędności Bank Polski S.A., Bank Handlowy w Warszawie S.A., Bank Polska Kasa Opieki S.A. and Santander Bank Polska S.A. Detailed information on the agreement may be found in part 6.6 of this report.</p>
<b>19 June 2019</b>	<p>A Framework Agreement was concluded between KGHM Polska Miedź S.A. and the European Bank for Reconstruction and Development, or EBRD, for financing in the amount of PLN 400 million.</p> <p>Under the Framework Agreement, the Company committed itself to act pursuant to the EBRD's Performance Requirements and the EBRD's anti-corruption guidelines.</p> <p>The Framework Agreement obliges the Company to use the funds acquired from the EBRD for the financing of selected investments advanced by KGHM.</p>
<b>19 September 2019</b>	<p>On 19 September 2019, KGHM Polska Miedź S.A. signed an agreement for reverse factoring with Pekao Faktoring Sp. z o.o. The agreement was entered into for an unspecified time with a limit of PLN 750 million.</p> <p>By paying the Receivables, the factor falls under the rights of suppliers as satisfied creditors to the amount of the payment rendered in accordance with art. 518 of the Civil code. Security on the agreement is proxy rights to a bank account. Available currencies are PLN, EUR or USD.</p>
<b>20 December 2019</b>	<p>On 20 December 2019, an unsecured syndicated credit facility agreement in the amount of USD 1 500 million (approximately PLN 5 742 million at the average exchange rate announced by the National Bank of Poland for USD/PLN on 19 December 2019) was entered into with an international syndicate of banks.</p> <p>The Agreement has a five-year tenor and two one-year extension options exercisable at the request of KGHM Polska Miedź S.A. (at the discretion of each syndicate member). The credit facility replaced the existing revolving syndicate credit facility in the amount of USD 2 500 million dated 11 July 2014 (which was announced by the Company via regulatory filing no. 22/2014).</p> <p>The signing of the syndicated credit facility Agreement realises the Strategy of KGHM Polska Miedź S.A. for the years 2019 – 2023 with respect to ensuring long-term financial stability by, among others, basing KGHM's financing structure on long-term instruments. The credit facility was arranged with a relational banks group of the KGHM Polska Miedź S.A. Group. The title of Lead Organizer and Bookrunner was granted to Bank Polska Kasa Opieki S.A., Intesa Sanpaolo S.p.A. Spółka Akcyjna Oddział w Polsce, Banco Santander S.A., Santander Bank Polska S.A. and Powszechna Kasa Oszczędności Bank Polski S.A. As the credit facility was oversubscribed, there was a substantial reduction in allocation for the syndicate members.</p> <p>According to the Agreement, the credit facility may be drawn in USD in the form of up to 30 renewable tranches. The funds acquired from the credit facility will be used to finance general corporate purposes. Interest on the credit facility was set based on LIBOR plus a margin, which depends on the net debt/EBITDA financial ratio. Other parameters of the credit facility agreement are similar to the standard terms of these types of transactions. The syndicate banks with which the Agreement was entered into on 20 December 2019, comprise: Bank Polska Kasa Opieki S.A., Intesa Sanpaolo S.p.A. Spółka Akcyjna Oddział w Polsce, Banco Santander, S.A., Santander Bank Polska S.A., Powszechna Kasa Oszczędności Bank Polski S.A., BNP Paribas Bank Polska S.A., Bank of China (Luxembourg) S.A. Spółka Akcyjna Oddział w Polsce, Bank Millennium S.A.,</p>

Credit Agricole Bank Polska S.A., Industrial and Commercial Bank of China (Europe) S.A. (Spółka Akcyjna) Oddział w Polsce, Erste Group Bank AG, SMBC Bank EU AG, Bank Handlowy w Warszawie S.A., Société Générale Spółka Akcyjna Oddział w Polsce and ING Bank Śląski S.A.

As a result of the signing of the aforementioned Agreement, as at 27 December 2019 the existing syndicated credit facility agreement from 11 July 2014 was terminated.

#### 14.1. Information on transactions entered into between related parties, under other than arm's length conditions

In 2019, neither the Parent Entity nor its subsidiaries entered into related party transactions under other than arm's length conditions.

#### 14.2. INFORMATION ON CONTRACTS WITH THE ENTITY ENTITLED TO AUDIT THE FINANCIAL STATEMENTS

The entity entitled to audit the separate financial statements of KGHM Polska Miedź S.A. and the consolidated financial statements of the KGHM Polska Miedź S.A. Group is PricewaterhouseCoopers Polska Spółka z ograniczoną odpowiedzialnością Audyt Sp.k. with its registered head office in Warsaw at the address ul. Polna 11.

The contract with PricewaterhouseCoopers Polska Spółka z ograniczoną odpowiedzialnością Audyt Sp.k. (PwC), signed on 27 February 2019 for the period from 1 January 2019 to 31 December 2021, is for the audit and review of the financial statements of KGHM Polska Miedź S.A. and of the KGHM Polska Miedź S.A. Group. The auditing firm was selected by the Supervisory Board of KGHM Polska Miedź S.A.

Based on a declaration by the Supervisory Board, the Management Board of the Company announces that the selection of the auditing firm auditing the annual financial statements for 2019 and the annual consolidated financial statements for 2019 was conducted in compliance with the rules, including those respecting the selection of, and procedures regulating the selection of, the auditing firm, indicating that:

- the auditing firm and the members of the team conducting the audit met the terms for the preparation of an unbiased and independent report on the audit of the annual financial statements and the annual consolidated financial statements in accordance with prevailing laws in force, professional standards and professional ethical principles,
- rules related to the rotation of the auditing firm and the key certified accountant, as well as the mandatory mandate periods, are adhered to, and
- the Company has a policy covering the selection of the auditing firm as well as a policy covering permitted non-auditing services provided by the auditing firm, the entity related to the auditing firm or a member of its network, including services conditionally freed from the ban on services provided by the auditing firm.

The Company made use of the services of PwC in the years 2010-2015 for the audit and review of the financial statements of KGHM Polska Miedź S.A. and of the KGHM Polska Miedź S.A. Group, and in the years 2016-2018 with respect to tax advising and financial-accounting services.

Detailed information on remuneration of the entity entitled to audit the financial statements for the review and audit of financial statements and other remuneration is presented in note 12.11 of the separate and consolidated financial statements.

#### 14.3. INFORMATION ABOUT SUPPLIERS AND CUSTOMERS

The copper smelters and refineries of KGHM Polska Miedź S.A. produce electrolytic copper from their own concentrates as well as from purchased copper-bearing material (concentrates, copper scrap and blister copper). In 2019, the production of electrolytic copper from purchased copper-bearing material amounted to 147.3 thousand tonnes, and represented 26% of total electrolytic copper production.

For the most part, this production came from copper scrap (90.4 thousand tonnes of copper; 16% of total electrolytic copper production), which is supplied to KGHM's metallurgical plants by KGHM Metraco S.A. – a 100%-owned subsidiary of KGHM Polska Miedź S.A.

KGHM Metraco S.A., due to its specialisation and familiarity with the scrap market, as well as to its equity relationship with KGHM Polska Miedź S.A., supplies scrap to the metallurgical plants of KGHM based on exclusivity and as a result revenues of this company from sales to KGHM Polska Miedź S.A. are significant and represent 13% of KGHM Polska Miedź S.A.'s sales revenue and 10% of sales revenue of the Group.

Apart from KGHM Metraco S.A., the only counterparty whose turnover with the Company exceeds 10% of the sales revenue of KGHM Polska Miedź S.A. (KGHM) is China Minmetals Corporation (Minmetals). Copper cathodes are sold to Minmetals based both on a framework contract as well as spot-type contracts. Total sales to Minmetals in 2019 accounted for 11% of the Company's revenue and 9% of the Group's revenue.

In 2019, there were no significant changes in the sources of supply of materials, merchandise and services to KGHM Polska Miedź S.A. There was no recorded dependence on a single or multiple customers or suppliers.

## 15. LITIGATION AND CLAIMS

### LIST OF SIGNIFICANT PROCEEDINGS BEFORE COURTS, ARBITRATION AUTHORITIES OR PUBLIC ADMINISTRATION AUTHORITIES RESPECTING THE LIABILITIES AND RECEIVABLES OF KGHM POLSKA MIEDŹ S.A. AND ITS SUBSIDIARIES

<p><b>Proceedings regarding royalties for use by the Company of invention project no. 1/97/KGHM</b></p>	<p>On 26 September 2007, plaintiffs (14 natural persons) filed a claim against KGHM Polska Miedź S.A. (Company) with the Regional Court in Legnica for the payment of royalties for the use by the Company of invention project no. 1/97/KGHM called „Sposób zwiększenia zdolności produkcyjnej wydziałów elektrorafinacji Huty Miedzi” (Method for increasing the production capacity of the electrorefining sections of the Metallurgical Plants) for the 8th period of the application, together with interest due. The amount of the claim (principal amount) was set by the Plaintiffs in the claim in the amount of PLN 42 million (principal amount without interest and court costs). Interest as at 31 March 2019 amounted to around PLN 55 million. In the response to the claim, KGHM Polska Miedź S.A. requested the dismissal of the claim in its entirety and filed a counter claim for the return of undue royalties paid for the 6th and 7th periods of application of invention project no. 1/97/KGHM, together with interest due, also invoking the right of mutual set-off of claims. The amount of the claim (principal amount) in the counter claim was set by the Company in the amount of approx. PLN 25 million.</p> <p>In accordance with the Company's position, the counter claim is justified. The Company in this regard paid the authors of the project royalties for a longer period of application of the project than anticipated in the initial contract entered into by the parties on advancing the invention project, based on an annex to the contract, extending the period of payment of royalties, whose validity is questioned by the Company. Moreover, the Company is questioning the „rationalisation” nature of the solutions, as well as whether they were in fact used in their entirety, and also their completeness and suitability for use in the form supplied by the Plaintiffs as well as the means of calculating the economic effects of this solution, which were the basis for paying the royalties.</p> <p>In a judgment dated 25 September 2018, the court dismissed the counter claim and partially upheld the principal claim to the total amount of approx. PLN 24 million, and at the same time ordered the payment of interest in the amount of approx. PLN 30 million, for the total amount of PLN 54 million. Both sides of the proceedings filed appeals to the judgment.</p> <p>In a judgment dated 12 June 2019, the Court of Appeal in Wrocław (Signature I ACa 205/19) dismissed the appeals of both sides, altering the judgment of the court of first instance solely in the matter of the resolution of court costs from the hearings at the court of first instance and charging them to KGHM Polska Miedź S.A. The judgment is binding and was executed by KGHM on 18-19 June 2019. KGHM Polska Miedź S.A. filed a cassation appeal against the judgment of the court of second instance.</p>
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## 16. ENVIRONMENTAL PROTECTION

### 16.1. KGHM POLSKA MIEDŹ S.A.

#### ACTIONS TAKEN BY THE COMPANY TO PROTECT THE ENVIRONMENT

KGHM Polska Miedź S.A., as one of the largest, socially responsible companies in Lower Silesia, cannot and does not want to avoid its responsibility for the environment. The idea of sustainable growth, and in particular respect for the natural environment, is one of the most important values of the Company.

The extraction of copper ore, followed by its processing at all stages of production, is inextricably linked to its impact on various aspects of the natural environment. Adherence to strict environmental standards, mandated by law, is possible thanks to the systematic modernisation of installations protecting the environment, both those built in the past as well as new investments in this area.

During the year intensive work was carried out aimed at implementing the decision of the European Commission establishing best available techniques (BAT) Conclusions for the non-ferrous metals industry. Adaptation of the metallurgical installations to BAT Conclusions is also related to further restriction of dust and gas emissions. In 2019, the Company spent more than PLN 229 million on investments to protect the natural environment, of which the largest expenditure, in the amount of over PLN 44 million, was incurred on replacing the absorption and drying towers of the sulphuric acid plant at the Legnica Copper Smelter and Refinery.

#### ENVIRONMENTAL FEES

Environmental fees paid by the Divisions of KGHM Polska Miedź S.A. in 2019 amounted to PLN 18 million. In 2019, in the structure of fees, the highest amount incurred was the waste storage fee: PLN 7 million. Another item of costs, over PLN 5 million, is the fee for emissions of gases and dusts to the atmosphere.

#### FINANCIAL RESOURCES FOR MINE DECOMMISSIONING AND RESTORATION OF MINING AREAS

The Act on geology and mining dated 9 June 2011 obliges the Parent Entity to maintain a special purpose fund – the Mine Closure Fund – to finance the decommissioning of mines and other technological facilities and the restoration of terrain.

Furthermore, to satisfy the obligations arising from the Act on waste dated 14 December 2012, the Parent Entity maintains a tailings storage facility restoration fund, whose aim is to secure funds for the restoration of tailings storage facilities and their post-decommissioning supervision.

As at 31 December 2019, the value of assets for decommissioning the Parent Entity's mines and restoring its tailings storage facilities amounted to PLN 339 million (as at 31 December 2018: PLN 314 million). The amount accumulated was in the form of cash held in special purpose bank accounts.

In addition, as at 31 December 2019, a guarantee had been granted at the request of the Parent Entity in the amount of PLN 179 million (as at 31 December 2018: PLN 160 million) securing the proper performance by the Parent Entity of future environmental obligations to restore the area, following the conclusion of operations of the Żelazny Most tailings storage facility.

#### LEGAL STATUS AND FUTURE ACTIONS

KGHM Polska Miedź S.A. operates ten installations whose functioning, in accordance with the Act on Environmental Protection, requires integrated permits.

In addition, the Tailings Division holds permits for the operation of the Żelazny Most Tailings Storage Facility, and sector permits required by law. The mines operate on the basis of current sector permits with respect to airborne emissions and waste management.

Metallurgical installations at the Głogów and Legnica Copper Smelters and Refineries as well as the gas-steam blocks in Polkowice and Głogów also hold permits to participate in the CO<sub>2</sub> emissions trading system, as since 2013 KGHM Polska Miedź S.A. has been participating in the obligatory European Union Emissions Trading System (EU ETS).

In 2019, emissions in the previous year in the amount of 1 110 thousand tonnes of CO<sub>2</sub> were settled by freely-acquired rights (around 930 thousand tonnes of CO<sub>2</sub> for 2018 and from reserves) supplemented by purchases of rights (EUAs or European Emission Allowances and CERs - certified emission reduction).

It is expected that 2019 emissions at the level of around 1.3 million tonnes of CO<sub>2</sub> will be settled thanks to freely-acquired rights for the Głogów and Legnica Copper Smelters and Refineries as well as rights for the Gas-Steam Blocks in Polkowice and Głogów (around 900 thousand tonnes of CO<sub>2</sub>) and reserves of rights from prior years and purchases of rights (EUA and CER) in the amount of around PLN 13 million.

The most important planned undertakings related to environmental protection in the near term are as follows:

- the advancement of investments involving the need to adapt the metallurgical installations to BAT conclusions. Advancement of these investments is also related to further reductions in dust and gas emissions, including arsenic emissions,

- updating the integrated permits for the operated installations,
- overseeing the system for trading CO<sub>2</sub> emissions, along with obtaining rights for these emissions,
- continuation of a program to promote health and prevent environmental threats, aimed at the people living in the nearest proximity to our metallurgical facilities, and
- construction of the southern quarter of the Żelazny Most tailings storage facility.

### ACTIVITIES TO MEET REACH REGULATION REQUIREMENTS

KGHM is a member of six international consortia created to meet the requirements of EC Regulation No. 1907/2006, the so-called REACH Regulation. In 2019, cooperation with the consortia involved adaptation to changes in REACH requirements as regards registration documentation, the classification of substances, assessment and authorisation. These changes are to be introduced smoothly, which is why the REACH consortia will continue to function.

### 16.2. KGHM INTERNATIONAL LTD. GROUP

In 2019, entities of the KGHM INTERNATIONAL LTD. Group also engaged in activities related to environmental protection.

In the case of the Robinson mine (USA), activities were aimed at monitoring air and water quality, waste management and the restoration of mining areas - total expenditures amounted to around PLN 28 million, including PLN 3 million due to environmental permits held.

At the Carlota mine in the USA, activities were mainly related to mine decommissioning and environmental monitoring - total expenditures for this purpose amounted to around PLN 5 million.

In the Sudbury Basin mines (Canada) activities focused on environmental monitoring. PLN 1 million was incurred for this purpose.

At the Franke mine (Chile) activities focused on acquiring required permits and environmental monitoring. Total expenditures for this purpose amounted to PLN 6 million.

### FINANCIAL RESOURCES FOR MINE DECOMMISSIONING AND RESTORATION OF MINING AREAS

Pursuant to laws in force in the United States and Canada, the KGHM INTERNATIONAL LTD. Group is obligated to provide security in the form of blocked cash or guarantees/letters of credit at the amount of the estimated liabilities for decommissioning of mines and technological facilities.

As at 31 December 2019, the value of assets for decommissioning the mines of KGHM INTERNATIONAL LTD. (cash) amounted to PLN 68 million (as at 31 December 2018: PLN 117 million).

In addition, as at 31 December 2019, KGHM Polska Miedź S.A. had issued letters of credit to secure liabilities related to covering the costs of decommissioning mines and restoring mining areas in the amount of PLN 397 million (as at 31 December 2018 - PLN 345 million). Letters of credit issued by KGHM INTERNATIONAL LTD. as at 31 December 2019 amounted to PLN 202 million (as at 31 December 2018 - PLN 85.0 million).

### 16.3. OTHER GROUP COMPANIES IN POLAND

The Polish companies of the Group operate in compliance with environmental laws. Companies which are required to do so hold valid environmental permits, with one exception. The company Uzdrowiska Kłodzkie S.A. - Grupa PGU does not possess a water rights permit for the discharge of post-bathing water for Zakład Przyrodolecznicy in Polanica-Zdrój. Because of this the fee paid by the company for the discharge of post-bathing water is higher by 500%. There is also no water rights permit for the discharge of excess mineral water from the „Pieniawa Józefa I” and „Pieniawa Józefa II” inlets. The discharge of this water to the river is not subject to fees. In order to resolve the formal and legal aspects of this situation, in terms of obtaining legal water rights for the discharge of the aforementioned water to the river, the company is engaged in discussions with Town Hall, as the owner of the sewage system. The company is also awaiting the issuance of a water rights permit for the discharge of water following bathing for the unit Zakład Przyrodolecznicy and the discharge of excess mineral water from the „Górne” inlet in Kudowa-Zdrój. In October 2019, the company appealed the decision received, due to the classification of unutilised mineral water from the „Górne” inlet as industrial waste. The discharge of industrial waste from Mineral Water Bottling Plant no. II in Polanica-Zdrój to the municipal sewage system has not been regulated by law. The Miejski Zakład Komunalny (municipal services office) in Polanica-Zdrój did not respond to the company's request for the clarification of conditions for the discharge of industrial waste to the municipal sewage system due to the lack of a signed agreement. The company is considering building a waste treatment plant on the grounds of the bottling plant.

Amongst the Polish companies of the Group, the largest environmental impact comes from the activities of the company „Energetyka” sp. z o.o. In 2019, this company incurred PLN 3.3 million in environmental fees, which mainly comprised payments for water intake and waste discharge (PLN 2.3 million) and for emission of contaminants to the atmosphere (around PLN 1 million). In 2019, the company advanced investments aimed at limiting emissions of atmospheric pollutants, including expanding capacity based on gas-fired boilers and the construction of a fumes treatment installation meeting emissions standards compliant with the Directives of the European Parliament.

Due to the specific nature of the products manufactured by the company NITROERG S.A. (explosives, initiation systems, fuel additives), it has an impact on the environment. The environmental fees incurred by this company in 2019 amounted to PLN 0.3 million. In 2019, the company advanced investments aimed at limiting its environmental impact, including modernisation of the sewage treatment plant, and continued construction of a new installation for the production of fuel additives, which will allow for the re-use of concentrated acids in the production process.

The company Cuprum Development Sp. z o.o., which owns land in the center of Wrocław, in February 2019 received notification from the Voivode of Lower Silesia on the commenced enforcement proceedings to enforce the execution of non-financial obligations, i.e. remediation of owned land, to an extent pursuant to a decision of the Regional Director for Environmental Protection from 2015. Under this notification, execution will be conducted in accordance with the Act on administrative execution proceedings. The requested enforcement measure is a fine aimed at forcing execution of the obligation. Following dismissal by the Voivode of the complaints filed against the notification, the company filed complaints with the Minister of the Environment and is awaiting his decision.

## 17. THE MANAGEMENT BOARD AND THE SUPERVISORY BOARD OF THE PARENT ENTITY

### 17.1. BIOS AND RESPONSIBILITIES OF MEMBERS OF THE MANAGEMENT BOARD

#### MARCIN CHLUDZIŃSKI – PRESIDENT OF THE MANAGEMENT BOARD (APPOINTED AS AT 6 JULY 2018)



Graduate of the Institute of Social Policy and the European Institute of Regional and Local Development at the University of Warsaw. He finished his MBA at the Institute of Economics, Polish Academy of Sciences. He has experience in the management of commercial law companies, restructuring projects and corporate supervision. Since 2005 he has been on the management boards and supervisory boards of commercial law companies.

President of the Management Board of KGHM Polska Miedź S.A. and chairman of the Employers' Organization of Polish Copper. In the years 2016-2018 President of the Management Board of Agencja Rozwoju Przemysłu S.A., where he successfully restructured the following companies: Przewozy Regionalne, H. Cegielski – Fabryka Pojazdów Szynowych and Świętokrzyskie

Kopalnie Surowców Mineralnych. Since January 2016 a member of the Supervisory Board of PZU S.A. Co-founder and President of the Management Board of Invent Grupa Doradztwa i Treningu Sp. z o.o. in the years 2006 – 2015. President of the economic think tank Fundacja Republikańska (Republican Foundation) in the years 2011 – 2015.

Member of Narodowa Rada Rozwoju (the National Development Council), an advisory body to the President of the Republic of Poland.

**The President of the Management Board** is responsible for:

- activities related to overall risk management at the corporate level as well as auditing and internal controlling within the Group,
- the preparation, implementation and execution of the Company's Strategy and Policy of Sustainable Development,
- activities related to comprehensive management of security and preventing losses in the Group,
- corporate supervision standards and compliance with the corporate governance standards adopted by the Company,
- overall corporate oversight over the Group's subsidiaries in Poland and abroad,
- compliance with formal reporting and publishing obligations within the scope required by law,
- activities related to creating, updating and maintaining the uniformity of the organisation's internal regulations to maintain consistent operating principles,
- providing organisational and legal services to the Company's bodies,
- providing legal services to the Company,
- activities related to communications and image-building within the Group,
- the shaping of relations with the Company's external business environment,
- on the Founder's behalf – supervision of the functioning of the KGHM Polish Copper Foundation as well as other organisations serving the public, which support achievement of the Group's business goals,
- the activities of the Data Center Division (COPI) with respect to:
  - supplying and developing information and communication services required for the proper functioning of the Head Office,
  - the rational utilisation by management of ordered and contracted goods and services, and
- activities related to human capital management.



## ADAM BUGAJCZUK – VICE PRESIDENT OF THE MANAGEMENT BOARD (DEVELOPMENT)

(APPOINTED AS AT 24 AUGUST 2018)



Graduate of the Wrocław University of Economics, Faculty of Economics, Management and Tourism.

Involved with PKO Bank Polski S.A. from January 2011, where he served as a manager and director. Among others, he was responsible for supervision over the execution of investment projects and optimisation of business processes, as well as the preparation of development plans and improvements in supervised areas. Co-responsible for execution of cost optimisation under the bank's business strategy. Supported the process of business expansion of PKO Bank Polski S.A. Responsible for the implementation of procurement policy in the Group's companies.

He was employed from 2002 to 2010 in the company Bank Zachodni WBK S.A., where he cooperated in the implementation of investment projects.

He was also responsible for the optimisation and supervision over the realisation of network contracts.

He has extensive experience in the areas of standardisation and normalisation of business processes.

**The Vice President of the Management Board (Development)** is responsible for:

- advancement of the Company's R&D policy,
- advancement of the Company's innovation and intellectual property protection policy,
- coordination of the Company's investments and development projects,
- the development, updating and monitoring of execution of the Group's equity investments plan,
- shaping of the Company's products portfolio,
- initiation, development and implementation of management standards in the process of managing projects and programs,
- acquisition and development of the mining resources base in Poland,
- management of real estate,
- overseeing the Company's administrative services,
- the work of the Procurement Unit.

## PAWEŁ GRUZA – VICE PRESIDENT OF THE MANAGEMENT BOARD (INTERNATIONAL ASSETS) (APPOINTED AS AT 10 SEPTEMBER 2018)



Graduate of the University of Warsaw, Faculty of Law and Administration.

An Undersecretary of State in the Ministry of Finance from November 2016 to September 2018. Co-author of the tax reform. As a representative of the minister responsible for financial institutions he was also a member of the Polish Financial Supervision Authority.

An Undersecretary of State in the Ministry of the State Treasury from April to November 2016. He managed a portfolio of companies with State Treasury ownership and state legal entities. He worked on reforming supervision over State Treasury companies. An expert and a management board member of Fundacja Republikańska (Republican Foundation) from 2007 to 2016. He was a partner and a management board member of MMR Consulting sp. z o.o., as well as a partner in the tax consultant office GWW Tax from 2007 to 2016. He worked in the Artur Andersen and Ernst

& Young consultancy companies from 2000 to 2006. He managed interdisciplinary consultant projects for Polish and international companies from the industrial and financial sector.

Author and co-author of numerous publications on taxes and social security.

**The Vice President of the Management Board (International Assets)** is responsible for:

- the preparation and implementation of strategy for international assets,
- activities related to acquiring and developing the international resource base,
- analysis, assessment and preparation of new international exploration projects,
- preparation of studies and expert opinions concerning international resource base projects,
- coordination of tasks with respect to the plan of the Company's equity investments in international subsidiaries,
- substantive oversight over the Group's international production subsidiaries, including the creation and execution of their production plans,
- the shaping of the Company's commercial and logistics policies.

**KATARZYNA KRECZMAŃSKA-GIGOL – VICE PRESIDENT OF THE MANAGEMENT BOARD (FINANCE)** (APPOINTED AS AT 6 JULY 2018)



Long-time employee in the banking sector in the area of corporate banking, member of company bodies (member of the Supervisory Boards of Bank Pocztowy S.A. and AMW Invest Sp. z o.o.). Experienced manager (Managing Director of the Finance Section and Director of the Treasury Office of Poczta Polska S.A.). Member of Stowarzyszenie Polskich Skarbników Korporacyjnych (Polish Corporate Treasurers Association). Combines business endeavours with academic work and teaching. Academic employee of the SGH Warsaw School of Economics since 2007 (Professor of Finance in Corporate Finance Unit of the SGH Institute of Finance). Chairwoman of the judging committee of the periodical "Bank i Kredyt" for best article.

She has broad skills in financial management and financial consulting. An expert in financial liquidity, factoring, debt collection and sources of

financing.

Author and co-author of numerous publications in finance, among others: „Finanse spółki akcyjnej” (“Finances of a joint-stock company”), „Podstawy finansowania spółki akcyjnej” (“Basics of financing a joint-stock company”), „Skarbnik korporacyjny” (“Corporate Treasurer”), „Płynność finansowa przedsiębiorstwa. Istota, pomiar, zarządzanie” (“Financial liquidity of a company. Essence, measurement, management”), „Windykacja polubowna i przymusowa. Proces, rynek, wycena wierzytelności” (“Amicable and compulsory collection of debt. The process, market and debt valuation”), „Windykacja należności – ujęcie interdyscyplinarne” (“Collection of debt – the interdisciplinary approach”), „Aktywne zarządzanie płynnością finansową” (“Active management of financial liquidity”), „Faktoring jako jeden z instrumentów zarządzania należnościami i zobowiązaniami handlowymi a struktura kapitału” („Factoring as one of the instruments in managing trade receivables and payables, and capital structure”), „Faktoring w Polsce 2010” („Factoring in Poland 2010”), „Faktoring w teorii i praktyce” („Factoring in theory and practice”), „Faktoring w świetle prawa cywilnego, podatkowego i bilansowego” (“Factoring in civil, tax and balance sheet law”), „Opłacalność faktoringu dla przedsiębiorcy i faktora” („Profitability of factoring for companies and factors”), „Bank a leasing (finansowanie, zabezpieczenie, dochodzenie, należności)” („Bank and leasing (financing, security, investigation, receivables)”), „Opłacalność działalności kredytowej banku” („Profitability of bank lending activities”) and „Podstawy tworzenia planu finansowego banku” („Basics of creating a bank finance plan”).

**The Vice President of the Management Board (Finance)** is responsible for:

- the shaping of the Group’s financial policy;
- review of the Main Strategy’s projects in terms of their financial feasibility;
- finances in all of the Group’s operations and activities;
- the creation of Group tax policy; and
- the Company’s accounting services.

**RADOSŁAW STACH - VICE PRESIDENT OF THE MANAGEMENT BOARD (PRODUCTION)** (APPOINTED AS AT 6 JULY 2018)



Graduate of the AGH University of Science and Technology in Kraków, Department of Mining and Geology – underground mining. He finished his MBA at the Wielkopolska Business School of the Poznań University of Economics and Business as well as the KGHM Executive Academy, managed jointly with IMD Business School in Switzerland. He finished the prestigious managers’ program “Personal Leadership Academy program” at the ICAN Institute.

Involved with the KGHM Polska Miedź S.A. Group since the beginning of his professional career. He was gradually promoted at the Polkowice-Sieroszowice mine: from intern, to senior miner, shift foreman, section foreman, manager of mining operations unit, chief mining engineer/ deputy manager of mining plant operation. He served in the function of vice president (operation development) in the company KGHM

INTERNATIONAL LTD. in Canada, and was responsible for the portfolio of international assets in North and South America in the years 2015 - 2016. Subsequently, he was executive director in the Polkowice-Sieroszowice mine. He also serves as a vice president of the management board of MBA CLUB of the Wielkopolska Business School of the Poznań University of Economics and Business since 2017.

An active member of KGHM’s rescue team since 2000. He achieved third place in team competition in the International Mines Rescue Competition which took place in the USA (2008). As a captain, he led his team to victory in the competition called “Virtual Rooms” in the International Mines Rescue Competition in Australia (2010).

Co-author of the following publications: „Wdrożenie zarządzania procesowego w KGHM Polska Miedź S.A.” (“Implementation of process management in KGHM Polska Miedź S.A.”) and „Konceptje biznesowe branży wydobywczej. Studium KGHM Polska Miedź S.A.” (“Business concepts of the mining industry. Study of KGHM Polska Miedź S.A.”).

**The Vice President of the Management Board (Production)** is responsible for:

- the integrated planning and optimisation of the Company’s production;
- occupational health and safety and control of environmental risks;

- activities with respect to maintaining readiness of the production and non-production assets and achievement of the main goals of the Energy Strategy;
- activities with respect to manufacturing products and development of the primary mine and metallurgical production;
- overseeing activities connected with the implementation, maintenance and improvement of management systems in the Company; and
- integrated supply chain management.

## 17.2. BIOGRAMS OF MEMBERS OF THE SUPERVISORY BOARD

### ANDRZEJ KISIELEWICZ – CHAIRMAN OF THE SUPERVISORY BOARD

*(Member of the Supervisory Board of KGHM Polska Miedź S.A. since 2018)*

A graduate of the Faculty of Mathematics and Computer Science of Wrocław University. Obtained a doctorate degree in mathematics at the Polish Academy of Sciences in Warsaw. He obtained his title of doctor habilitatus from Wrocław University, and he obtained the title of professor in mathematics in 2001. Currently, he is a professor at Wrocław University, and has worked there since 1993.

He gained professional experience in international science facilities: the University of Manitoba (Winnipeg, Canada, 1989-1990), Technische Hochschule Darmstadt (Germany, 1990-1992) and Vanderbilt University (Nashville, USA, 2001-2002). In addition, he has had many short-term international internships, among others in France, Italy, Austria and Israel. He obtained two of the most prestigious science scholarships in the world: the Alexander von Humboldt scholarship and the Fulbright scholarship.

He also has many years of experience in working on supervisory boards. Among others, he has been a member and chairman of the supervisory boards of companies such as „Spedtrans” sp. z o.o. and „Teta” S.A. Since 2016 he has been a member of the supervisory board of PKO BP S.A.

He is an author of over seventy scientific publications in mathematics, logic and computer sciences in international publications, as well as an author of three books in Polish („Logika i argumentacja” (“Logic and argumentation”), „Sztuczna inteligencja i logika” (“Artificial intelligence and logic”), „Wprowadzenie do informatyki” (“Introduction to computer science”).

### LESZEK BANASZAK - DEPUTY CHAIRMAN OF THE SUPERVISORY BOARD

*(Member of the Supervisory Board of KGHM Polska Miedź S.A. since 2018)*

Leszek Banaszak is a graduate of the University of Warsaw, with a Master’s Degree in Political Science.

For the past 30 years he has been continuously associated with government administration (including nine years in the diplomatic service). Among others he has worked in the Governmental Press Office, the Ministry of Environmental Protection, Natural Resources and Forestry, the Ministry of International Economic Cooperation, the Ministry of the Economy, the Ministry of Energy and the Ministry of State Assets.

He has been responsible among others for bi-lateral coordination of Poland in the area of environmental protection, coordination of activities by the Polish administration arising from the cooperation of Poland with international institutions and organisations in the area of environmental protection, among others for cooperation under the Organisation of Baltic Sea States (HELCOM), coordination of activities by Poland under the Pan-European Conference of Ministers of Environmental Protection, coordination of activities with respect to international cooperation in meeting the stipulations of the United Nation’s framework convention on climate change. Also cooperated under the European Economic Commission (EEC UN) in Geneva and the UN Commission on Sustainable Development (CSD UN) in New York.

He was the chief negotiator in the area „Environment” during the negotiations regarding Poland’s membership in the Organisation of Economic Cooperation and Development (OECD) in Paris.

He was also responsible for coordination of cooperation between the Republic of Poland and the OECD, the Republic of Poland and the WTO (World Trade Organisation) and oversaw cooperation with the World Bank and the European Bank for Reconstruction and Development.

Also connected with the Department of Energy of the Ministry of the Economy, responsible for international cooperation and European integration (was the chief negotiator in the negotiating area „Energy” during the negotiations regarding Poland’s membership in the European Union), also coordinated legislative work arising from the adaptation of Polish laws to those of the EU. Was also responsible for cooperation with international organisations and institutions, acting in the area of energy, among others the Organisation of Economic Cooperation and Development (OECD), the International Energy Agency (IEA), the European Economic Commission of the United Nations (UN ECE), the UN Commission on Sustainable Development (CSD UN), the Secretariat of the Energy Card Treaty (ECT), the Council of Baltic Sea States and the World Energy Council (WEC).

In the years 2004-2009 and 2012-2016 worked in the diplomatic service in sections of the Polish Embassy in London.

Since 2016 associated with the Department of Renewable Energy in the Ministry of Energy (currently from November 2019 in the Ministry of State Assets).

Has many years of experience working on supervisory boards. Among others he has been chairman of the supervisory board of Krajowa Agencja Poszanowania Energii (The Polish National Energy Conservation Agency), currently he also serves in the function of chairman of the Supervisory Board of HUTMAR S.A.

**JAROSŁAW JANAS – SECRETARY OF THE SUPERVISORY BOARD***(Member of the Supervisory Board of KGHM Polska Miedź S.A. since 2018)*

An attorney with a doctorate in law from Wrocław. From 2009 to 2010 he researched British public healthcare at the University of Exeter School of Law (UK), resulting in a doctorate, "Prywatyzacja brytyjskiego sektora publicznego na przykładzie National Health Service" ("Privatisation of the British public sector, illustrated by the National Health Service"). An entrepreneur continuously from 1999, an academic teacher, member of the management board of Fundacja Sancta Familia (Sancta Familia Foundation) in Wrocław since 2005, Chairman of the Estate Council of Biskupin-Sępólno-Bartoszowice-Dąbie in the years 2009-2013, a volunteer in Ilford Park Polish Home (UK) 2009-2010, member of the Wrocławska Rada ds. Budżetu Obywatelskiego (Wrocław Citizen's Budget Council) in the years 2015-2017, member of the Supervisory Board of Polska Agencja Inwestycji i Handlu S.A. (State Treasury) in the years 2016-2018, and an expert in healthcare reform (2018-2019). In the years 2011-2019 he was an author of research papers on British law, privatisation of the public sector, judicial control of public administration and healthcare law. Co-author of comments to the *Ustawa o pomocy państwa w wychowywaniu dzieci (Lex/el. 2019)* (Act on State assistance in raising children). He has more than twenty years of experience in management.

**JÓZEF CZYZERSKI***(Member of the Supervisory Board of KGHM Polska Miedź S.A. since 2012)*

Secondary technical education. Since 1979 employed in the Rudna mine of KGHM Polska Miedź S.A., an underground electromechanic. Chairman of the trade union Krajowa Sekcja Górnictwa Rud Miedzi NSZZ Solidarność. Employee-elected member of the Supervisory Board of KGHM Polska Miedź S.A. in the years 1999-2011, and then from 2014.

**IRENEUSZ PASIS***(Member of the Supervisory Board of KGHM Polska Miedź S.A. since 2018)*

Secondary technical education. Since 1988 a mining machinery operator in Przedsiębiorstwo Budowy Kopalń „PeBeKa” S.A. in Lubin (formerly called Zakład Robót Górniczych w Lubinie). Since 2012 Chairman of the Plant Committee of the trade union NSZZ „Solidarność” in PeBeKa S.A.; and since 2015 Secretary of the Employee Council in PeBeKa S.A. Since 2014 has served as Deputy Chairman of the trade union Krajowa Sekcja Górnictwa Rud Miedzi NSZZ „Solidarność”. Previously, in the years 2011 – 2015 was Chairman of the Employee Council in PeBeKa S.A.

**BARTOSZ PIECHOTA***(Member of the Supervisory Board of KGHM Polska Miedź S.A. since 2018)*

Bartosz Piechota is a lawyer, a graduate of the Faculty of Law and Administration of the University of Warsaw and also of Cardiff University Law School (Diploma in Legal Studies). Also completed the School of American Law conducted by the University of Florida Levin College of Law and the University of Warsaw. Has many years of experience in providing legal services to the largest Polish and foreign companies, in particular with respect to resolving disputes and restructurisation as well as with respect to corporate law. In recent years he has acted as a consultant, among others, in the realisation of a variety of key infrastructural investments. Over a period of ten years, to September 2019, he was a founding partner of a leading law firm in Poland involved in resolving disputes and restructurisation. Previously he worked in international and Polish law firms, among others Allen & Overy and Wardyński i Wspólnicy. In the period from 2014 to 2016 he served as Liaison Officer for the International Bar Association in the restructurisation and bankruptcy section responsible for Central and Eastern Europe. He is a member of the International Bar Association and is also the author of publications, as well as a lecturer at international and Polish conferences. In the years 2016 – 2019 he was a member of the Supervisory Board of PLL LOT S.A., and from October 2018 to July 2019 was delegated to serve in the function of member of the Management Board of PLL LOT S.A. Currently he is a member of the Management Board of Polska Grupa Lotnicza S.A. For many years he has cooperated in the role of expert with Fundacja Republikańska (Republican Foundation).

**MAREK PIETRZAK***(Member of the Supervisory Board of KGHM Polska Miedź S.A. since 2016)*

Legal Adviser. A graduate of the Department of Law and Administration of Łazarski University in Warsaw and the Economics Faculty of the Private Higher School of Business and Administration in Warsaw. In 2013, he finished his legal adviser apprenticeship in the District Chamber of Legal Advisers in Warsaw and was licensed to work in the profession. He also finished management and business studies (MBA) at the Warsaw Management University, accredited by the Apsley Business School of London and was granted the title of Executive Master of Business Administration. He has also completed post-graduate studies in accounting and corporate finance at the SGH Warsaw School of Economics. He has professional experience in public administration and practical experience in supervision and management of commercial law companies, including those where the State Treasury is one of the shareholders.

In his professional practice he concentrates on providing legal services to economic entities. His chief specialisations are civil and economic law, in particular company law, as well as labour law.

Currently, Marek Pietrzak serves as President of the Management Board of Orlen Asphalt Sp. z o.o. and as Chairman of the Supervisory Board of Polskie Radio Regionalna Rozgłośnia w Warszawie Radio dla Ciebie S.A.

**BOGUSŁAW SZAREK**

*(Member of the Supervisory Board of KGHM Polska Miedź S.A. since 2012)*

Secondary technical education.

Since 1982 employed at the Sieroszowice Mine of KGHM Polska Miedź S.A. in the position: mining machinery and tools mechanic.

Since 1992 Chairman of the Plant Committee of the trade union NSZZ „Solidarność” in the Sieroszowice Mine, and following the merger of the Polkowice and Sieroszowice mines, since 1996 Chairman of the Plant Committee of the trade union NSZZ „Solidarność” in the Polkowice-Sieroszowice mine. Since 2012 an employee-elected Member of the Supervisory Board of KGHM Polska Miedź S.A.

Deputy Chairman of the Board of the trade union Sekcja Górnictwa Rud Miedzi NSZZ „Solidarność”. Treasurer of the Board of the Secretariat for Mining and Energy of the trade union NSZZ „Solidarność”. Member of the National Committee of the trade union NSZZ „Solidarność”.

**AGNIESZKA WINNIK-KALEMBA**

*(Member of the Supervisory Board of KGHM Polska Miedź S.A. since 2016)*

Attorney, graduate of the Department of Law of Wrocław University. Also a graduate of the faculty of Public Administration at Georgetown University in Washington D.C.; and of the faculty of Public Administration and Business Law at the University of Kentucky.

She passed her bar exam in 2003 under the District Bar Council in Wrocław and was licensed to work in the profession.

Since 2003 owner of a Law Office. In the years 2006 - 2010 served as an advisor and regular associate of the late Member of Parliament Aleksandra Natalii – Świat. In the years 1999 - 2003 gained experience as an apprentice attorney-at-law at Kazimierz Cyrkiewicz’s Law Office in Wrocław. In addition, was previously Manager of the Legal Services Office of the Lower Silesia Marshal’s Office in Wrocław and was Legal Assistant to the Chairman of the Chamber of Regions of the European Council in Strasbourg, Parliament of the Voivodeship of Wrocław. Also gained experience as Legal Assistant in the Law Offices of Bowles, Keating, Matuszewich & Fiordalisi Chicago – Milan – Rome, a Partnership of Professional Corporation, Chicago USA.

Was Deputy Chairwoman and member of the Supervisory Board of PKO BP S.A.

**17.3. CHANGES IN THE PARENT ENTITY’S BODIES****MANAGEMENT BOARD OF THE COMPANY**

In accordance with the Statutes of KGHM Polska Miedź S.A. the members of the Management Board are appointed and dismissed by the Supervisory Board. The composition of the 10th-term Management Board of KGHM Polska Miedź S.A. from 1 January 2019 to 31 December 2019 was as follows:

- Marcin Chłudziński                      President of the Management Board,
- Adam Bugajczuk                        Vice President of the Management Board (Development),
- Paweł Gruza                              Vice President of the Management Board (International Assets),
- Katarzyna Kreczmańska-Gigoł      Vice President of the Management Board (Finance),
- Radosław Stach                            Vice President of the Management Board (Production).

**SUPERVISORY BOARD OF THE COMPANY**

In accordance with the Statutes of the Company the members of the Supervisory Board are appointed and dismissed by the General Meeting.

As at 1 January 2019, the composition of the 10th-term Supervisory Board of KGHM Polska Miedź S.A. was as follows:

- Andrzej Kisielewicz                    Chairman,
- Leszek Banaszak                        Deputy Chairman,
- Jarosław Janas                            Secretary,
- Janusz Marcin Kowalski,
- Bartosz Piechota,
- Marek Pietrzak,
- Agnieszka Winnik-Kalemba,

and elected by employees:

- Józef Czyczerski,
- Ireneusz Pasis,
- Bogusław Szarek.

On 23 October 2019, Janusz Marcin Kowalski submitted his resignation from the function of Member of the Supervisory Board effective as of 11 November 2019.

The composition of the Supervisory Board from 11 November 2019 to 31 December 2019 was as follows:

- Andrzej Kisielewicz                      Chairman,
- Leszek Banaszak                        Deputy Chairman,
- Jarosław Janas                            Secretary,
- Bartosz Piechota,
- Marek Pietrzak,
- Agnieszka Winnik-Kalemba,

and elected by employees:

- Józef Czyczerski,
- Ireneusz Pasis,
- Bogusław Szarek.

#### 17.4. REMUNERATION OF THE PARENT ENTITY'S BODIES AND OF OTHER KEY MANAGERS OF THE GROUP

##### INFORMATION ON REMUNERATION OF MEMBERS OF THE MANAGEMENT BOARD OF KGHM POLSKA MIEDŹ S.A.

As a result of the coming into force of the Act dated 9 June 2016 on the terms of setting the remuneration of individuals managing certain companies, the Supervisory Board, acting under the authority granted by the Extraordinary General Meeting of the Company KGHM Polska Miedź S.A., established templates for the management services contracts for the Company's Management Board setting the principles of employment and remuneration. Based on the aforementioned contract templates, management services contracts were signed with the members of the Management Board for the time in which they served as a member of the Management Board. This means that the termination of a contract will occur on the final day on which the function is served, with no notice period and without the need to take additional actions.

The Members of the Management Board receive basic monthly remuneration as well as variable remuneration representing supplementary remuneration for the Company's financial year.

The fixed monthly remuneration for individual members of the Company's Management Board is within a range of seven- to fifteen times the basis for calculation, as described in art. 1 sec. 3 point 11 of the Act dated 9 June 2016 on the terms of setting the remuneration of individuals managing certain companies.

Fixed remuneration is comprised of the following:

- for the President of the Management Board: 15-times,
- for other members of the Management Board: 14-times.

Variable remuneration depends on the level of achievement of the management goals set by the Supervisory Board for a given year and may not exceed 100% of the annual fixed remuneration for the time during which the subject of a given contract is performed, with the proviso that the contract was performed in a given year for a period longer than three months.

Based on the Statutes of KGHM Polska Miedź S.A., the Bylaws of the Supervisory Board, the management services contracts, resolution no. 8/2016 of the Extraordinary General Meeting and the Act on the terms of setting the remuneration of individuals managing certain companies, the Supervisory Board set Management Goals for the Members of the Management Board for 2019.

The Supervisory Board also set goals under which variable remuneration for the year 2019 may be received, contingent upon achieving the following conditions:

- application of the principles of remunerating members of management and supervisory bodies, pursuant to the act dated 9 June 2016 on the terms of setting the remuneration of individuals managing certain companies, in all of the Group's companies; and
- execution of the duties described in art. 17-20, art. 22 and art. 23 of the act dated 16 December 2016 on the principles of state assets management.

Payment of variable remuneration is made following the submission by individual members of the Management Board of reports on the achievement of the goals. Payment of this variable remuneration is contingent on the achievement by a Management Board member of the management goals, approval of the Management Board's Report on the activities of the Company and the Company's financial statements for the prior year, and the granting of approval by the General Meeting for the given Management Board Member's performance of duties. On this basis, the Supervisory Board evaluates the execution of the aforementioned goals and, assuming the conditions have been met for granting the right to variable remuneration, sets the amount of the variable remuneration due.

Table 49. Potentially-due remuneration of Members of the Management Board of KGHM Polska Miedź S.A. for 2019

First, last name	Position	Potentially-due variable remuneration <sup>1)</sup> (PLN thousand)
Marcin Chludziński	Member of the Management Board - President of the Management Board	792.7
Katarzyna Kreczmańska-Gigol	Member of the Management Board - Vice President of the Management Board	739.8
Radosław Stach	Member of the Management Board - Vice President of the Management Board	739.8
Adam Bugajczuk	Member of the Management Board - Vice President of the Management Board	739.8
Paweł Gruza	Member of the Management Board - Vice President of the Management Board	739.8
<b>TOTAL</b>		<b>3 751.9</b>

<sup>1)</sup> for 2019 based on management services contract

Members of the Management Board may join the Employee Pension Program under the terms of the existing Collective Agreement, with the proviso that the amount of the monthly contribution under this Program is included in the amount of the fixed remuneration for the given period.

From 2020, the Supervisory Board, based on the wording of agreements connecting individual Members of the Management Board with the Company, expressed consent to the coverage by the Company of the cost of life insurance contracts under the group life insurance policies in place in the Company, including in the case of death, accident or illness. The scope of this insurance is analogous to that provided to management staff, the sole difference being that in the case of the selection by a particular Management Board Member of life insurance with a so-called equity insurance fund (ubezpieczeniowy fundusz kapitałowy), that portion of the contribution under this option will not be financed by the Company.

The management services contracts also regulate issues involving the application (utilisation) of all of the Company's resources (tools) required to carry out the contractual duties and to maintain the requirements of security in terms of collecting and transmitting data, including in particular:

- office space together with technical equipment and infrastructure, including a personal computer with wireless Internet access and other necessary equipment, means of communication, including a mobile phone;
- local housing appropriate to the function served (in respect of which the Company covers the cost of such housing to the net amount of PLN 2 500);
- participation in conferences, seminars or business meetings related to the Company's operations and, if necessary to carry out these obligations, business trips in Poland and abroad;
- the incurring by the Company of costs related to services performed outside of the Head Office which must be incurred to properly perform the services, in particular such as travel costs and quartering in a standard appropriate to the function performed;
- use of a company car for business purposes;
- civil liability insurance for the Management Board Member related to serving in the function; and
- incurring or refinancing costs of individual training for the Management Board Member related to the Contract in question and contractual obligations of the Management Board Member, in each case with the prior consent of the Chairman of the Supervisory Board.

The Contracts also provide that if the Management Board Member serves as a member of a body in a subsidiary of the Company within the Group, the Management Board Member will not receive additional remuneration for this function, apart from the remuneration provided for in the management services contract connecting the Member with the Company. In addition, the Management Board Member is obligated to inform the Supervisory Board of the possession of shares in publically-listed companies and to gain the consent of the Supervisory Board for accepting a position or serving in a function in the body of another commercial law company – excluding companies of the Group, the acquisition or possession of shares in another commercial law company, as well as performing work or services on behalf of other entities based on a labour contract, mandate contract or based on any other legal relationship.

The contracts signed with the Members of the Management Board regulate the question of compensation in the case of termination, with or without notice, of the management services contract for reasons other than breach of the contract's basic obligations. The contracts foresee that the Company will pay severance pay of three times the amount of the fixed part of remuneration (if the contract was in force for at least 12 months).

The contracts with the Members of the Management Board – both during the period of employment as well as following the period of employment – deal with the question of forbidding any activities which would represent a conflict of interest. In particular, they establish that for a period of six months from the date when employment in the function ceases, the Management Board Member is not allowed to engage in any activities which would represent a conflict of interest. For adherence to the clause on forbidding competitive activities, KGHM pays the Management Board Member compensation in a total amount calculated as a multiple of the monthly fixed remuneration and the 6-month period of the forbidding of competitive activities. The payment of compensation is conditional on the Management Board Member's having served in the function for at least 3 months. If a Member of the Management Board breaches this clause in the contract, he or she will be required to pay a contractual penalty in the entire amount of the compensation received. Payment of the contractual penalty does not deprive the Company of the right to seek compensation in an amount exceeding that amount under general rules.

Detailed information on the amount of remuneration, bonuses or benefits for Management Board members may be found in note 12.10 of the separate and consolidated financial statements.

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## **INFORMATION ON REMUNERATION OF SUPERVISORY BOARD MEMBERS**

The remuneration of members of supervisory boards was set on 7 June 2019 by the General Meeting based on the Act dated 9 June 2016 on the terms of setting the remuneration of individuals managing certain companies. The amount of monthly remuneration of individual members of the Supervisory Board depends on the function served and is set as 2.2x or twice the average monthly remuneration in the corporate sector excluding payments from profit in the fourth quarter of the previous year, announced by the President of the Central Statistical Office. Members of the Supervisory Board are not remunerated for any month in which they did not attend any of the formally convened meetings for unjustified reasons, which are assessed and qualified by the Supervisory Board.

The Company also covers or reimburses costs related to participation in the work of the Supervisory Board.

Detailed information on the amount of remuneration, bonuses or benefits for Supervisory Board members may be found in note 12.10 of the separate and consolidated financial statements.

## **INFORMATION ON THE ADOPTED AND APPLIED REMUNERATION SYSTEM FOR KEY MANAGERS**

Key managers receive remuneration based on employment contracts. During the lives of these contracts employees receive:

- basic monthly remuneration, which amounts – depending on the function served – from 5- to 11-times the average monthly remuneration in the corporate sector, excluding payments from profit, in the fourth quarter of the previous year, announced by the President of the Central Statistical Office.
- an annual bonus, paid in accordance with the principles for bonuses set by the Management Board, based on a system of business measures (KPIs) and individual goals (MBO). Principles for setting and granting annual bonuses (STIP - Short-Term Incentive Plan) in KGHM Polska Miedź S.A. have been functioning since 2013. This system is based on collective, individual and task-related KPIs which were derived from the key performance indicators for the Management Board as well as on goals arising from the Company's strategy.
- additional benefits, such as life insurance, the Employee Pension Program, a Health Care Package, and
- a company car.

## **PENSION OBLIGATIONS AND RELATED BENEFITS IN RESPECT OF FORMER MANAGEMENT AND SUPERVISORY STAFF**

KGHM Polska Miedź S.A. has no pension obligations or related benefits in respect of former management and supervisory staff or liabilities drawn in respect of such pensions.



## 18. ETHICS AND CORPORATE GOVERNANCE

The Code of Ethics of the KGHM Polska Miedź S.A. Group is the main tool, in the corporate Group culture, which assists in defining priorities and in establishing a collection of principles which are binding for all employees in their daily work.

The objective of the Code of Ethics is to ensure that the behaviour of employees conforms to the highest standards based on the values which guide the KGHM Polska Miedź S.A. Group's employees: zero harm, teamwork, results-driven, accountability and courage.

Additionally, in order to enable effective implementation of the principles and values set forth in the Code of Ethics across the KGHM Polska Miedź S.A. Group other appropriate policies and procedures are in force. Their implementation meets world corporate governance standards as well as the increasing demands of stakeholders, including above all customers and financial institutions.

Based on best practices in corporate governance, the following policies are in force, introducing global, unified standards which have been adapted to the laws applicable in all of the jurisdictions in which the KGHM Polska Miedź S.A. Group operates:

<b>Competition Law Policy in the KGHM Polska Miedź S.A. Group</b>	The goal of the Competition Law Policy is to create a functional framework for a system that will enable the KGHM Polska Miedź S.A. Group to remain in conformity with the competition laws which are applicable in all of the countries in which the KGHM Polska Miedź S.A. Group operates.
<b>Anticorruption Policy in the KGHM Polska Miedź S.A. Group</b>	The Anticorruption Policy establishes basic principles and standards, whose goal is to prevent any breaches of the anticorruption laws in the jurisdictions in which the KGHM Polska Miedź S.A. Group operates. The Group applies a zero tolerance policy towards corruption and bribery.
<b>Responsible Supply Chain Policy in the KGHM Polska Miedź S.A. Group</b>	The Responsible Supply Chain Policy is aimed at securing the selection of only responsible suppliers, especially in the case of acquiring so-called conflict minerals (gold, tin, wolfram and tantalum) and at ensuring that the merchandise and services purchased by the KGHM Polska Miedź S.A. Group are not utilised to finance terrorism, and are manufactured or provided in accordance with laws respecting basic human rights, labour standards, protecting the environment and counteracting corruption.
<b>Security Policy in the KGHM Polska Miedź S.A. Group</b>	The Security Policy sets forth joint principles and goals for the entities and organisational units of the KGHM Group related to safety and preventing losses. Pursuant to its clauses, all of the KGHM Group's employees operate in accordance with basic principles: professional integrity, accuracy in the execution of official duties, loyalty to the employer, a results oriented approach, courage, teamwork, accountability, mutual responsibility for safety and preventing losses and avoidance of actions harmful to the employer.

In 2019, the „Procedure for assessing the supply chain for gold and silver in KGHM Polska Miedź S.A.” was updated in the Company in order to assure its compliance with the current LBMA Responsible Gold Guidance V8 and LBMA Responsible Silver Guidance V1. The system for managing the responsible gold and silver supply chain is subject to an annual, independent, external audit to confirm the Company's adherence to the principles of conflict-free gold and silver under the LBMA Responsible Gold Guidance and the LBMA Responsible Silver Guidance.

In 2018, the Management Board of KGHM Polska Miedź S.A. adopted a new „Code of Ethics of the KGHM Polska Miedź S.A. Group”. In order to comply with the most important principles related to counteracting corruption in the KGHM Polska Miedź S.A. Group and in the companies of the KGHM Polska Miedź S.A. Group located in Poland and abroad, the Anticorruption Policy and the Procedure for Counteracting the Threat of Corruption in the KGHM Polska Miedź S.A. Group were updated. The Procedure sets forth in detail the standards of behaviour in situations where corruption may arise and informs about criminal penalties for abuse. It is applied in order to minimise the risk of Corruption and to limit all corruption-related phenomena which could arise in relation to the functioning of the KGHM Group.

In 2019, the wording of the procedure regulating conflicts of interest and acceptable gifts was updated. In the Divisions and in seven of the domestic companies, units for overseeing safety and preventing losses were created. Ethics and Anticorruption Representatives are in place in all of KGHM's entities, domestic and international. In 2019, the Procedure for Disclosing Improprieties and Protecting Whistle-blowers in the KGHM Group was also updated, adapting it to the requirements of the amended Act on public offerings and conditions governing the introduction of financial instruments to organised trading, and on public companies. This procedure is aimed at enhancing the effectiveness of uncovering and resolving situations related to the occurrence of improprieties representing an abuse of regulations applied in the KGHM Group, in particular the Code of Ethics of the KGHM Group, the Security Policy, the Anticorruption Policy and the Procedure Counteracting the Threat of Corruption.

In 2019, an additional channel for whistleblowers was implemented – the „KGHM Ethics Line” platform, available on the corporate website for both employees and third parties, including contractors and customers. The platform is available in four languages – Polish, English, Spanish and Russian. It enables the anonymous disclosure of improprieties and is an alternative channel for other forms of contact – telephone lines, email addresses and addresses for correspondence. In the entities of the KGHM Group an Internal Control Procedure for the Safety and Prevention of Losses Section of KGHM Polska Miedź S.A. was implemented.

Audits conducted by the Safety and Prevention of Losses Section comprise the identification and uncovering of fraud, improprieties, abuse, corruption, personal abuse and breaches of the Group's Code of Ethics. Also implemented was an Anti-Personal Abuse Procedure, enabling the effective prevention of personal abuse in the workplace. A tool which supports the employer in the question of prevention of personal abuse, discrimination and breaches of employee rights are the Ethics Committees appointed in the entities of the KGHM Group.

Moreover, work supporting and raising ethical standards and corporate governance will be continued in 2020.

## 19. REGULATORY FILINGS PUBLISHED AFTER THE BALANCE SHEET DATE

<i>Date of report</i>		<i>Section</i>
<b>15 January 2020</b>	<p><b>Identification of indications to verify the recoverable amount of international mining assets</b></p> <p>The Management Board of the Company announced that as a result of reviewing the technical and economic parameters of key international mining assets belonging to the KGHM Polska Miedź S.A. Group, indications of a possible change in the recoverable amounts of a part of these assets were identified.</p> <p>For other key international mining assets, indications to conduct tests were not identified.</p> <p>Detailed information on the results of the tests conducted may be found in Part 3 of the Separate and Consolidated Financial Statements.</p>	6, 7
<b>16 January 2020</b>	<p><b>Information on the main Budget targets for 2020</b></p> <p>The Management Board of the Company announced the approval of the Budget of KGHM Polska Miedź S.A. and the KGHM Polska Miedź S.A. Group's Budget for 2020 by the Company's Supervisory Board and provided information on the main budgetary assumptions.</p>	6.5
<b>27 February 2020</b>	<p><b>Information on the results of the conducted tests for impairment</b></p> <p>Information on the completion of major work related to impairment testing of international mining assets of the KGHM Polska Miedź S.A. Group and assets of the company "Energetyka" sp. z o.o. (a subsidiary of KGHM Polska Miedź S.A. – 100% share) and its subsidiary – WPEC S.A. (100% share).</p> <p>Detailed information on the results of the tests conducted may be found in Part 3 of the Separate and Consolidated Financial Statements.</p>	6, 7

In addition, in 2020 regulatory filings were published concerning:

- publication dates for periodic reports in 2020 (16 January 2020),
- preliminary production and sales data of the KGHM Polska Miedź S.A. Group for December 2019 (23 January 2020) and January 2020 (24 February 2020).

## APPENDIX 1 CORPORATE GOVERNANCE STATEMENT

KGHM Polska Miedź S.A., whose shares are listed on the Warsaw Stock Exchange, in 2019 was subject to the corporate governance principles described in the document „Code of Best Practice for WSE Listed Companies 2016” (hereafter „Best Practice”) which was adopted by Resolution No. 26/1413/2015 of the Warsaw Stock Exchange Supervisory Board on 13 October 2015. These principles are available at the official website of the Warsaw Stock Exchange devoted to this subject (<https://www.gpw.pl/best-practice>) as well as at the website of KGHM Polska Miedź S.A. under the section devoted to corporate governance (<http://kgm.com/en/investors/corporate-governance/governance-compliance>).

KGHM Polska Miedź S.A. has endeavoured at every stage of its operations to carry out the recommendations and principles respecting “Best Practice” for listed companies.

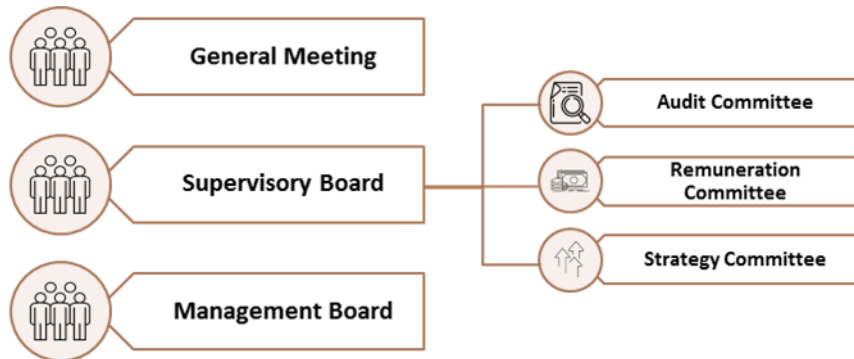
In 2019, KGHM Polska Miedź S.A. did not comply with the following recommendation from „Best Practice”:

<i>Recommendation not applied</i>	<i>Explanation</i>
Recommendation IV.R.2 which states that, if justified, a company should enable its shareholders to participate in general meetings using electronic means of communication, in particular through the real-time broadcast of general meetings, real-time bilateral communication whereby shareholders may take the floor during a general meeting from a location other than the general meeting, and also exercise the right to vote during a general meeting either in person or through a proxy.	In the Company's opinion, introduction of the possibility of participation in General Meetings using electronic means of communication may carry risk factors of a legal and technical nature leading to interference with the efficient conduct of General Meetings, and as a result to the possible questioning of any resolutions adopted. In the Company's opinion, current principles of participation in the General Meetings of KGHM Polska Miedź S.A. enable all shareholders to exercise the rights attached to owning the shares and protect the interests of all shareholders. The Company is considering introducing the aforementioned recommendation in situations when their technical and legal aspect no longer raises any doubts, and when such introduction will be justified by a real need for this form of communication with shareholders. Since 2016 KGHM Polska Miedź S.A. has been providing real-time streaming webcasts of its General Meetings.

Moreover, the following detailed principles from „Best Practice” did not apply to the Company:

<i>Detailed principle</i>	<i>Explanation</i>
Detailed principle I.Z.1.10. which states that the Company should publish, on its corporate website, financial projections published at least in the last 5 years, if the company has decided to publish them, including information about the degree of their implementation.	The Company did not publish a financial forecast in the last five years.
Detailed principle III.Z.6. which states that, Where the company has no separate internal audit function in its organisation, the audit committee (or the supervisory board if it performs the functions of the audit committee) should review on an annual basis whether such function needs to be separated.	In KGHM Polska Miedź S.A. the internal audit function has been organisationally separated as the Internal Audit Department.
Detailed principle IV.R.3. according to which the Company attempts to ensure that, in a situation where securities issued by a company are traded in different countries (or in different markets) and in different legal systems, the company should strive to ensure that corporate events related to the acquisition of rights by shareholders take place on the same dates in all the countries where such securities are traded.	The securities issued by the Company are listed solely on the Warsaw Stock Exchange.
Detailed principle VI.Z.2. which states that, in order to tie the remuneration of members of the management board and key managers to the company's long-term business and financial goals, the period between the allocation of options or other instruments linked to the company's shares under the incentive scheme and their exercisability should be no less than two years.	There is no incentive program in the Company based on options or other instruments linked to the Company's shares.

Diagram 10. Corporate governance structure in KGHM Polska Miedź S.A.



## GENERAL MEETING

The General Meeting (GM) of KGHM Polska Miedź S.A. is the Company's highest authority. It meets in either Ordinary or Extraordinary form, based on generally prevailing law, the Statutes of the Company and the "Bylaws of the General Meeting of KGHM Polska Miedź S.A. with its registered head office in Lubin". GMs are convened by the Company's Management Board. In situations defined by the Commercial Partnerships and Companies Code, General Meetings may be convened by the Supervisory Board or by shareholders. The Statutes of KGHM Polska Miedź S.A. also authorise the Polish State Treasury to convene a General Meeting. The General Meeting of the Company is convened by an announcement published on the Company website and in the manner set forth in the Act dated 29 July 2005 on public offerings and conditions governing the introduction of financial instruments to organised trading, and on public companies (Journal of Laws from 2005, No. 184, item 1539, with subsequent amendments). A General Meeting may adopt resolutions if at least one-fourth of the share capital is represented. Resolutions are adopted by a simple majority of votes cast, unless the law or the Company's Statutes state otherwise. The principles for conducting a General Meeting are set forth by the Commercial Partnerships and Companies Code and the Company's Statutes. Additional issues related to the functioning of the General Meeting are regulated by the "Bylaws of the General Meeting of KGHM Polska Miedź S.A. with its registered head office in Lubin" adopted by the GM on 17 May 2010, which are available on the Company's website, [www.kghm.com](http://www.kghm.com).

The duties of the General Meeting include in particular:

1. examining and approving the report of the Management Board on the Company's activity and the financial statements, including the financial statements of the Group, for the past financial year,
2. adopting resolutions on the distribution of profits or coverage of losses,
3. acknowledging the fulfilment of duties performed by members of the bodies of the Company,
4. changing the subject of the Company's activity,
5. changes in the Company Statutes,
6. increasing or decreasing the share capital,
7. the manner and conditions for retiring shares,
8. merging, splitting and transforming the Company,
9. dissolving and liquidating the Company,
10. issuing convertible bonds or senior bonds,
11. consenting to the disposal and lease of an enterprise or of an organised part thereof, as well as the attachment of limited property rights to same,
12. all decisions relating to claims for redress of damage suffered during the foundation of the Company, or from management or supervisory activities,
13. purchase of the Company's own shares, which are to be offered to employees or persons who were employed by the company or by related companies for a period of at least three years,
14. establishing principles of the remuneration of members of the Supervisory Board, and
15. establishing principles of the remuneration of members of the Management Board.

The schedule of work on organising the General Meetings of the Company is planned in such a way as to ensure that the obligations towards shareholders are properly met and to enable them to exercise their rights.

The introduction of changes to the Company Statutes requires a resolution by the General Meeting and an entry in the National Court Register. Changes in the Company Statutes are made by the General Meeting in accordance with generally prevailing laws, in the manner and form prescribed by the Commercial Partnerships and Companies Code, i.e. by a majority three-fourths of the votes cast in the presence of persons representing at least half of the share capital.

Amongst the regulations of the Commercial Partnerships and Companies Code, in respect of the organisation of General Meetings and shareholder rights, the Company applies only those regulations which are obligatory, i.e. those which require the publication of announcements and relevant materials for the General Meeting on the Company website and the use of

electronic forms of contact with shareholders. Regulations enabling shareholders to participate in General Meetings using electronic means of communication are not applied.

## SHAREHOLDERS AND THEIR RIGHTS

Detailed information on the ownership structure is presented in Section 11 of this report.

Shareholders of the Company exercise their rights in a manner and within the limits prescribed by prevailing law, the Statutes of the Company and the Bylaws of the General Meeting of KGHM Polska Miedź S.A.

Shareholders are entitled to exercise their voting rights either personally or through a proxy. The authority to participate in a General Meeting and to exercise voting rights should be granted in writing or in electronic form. All of the shares are bearer shares. Each share represents one vote.

There is no limitation to the transfer of ownership rights to the shares of the Company or with respect to the execution of voting rights on the shares of the Company, other than those generally prescribed by laws in force.

The Company has not issued securities which would grant special control rights in respect of the Company.

A shareholder is entitled in particular to the following:

1. to convene an Extraordinary General Meeting if the said shareholder represents at least half of the share capital or has been authorised by a court of registration and represents at least one-twentieth of the share capital,
2. to announce draft resolutions during a General Meeting which are in regard to matters introduced to the agenda,
3. in accordance with the Statutes, the Polish State Treasury as a shareholder may convene an Ordinary General Meeting if the Management Board does not do so in the statutory timeframe as well as an Extraordinary General Meeting if it considers its convening as warranted,
4. to request that a matter included in the agenda be removed or not considered,
5. to order the convening of an Extraordinary General Meeting and to include specified matters on the agenda of this General Meeting, if the shareholder or shareholders represent at least one-twentieth of the share capital, and
6. to order the inclusion of specified matters on the agenda of the next General Meeting, if the shareholder or shareholders represent at least one-twentieth of the share capital.

## SUPERVISORY BOARD

The Supervisory Board of KGHM Polska Miedź S.A. is the permanent supervisory authority of KGHM Polska Miedź S.A., in all of the Company's functional areas. According to the Statutes of the Company, the Supervisory Board is composed of 7 to 10 members appointed by the General Meeting, 3 of whom are elected by the Company's employees. The Members of the Supervisory Board are appointed for a mutual term in the office, which lasts three years. The Supervisory Board selects from among its members a Chairman of the Supervisory Board, his Deputy and, if needed, a Secretary. The Supervisory Board should meet at least once a quarter. For resolutions of the Supervisory Board to be valid all of the members of the Supervisory Board must be invited to attend and resolutions must be adopted by an absolute majority of votes in the presence of at least one-half of the members.

The duties of the Supervisory Board include in particular the following:

1. evaluating the separate and consolidated financial statements and the report of the Management Board on the activity of the Company for the given financial year,
2. evaluating the proposals of the Management Board with respect to the distribution of profits or coverage of losses,
3. submitting to the General Meeting an annual written report on the results of the evaluations of the documents referred to in the first two points above,
4. submitting to the General Meeting annual requests for granting approval of performance of duties of the Management Board's members with respect to their activities in a financial year,
5. examining and controlling the activity and financial condition of the Company, and submitting to the Ordinary General Meeting an annual, brief assessment of the standing of the Company,
6. choosing an auditor to audit the statements referred to in point 1,
7. setting the number of members of the Management Board,
8. appointing and dismissing the members of the Management Board, with due regard to §12 of the Company's Statutes,
9. suspending from their duties for important reasons some or all of the members of the Management Board,
10. temporarily delegating a member or members of the Supervisory Board to carry out the duties of members of the Management Board who are unable to carry out their duties,
11. establishing the remuneration of members of the Management Board, as well as the other conditions of management services contracts,

12. approving the Bylaws of the Management Board of the Company,
13. approving the Company's annual and multi-year operating plans, including the Company's Strategy and annual budget,
14. stating its opinion on any request of the Management Board addressed to the General Meeting,
15. at the request of the Management Board, expressing its consent to:
  - a. the purchase and sale of real estate, of perpetual usufruct or of a stake in real estate (this does not require a resolution of the General Meeting),
  - b. the granting of guarantees and loans to commercial entities in which the Company owns less than 1/3 of the voting rights at the General Meeting of such entities,
  - c. establishing and acceding to commercial partnerships and companies,
  - d. disposing of shares in subsidiaries of the Company,
  - e. founding branches, companies, representative offices and other organisational or economic entities abroad,
  - f. obtaining or acquiring shares of another Company,
  - g. the establishment and liquidation of foundations,
  - h. agreements for legal services, marketing services, public relations services and social communication services, and advisory services associated with management, if the total expected remuneration for providing such services exceeds the net amount of PLN 500 000 per year,
  - i. changes in agreements for legal services, marketing services, public relations services and social communication services, and advisory services associated with management which increase the amount of remuneration above the amount referred to in letter h,
  - j. agreements for legal services, marketing services, public relations services and social communication services, and advisory services associated with management, in which the maximum amount of remuneration is not determined,
  - k. donations or other agreements with similar implications, with a value exceeding PLN 20 000 or 0.1% of total assets pursuant to the Act of 29 September 1994 on accounting (Journal of laws from 1994 No. 121, item 591 with subsequent amendments), determined based on the most recently approved financial statements, and
  - l. discharge of debt or other agreements with similar implications with a value exceeding PLN 50 000 or 0.1% of total assets pursuant to the Act of 29 September 1994 on accounting (Journal of laws from 1994 No. 121, item 591 with subsequent amendments), determined based on the most recently approved financial statements.
16. determining the manner of voting by a representative of KGHM Polska Miedź S.A. at the General Meetings of companies in respect of which the Company is a parent entity pursuant to art. 4 point 3 of the Act of 16 February 2007 on competition and consumer protection (Journal of Laws from 2019, item 369 with subsequent amendments), regarding:
  - a. the founding by a company of another company;
  - b. amendments in the statutes or articles of association and in the subject of a company's activities;
  - c. the merger, transformation, splitting, dissolution and liquidation of a company;
  - d. increasing or decreasing a company's share capital;
  - e. the disposal and lease of an enterprise or of an organised part thereof, as well as the attachment of limited property rights to same;
  - f. the retirement of shares;
  - g. setting the remuneration of members of the management boards and supervisory boards;
  - h. decisions relating to claims for redress of damage suffered during the founding of the company, or from management or supervisory activities;
  - i. regarding issues referred to in art. 17 of the Act of 16 December 2016 on the principles of state assets management (Journal of Laws from 2016, item 2259 with subsequent amendments), with due regard to § 34 sec. 4 of the Statutes.
17. expressing an opinion on investments by the Company in fixed assets, which meet one of the following conditions:
  - a. investments having a value of more than 10% of the budget for expenditures on investments in tangible assets of the Company for a given financial year,
  - b. investments of more than 5% of the budget for expenditures on investments in tangible assets of the Company for a given financial year, if the investment does not meet the criteria for planned effectiveness in comparison to the accepted rate of return on equity in the Company,
18. providing an opinion on reports prepared by the Management Board on representative expenses, expenses for legal services, marketing services, public relations services and social communication services and advisory services associated with management,

19. providing an opinion on the principles of sponsoring activities and assessing the effectiveness of the sponsoring activities conducted by the Company,
20. providing an opinion on changes to the principles for the disposal of non-current assets, set forth in § 33<sup>1</sup> of the Statutes, and
21. confirmation of remuneration policy for the Group.

The Supervisory Board operates on the basis of generally prevailing law, the Statutes of the Company and the Bylaws of the Supervisory Board. The Bylaws and Statutes of the Company are available on the Company's website, [www.kghm.com](http://www.kghm.com).

The composition of the Supervisory Board and its changes in 2019 are presented in the Section 17 of this report.

The following members of the Supervisory Board of KGHM Polska Miedź S.A submitted declarations on meeting independence criteria, specified in principle no. II.Z.4. of "Best Practice of GPW Listed Companies 2016": Andrzej Kisielewicz, Jarosław Janas, Janusz Kowalski, Bartosz Piechota, Marek Pietrzak and Agnieszka Winnik – Kalemba. On 23 October 2019 Janusz Kowalski submitted his resignation from the function of Member of the Supervisory Board of KGHM Polska Miedź S.A. effective as of 11 November 2019.



## SUPERVISORY BOARD COMMITTEES

Within the structure of the Supervisory Board are three committees which serve in an auxiliary role to the Supervisory Board in the preparation of assessments, opinions and other actions aimed at reaching decisions which must be made by the Supervisory Board.

Audit Committee	The composition of the Audit Committee in 2019:	
		1 January – 31 December
	- Marek Pietrzak	✓
	- Bogusław Szarek	✓
	- Agnieszka Winnik-Kalemba	✓ (Chairman)
	- Leszek Banaszak	✓
	- Jarosław Janas	✓
	- Ireneusz Pasis	✓
	- Bartosz Piechota	✓

The Audit Committee is responsible for supervision in the areas of financial reporting, the internal control system, risk management and internal and external audits.

In accordance with the Bylaws of the Supervisory Board the tasks of the Audit Committee are as follows:

- 1) monitoring of:
  - a) the financial reporting process,
  - b) the effectiveness of internal control systems and risk management systems as well as internal auditing, including financial reporting;
- 2) the conduct of financial review, in particular carrying out auditing research by the auditing firm, reflecting all of the conclusions of the Auditing Oversight Committee resulting from audits carried out within an auditing firm; conducting reviews of transactions carried out by the Company, which the Audit Committee considers as significant for the Company;
- 3) providing an opinion on the Company's internal audit plan and the internal audit bylaws, as well as changes in the position of Internal Audit Director who reports directly to the President or other Member of the Management Board;
- 4) analysis of the conclusions and recommendations of the Company's internal audit, including monitoring of the degree of implementation of recommendations made by the Company's Management Board;
- 5) auditing and monitoring the independence of the certified auditor and the auditing firm, in particular if the auditing firm provides services to the Company apart from auditing;
- 6) informing the Supervisory Board of audit results and explaining to what degree such audits have resulted in the transparency of financial reporting in the Company, and also the role of the Audit Committee in this process;
- 7) assessing the independence of the certified auditor and expressing consent for the certified auditor to provide permitted non-auditing services in the Company;
- 8) developing a policy to select the auditing firm for conducting audits;
- 9) developing a policy for the auditing firm conducting audits, through entities related to the said auditing firm and by a member of the auditing firm's network, to provide permitted non-auditing services;
- 10) setting forth the Company's procedures for selecting an auditing firm;
- 11) presenting the Supervisory Board with the recommendations referred to in art. 16 section 2 of Decree no. 537/2014 (i.e. recommendations regarding the appointment of a certified auditor or auditing firms),
- 12) submitting recommendations aimed at ensuring the transparency of the Company's financial reporting process; and
- 13) other tasks ordered by the Supervisory Board.

With respect to the Members of the Audit Committee serving in the function from 1 January 2019 to 31 December 2019, Agnieszka Winnik-Kalemba, Marek Pietrzak, Bartosz Piechota and Jarosław Janas met the criteria for independence as defined by art. 129 sec. 3 of the Act dated 11 May 2017 on certified auditors, auditing firms and public oversight (Journal of Laws from 2017 item 1089, with subsequent amendments).

The qualifications of Committee's members in the areas of accounting or the auditing of financial statements, as well as knowledge and skills in the sector in which KGHM Polska Miedź S.A. operates, resulted from the education, experience and professional practice of the Committee's members. Following is detailed information on their qualifications in the areas of accounting or the auditing of financial statements as well as their knowledge and skills in the sector in which KGHM Polska Miedź S.A. operates.

Marek Pietrzak was selected as a member possessing qualifications in the field of accounting or the auditing of financial statements, resulting from his education (among others the title of legal adviser and Executive Master of Business Administration and completion of post-graduate studies in accounting and corporate finance at the SGH Warsaw School of Economics), experience and professional practice (among others supervision and management of commercial law companies).

Bogusław Szarek was selected as a member possessing knowledge and skills in the sector in which KGHM Polska Miedź S.A. operates resulting from many years of employment in KGHM Polska Miedź S.A. as well as being a member of the Supervisory Board of KGHM Polska Miedź S.A. since 2012.

In 2019 there were 10 meetings of the Audit Committee.

Remuneration Committee	Composition of the Remuneration Committee in 2019:	
	1 January – 31 December	
	- Józef Czyczerski	✓
	- Marek Pietrzak	✓
	- Bogusław Szarek	✓
	- Andrzej Kisielewicz	✓ (Chairman)
	- Leszek Banaszak	✓
	- Jarosław Janas	✓
	- Ireneusz Pasis	✓

The Remuneration Committee is responsible for supervising the performance of the duties set forth in the contracts signed with the Management Board, the remuneration system and benefits paid out in KGHM Polska Miedź S.A. and the Group, training and other benefits provided by the Company, as well as audits performed by the Supervisory Board in this regard.

In accordance with the Bylaws of the Supervisory Board the tasks of the Remuneration Committee are as follows:

- 1) the management of issues related to the recruitment and employment of members of the Management Board by preparing and arranging draft documents and processes to be submitted for the acceptance of the Supervisory Board;
- 2) the preparation of draft contracts/agreements and other sample documents related to the establishment of an employment relationship with members of the Management Board and oversight of the execution of the contractual obligations by the parties;
- 3) oversight of the execution of the Management Board remuneration system, in particular the preparation of settlement documents with respect to variable elements and bonus-based remuneration in order to submit recommendations to the Supervisory Board;
- 4) monitoring and periodic assessment of the remuneration system for the Company's senior management and, if necessary, the preparation of recommendations for the Supervisory Board;
- 5) oversight of the proper execution of additional benefits for the Management Board resulting from employment contracts, such as insurance, company cars, housing, etc.; and
- 6) other tasks ordered by the Supervisory Board.

Strategy Committee	Composition of the Strategy Committee in 2019:		
	1 January – 10 November	11 November – 31 December	
	- Józef Czyczerski	✓	✓
	- Marek Pietrzak	✓	✓
	- Bogusław Szarek	✓	✓
	- Agnieszka Winnik-Kalemba	✓	✓
	- Bartosz Piechota	✓ (Chairman)	✓
	- Leszek Banaszak	✓	✓
	- Janusz Kowalski	✓	✓
	- Ireneusz Pasis	✓	✓

The Strategy Committee supervises the realisation of Company strategy, the Company's annual and multi-year operating plans, supervising the coherence of these documents, and also provides its opinion to the Supervisory Board on the strategic projects presented by the Management Board of the Company and any changes thereto, as well as on the Company's annual and multi-year operating plans.

In accordance with the Bylaws of the Supervisory Board the tasks of the Strategy Committee are as follows:

- 1) execution on behalf of the Company's Supervisory Board of tasks in the area of oversight of issues associated with the Company's strategy and the annual and long-term operating plans of the Company;
- 2) monitoring execution of the Company's strategy by the Management Board and issuing opinions on the degree to which the existing strategy is able to deal with changes in the actual situation;
- 3) monitoring execution of the annual and long-term operating plans of the Company by the Management Board, and assessment of whether these plans need to be modified;
- 4) assessment of the consistency of the annual and long-term operating plans of the Company with the Company's strategy as executed by the Management Board, and the presentation of any proposed changes in all such Company documents;
- 5) submission to the Company's Supervisory Board of its opinions regarding the draft strategies of the Company and any changes thereto and of the annual and multi-year operating plans of the Company, as presented by the Company's Management Board; and
- 6) other tasks ordered by the Supervisory Board.

The detailed rights, scope of activities and manner of work of these Committees are described by bylaws approved by the Supervisory Board. After the end of the year the Audit, Remuneration and Strategy Committees submit reports on their activities to the Supervisory Board.

### MANAGEMENT BOARD

The duties of the Management Board include all matters pertaining to the functioning of the Company which have not been reserved by the Commercial Partnerships and Companies Code and the Statutes of the Company to the duties of the General Meeting and the Supervisory Board. A detailed description of the Management Board's scope of duties and obligations and the manner in which it functions may be found in the Bylaws of the Management Board.

According to the Statutes of KGHM Polska Miedź S.A., the Company's Management Board may be composed of 1 to 7 persons, appointed for a mutual term of office. The term of office of the Management Board lasts three consecutive years. The number

of members of the Management Board is set by the Supervisory Board, which appoints and dismisses the President of the Management Board and the Vice Presidents. The Supervisory Board appoints the members of the Management Board following the conduct of qualification proceedings, the goal of which is to review and evaluate the qualifications of candidates and to select the best candidate for Member of the Management Board, with due regard being given to sec. 5 and sections 7 to 12 concerning the appointment or recall of an employee-elected member of the Management Board. The members of the Management Board, including any such chosen by the employees, may be recalled by the Supervisory Board prior to the expiration of their term, which in no way shall interfere with their rights arising from their employment contract or other legal relationship relating to their functioning as a member of the Management Board. The result of elections of an employee-elected member of the Management Board, or the result of voting for their recalling, shall be binding upon the Supervisory Board, as long as in the said voting for either their appointment or recalling at least 50% of the Company's employees have participated. The election and recall of an employee-elected member of the Management Board requires an absolute majority of the votes cast.

The Management Board operates based on generally prevailing law, the Statutes of the Company and the Bylaws of the Management Board of KGHM Polska Miedź S.A. For resolutions of the Management Board to be valid at least two-thirds of the members of the Management Board must be present. Resolutions of the Management Board are approved by a simple majority of the votes cast. In the case of a tie vote being cast either for or against a given resolution, the President of the Management Board casts the deciding vote.

A detailed list of the matters requiring a resolution of the Management Board is included in the Bylaws of the Management Board of KGHM Polska Miedź S.A. approved by the Supervisory Board.

The authority of the Management Board to pass decisions on the issuance or redemption of shares is statutorily limited. The shares of the Company may be redeemed given shareholder consent through their acquisition by the Company. A resolution of the General Meeting on the redemption of shares may be preceded by an agreement entered into with a shareholder. In accordance with §29 sec. 1 point 6 of the Statutes of the Company, any increase in share capital or issuance of shares requires the approval of the General Meeting. The same holds true for the issuance of bonds (§29 sec. 1 point 10 of the Statutes of the Company). The Management Board of the Company does not have the authority to increase the share capital or issue the shares of the Company under conditions specified in art. 444-446 of the Commercial Partnerships and Companies Code.

The delegation of duties, the composition of the Management Board and its changes in 2019 are presented in Section 17 of this report.

## MAIN CHARACTERISTICS OF INTERNAL CONTROL AND RISK MANAGEMENT SYSTEMS AS APPLIED BY THE COMPANY IN THE PROCESS OF PREPARING SEPARATE AND CONSOLIDATED FINANCIAL STATEMENTS

The system of internal control in KGHM Polska Miedź S.A., and the management of risk in the process of preparing financial statements, is performed in the following manner:

<p><b>Supervision of the application of uniform accounting principles by the Parent Entity and the companies of the KGHM Polska Miedź S.A. Group during the process of preparing reporting packets to prepare the consolidated financial statements of the KGHM Polska Miedź S.A. Group</b></p>	<p>In order to ensure reliability and accuracy in the keeping of the accounting records of the Parent Entity and the uniformity of the accounting principles applied when preparing the financial statements of Group subsidiaries, the Management Board of the Parent Entity has introduced for continuous use an Accounting Policy for the Group in accordance with International Financial Reporting Standards approved by the European Union which is regularly updated in compliance with new regulations. Control over the accounting policies applied in the process of preparing the financial statements of KGHM Polska Miedź S.A. and of Group subsidiaries is based on the control mechanisms embedded in the functioning of the reporting systems. The reporting packets of subsidiaries are also reviewed by appropriate units in the Parent Entity.</p>
<p><b>Centralised financial and accounting services</b></p>	<p>KGHM Polska Miedź S.A. performs its accounting activities within a centralised financial and accounting services structure. Bookkeeping in the Parent Entity is performed by the Accounting Services Center under the Head Office of KGHM Polska Miedź S.A. The centralisation of accounting services under a model which provides for the transparent breakdown of duties and responsibilities ensures minimisation of the risk of bookkeeping errors and high-quality financial statements. Actions are systematically being taken aimed at optimising the functioning of the accounting services and enhancing the security of the process of bookkeeping accounting services.</p>
<p><b>Finance and accounting systems</b></p>	<p>KGHM Polska Miedź S.A. keeps accounting records in an integrated IT system. The modular structure of this system ensures a transparent segregation of processes and duties, coherence of accounting records and control over ledgers: special purpose ledger, general ledger and sub-ledgers. Access to this data at various levels and in various units is available via a well-developed reporting system. The Parent Entity continuously adapts the IT information system to changing accounting principles or other legal standards. The Parent Entity's solutions are implemented in the IT systems of Group entities. To ensure the legitimate utilisation and protection of systems, data, secure access to data and computer equipment, appropriate organisational and systemic solutions have been introduced. Access to the resources of the financial and accounting system, as well as financial reporting, is limited to the respective entitlements of authorised employees solely with respect to the duties which they carry out. These entitlements are subject to regular review and audits. Control over this access is carried out at each stage of financial statements preparation, beginning with the entering of source data, through the processing of data, to the generation of output information.</p>

	<p>A key element in limiting the risk of errors and misstatements in accounting for economic activities are the actions taken which are aimed at increasing the use of IT tools to automate control over and the settlement of purchases by the Company. These actions include:</p> <ul style="list-style-type: none"> <li>- on-going expansion of the scope of the Workflow system of electronic document settlement and approval,</li> <li>- implementation of the electronic system for transmitting data between the system in the Parent Entity and IT systems in Group companies; and</li> <li>- customer settlement based on e-invoices for procurement and sales.</li> </ul>
<b>Corporate risk management</b>	<p>Under the Corporate Risk Management Policy and Procedures and the Corporate Risk and Compliance Committee Rules updated in 2019, corporate risk management is an on-going process in the KGHM Polska Miedź S.A. Group. Risk factors associated with the Group's various operations are continuously identified, assessed and analysed in terms of their possible limitation.</p> <p>The Department of Corporate Risk Management and Compliance is responsible for coordination of the entire corporate risk management process and for developing the methods and tools used by managers in the Parent Entity, its subsidiaries and projects, as well as for risk monitoring and escalation, and for reporting incidents.</p> <p>These activities also comprise risk management with respect to the process of preparing the consolidated financial statements of the Group.</p> <p>This comprehensive approach to analysing risk factors also comprises the identification of risk factors related to achieving the strategic goals. The process of corporate risk management is annually subjected to an effectiveness audit (in compliance with the guidelines of Best Practice for WSE Listed Companies 2016).</p>
<b>Internal audit</b>	<p>A fundamental element of risk management with respect to the functioning of control mechanisms and the existence of risks in the operations of KGHM Polska Miedź S.A. is the work carried out by the Internal Audit Department. This work also indirectly augments the process of preparing financial statements as well as their accuracy.</p> <p>The Internal Audit Department carries out its tasks based on the "Audit Plan" for the given calendar year approved by the Management Board of KGHM Polska Miedź S.A. and assessed by the Audit Committee of KGHM Polska Miedź S.A.</p> <p>The goal of an audit is to provide the Management Board and the Audit Committee of the Supervisory Board of KGHM Polska Miedź S.A. with independent and objective information on internal control and risk management systems as well as with analyses of business processes within KGHM Polska Miedź S.A. and in the Group's companies. Independently from internal audit and institutional control, the obligation fully remains in KGHM Polska Miedź S.A. for each employee to exercise self-control in respect of their duties and for every level of management staff to exercise their control as part of their coordination and supervision duties.</p>
<b>External audit</b>	<p>In accordance with prevailing law, KGHM Polska Miedź S.A. submits its consolidated financial statements for half-year review and annual auditing by a certified auditor. The Supervisory Board selects the certified auditor through a tender process, based on the recommendations of the Supervisory Board's Audit Committee and the report on the tender conducted by the Committee.</p> <p>The appropriate entity to audit the financial statements of KGHM Polska Miedź S.A. for the years 2019-2021 is PricewaterhouseCoopers Polska spółka z ograniczoną odpowiedzialnością Audyt sp.k. (for the years 2016-2018 the entity was Deloitte Polska Sp. z o.o.). As part of the audit work performed the certified auditor performs, on the basis of prevailing audit methodology, an independent evaluation of the accounting principles applied by Parent Entity in preparing the financial statements and the accuracy and reliability of the consolidated financial statements.</p> <p>The effectiveness of the internal control system and the risk management system in the process of preparing the financial statements is confirmed by the unqualified report on the audit issued by the certified auditor from its audit of the consolidated financial statements of KGHM Polska Miedź S.A.</p>
<b>Supervision over the process of financial reporting</b>	<p>The body which supervises the process of financial reporting in KGHM Polska Miedź S.A. and which cooperates with the independent auditor is the Supervisory Board's Audit Committee, which is appointed by the Supervisory Board of the Parent Entity. The Audit Committee, in accordance with its duties as set forth in the Act dated 11 May 2017 on certified auditors, auditing firms and public oversight (Journal of Laws from 2017, item 1089 with subsequent amendments.) in particular:</p> <ul style="list-style-type: none"> <li>- monitors the process of financial reporting in terms of compliance with the Accounting Policy approved by the KGHM Polska Miedź S.A. Group and prevailing laws,</li> <li>- monitors the effectiveness of internal control systems, internal audit and risk management,</li> <li>- monitors the independence of the certified auditor and of the entity entitled to audit financial statements, and</li> <li>- conducts the process of selecting the entity entitled to audit financial statements of the Parent Entity to provide a recommendation to the Supervisory Board.</li> </ul> <p>Monitoring of the process of financial reporting and assessment of the financial statements by the Supervisory Board is the final step of the review and control carried out by this body, ensuring the reliability and accuracy of the data presented in the consolidated financial statements of the KGHM Polska Miedź S.A. Group.</p>

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Proper management of the process of keeping records and preparing financial statements ensures the security and the high quality of the information.

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### AUDIT FIRM AUDITING THE FINANCIAL STATEMENTS

Permitted non-auditing services were provided to the Company by the firm auditing its financial statements. In each case the Audit Committee evaluated the independence of the auditing firm and expressed its consent to the provision of these services.

Detailed information on remuneration of the entity entitled to audit the financial statements for the review and audit of financial statements and other remuneration is presented in note 12.11 of the separate and consolidated financial statements.

The Company implemented a policy for the selection of the auditing firm to conduct audits (hereafter: Selection policy) and a policy for permitted non-auditing services to be provided by the auditing firm conducting audits through entities associated with the auditing firm through members of the auditing firm's network (hereafter: Services policy).

Main assumptions of the Selection policy:

- maximum uninterrupted period of providing services by a given auditing firm of audits of the financial statements amounting to 5 years followed by a grace period of at least 4 years;
- transparency, accuracy and honesty in all procedures involving the selection of the auditing firm;
- equal opportunity for all of the auditing firms meeting the Company's requirements to be selected;
- appropriate substantive preparation and due diligence of persons selected within the Company to carry out the Selection policy;
- documentation of selection procedures performed and evaluation of offers in a manner which ensures the transparency of the actions taken.

Main assumptions of the Services policy:

- limitation of the scope of permitted non-auditing services ordered from the auditing firm or a related entity thereof; maximum total remuneration for the services provided in this regard is limited to 70% of the average annual remuneration paid out during the last three financial years due to providing statutory auditing services;
- the need to review the purpose and necessity for purchasing permitted non-auditing services from the auditing firm or a related entity thereof on an individual basis;
- active participation of the Audit Committee in the process of evaluating threats to and the security of the independence of the auditing firm in providing permitted non-auditing services;
- the signing of an agreement and the providing of services, as well as any change in the scope of the services or remuneration thereof, will be possible only after the Audit Committee has provided the requisite consent.

The recommendation regarding the selection of the auditing firm to conduct audits met the existing conditions and was prepared following a selection procedure organised by the Company which met the existing criteria.

### DIVERSITY POLICY APPLIED TO THE ADMINISTRATIVE, MANAGEMENT AND SUPERVISORY BODIES OF THE COMPANY

KGHM Polska Miedź S.A. applies best practice in promoting diversity with respect to its employees. As a global company, active on global markets, labour and employee relations standards are applied which are consistent with local laws in force, as well as with those defined by international institutions. Existing regulations and policies reflect the good of employees and mutual relations, based on best practice, regardless of the jurisdiction in which KGHM Polska Miedź S.A. operates.

KGHM Polska Miedź S.A. creates a non-discriminatory environment and workplace, and consequently no form of discrimination is tolerated, especially as regards gender, race, age, origin, religion, disability, philosophy, sexual orientation, social status, civil state, political party and trade union membership and manner of employment.

KGHM Polska Miedź S.A. manages diversity by aiming at creating an organisational culture based on mutual respect, equal treatment, access to development opportunities and the utilisation of employee potential. The approach to management of diversity is defined by the „Declaration of Diversity of KGHM Polska Miedź S.A.”.

Moreover, in KGHM Polska Miedź S.A. the process of recruitment is conducted with full respect to the principles of diversity and equal access to employment. All candidates meeting the criteria set forth for a given recruitment process are treated equally.

The participants in this process adhere to the ban on discrimination. They endeavour to ensure a rational degree of diversity in the process of selecting individual employees, while maintaining the primacy of knowledge, substantive skills and social ability.

The management of diversity also applies to members of the Supervisory Board and Management Board of KGHM Polska Miedź S.A. The management and supervisory staff are diverse in terms of gender, age and experience:

**Table 50. Structure of diversity amongst management and supervisory staff as at 31 December 2019**

<b>Structure of gender diversity</b>	Women		Men	
	Supervisory Board of KGHM Polska Miedź S.A.	1		8
Management Board of KGHM Polska Miedź S.A.	1		4	

<b>Structure of age diversity</b>	<40 years	40-50 years	51-60 years	>60 years
	Supervisory Board of KGHM Polska Miedź S.A.	2	2	3
Management Board of KGHM Polska Miedź S.A.		4	1	

<b>Length of experience in KGHM Polska Miedź S.A.</b>	<5 years	5-10 years	11-20 years	>20 years
	Supervisory Board of KGHM Polska Miedź S.A.	7		
Management Board of KGHM Polska Miedź S.A.	4			1

## APPENDIX 2 KGHM POLSKA MIEDŹ S.A. GROUP STRUCTURE

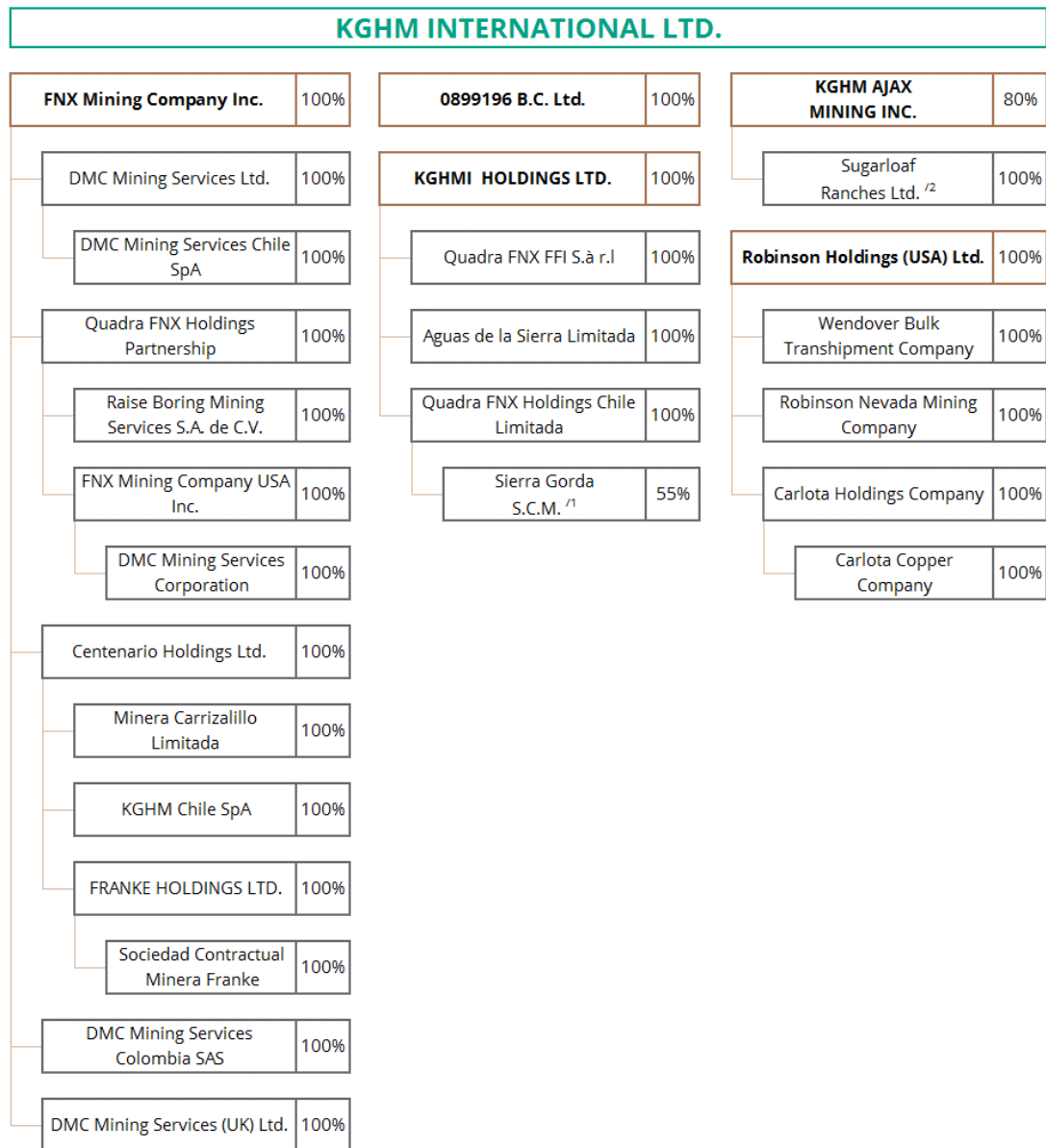


Group structure presented in Appendix 3

1/ joint venture accounted for using the equity method

2/ unconsolidated subsidiary

**APPENDIX 3 KGHM INTERNATIONAL LTD. GROUP STRUCTURE**



<sup>1/</sup> joint venture accounted for using the equity method

<sup>2/</sup> actual Group share 80%



## APPENDIX 4 ACTIVITIES OF SUBSIDIARIES AND JOINT VENTURES OF KGHM POLSKA MIEDŹ S.A.

### COMPANIES IN POLAND

<i>Entity</i>	<i>Head Office</i>	<i>Activities</i>
KGHM Polska Miedź S.A.	Poland	mining of copper ore, excavation of salt, production of copper and precious metals
„Energetyka” sp. z o.o.	Poland	generation, transmission and distribution of electrical and heating energy, water-sewage management; trade in oil-based products
PeBeKa S.A.	Poland	mine construction (construction of shafts and drifts), construction of roadway/railway tunnels; specialist construction, drilling services (geological/exploration drilling)
KGHM ZANAM S.A.	Poland	production of mining machinery and equipment, construction machinery; machinery repairs; production maintenance services; advancement of investments; steel construction services; roadway cargo transport
KGHM CUPRUM sp. z o.o. - CBR	Poland	design and R&D activities
CBJ sp. z o.o.	Poland	research and chemical-physical analysis; measurement of imissions and emissions; industrial research;
INOVA Spółka z o.o.	Poland	design and production – innovative solutions in electrical engineering, automated equipment and communication systems; certification and attestation of machinery and equipment
KGHM Metraco S.A.	Poland	trade and processing of non-ferrous metals scrap; rhenium recovery from acidic industrial waste; processing of shaft slag into road-building material and sale of such; trading in salt; recovery of copper and silver from smelter tiles; trading in chemical factors
POL-MIEDŹ TRANS Sp. z o.o.	Poland	railway cargo transport
NITROERG S.A.	Poland	production of explosives, Nitroacet 50 and initiating systems
MERCUS Logistyka sp. z o.o.	Poland	materials logistics; trade in consumer goods; production of bundled electrical cables and hydraulic cables; passenger roadway transport
NITROERG SERWIS Sp. z o.o.	Poland	comprehensive drilling and blasting work for mines, sales of explosives and initiating systems
CENTROŹŁOM WROCŁAW S.A.	Poland	recovery of raw materials from segregated materials – purchase and sale of metal scrap, waste recycling, sale of steel and aluminium and production of reinforcing building materials
Walcownia Metali Nieżelaznych „ŁABĘDY” S.A.	Poland	production of pressed goods from copper and its alloys; rolling services
PHU „Lubinpex” Sp. z o.o.	Poland	gastronomic, commercial and catering services
PMT Linie Kolejowe Sp. z o.o.	Poland	authorized management of railway infrastructure
KGHM TFI S.A.	Poland	creation and management of investment funds
INTERFERIE S.A.	Poland	hotel services combining active recreation with sanatorium-healing, rehabilitation, SPA and wellness services
Interferie Medical SPA Sp. z o.o.	Poland	hotel, recreation, rehabilitation, health tourism and wellness services
WPEC w Legnicy S.A.	Poland	production of heat from its own sources, transmission and distribution of heat, servicing
Uzdrowiska Kłodzkie S.A. – Grupa PGU		
Uzdrowisko Połczyn Grupa PGU S.A.		
Uzdrowisko Cieplice sp. z o.o. – Grupa PGU	Poland	services in the following areas: spa-healing, sanatorium, preventative medicine, rehabilitation, biological renewal, recreation based on natural healing materials and bioclimatic conditions
Uzdrowisko Świeradów – Czerniawa Sp. z o.o. – Grupa PGU		
Staropolanka Spółka z o.o. in liquidation	Poland	production and sale of mineral water (the company has not commenced operations)
Fundusz Hotele 01 Sp. z o.o.	Poland	special-purpose companies operating within the structures of the KGHM VI FIZAN investment fund
Fundusz Hotele 01 Sp. z o.o. S.K.A.		
Polska Grupa Uzdrowisk Sp. z o.o.	Poland	center of common services for entities operating within the structures of the investment fund
KGHM VI FIZAN		
KGHM VII FIZAN	Polska	closed-end, non-public investment funds - investing cash
„MCZ” S.A.	Poland	hospital services; medical practice; activities related to protecting human health; occupational medicine
Zagłębie Lubin S.A.	Poland	management of a football club, organisation of professional sporting events

Entity	Head Office	Activities
BIPROMET S.A.	Poland	design services, consulting, technical conceptual work; general realisation of investments
Cuprum Development sp. z o.o.	Poland	activities related to real estate market services, construction services, design work and financing
Cuprum Nieruchomości sp. z o.o.	Poland	company not engaged in operations
Future 2 Sp. z o.o.		
Future 3 Sp. z o.o.		
Future 4 Sp. z o.o.	Poland	companies not engaged in operations
Future 5 Sp. z o.o.		
Future 6 Sp. z o.o.		
Future 7 Sp. z o.o.		
NANO CARBON Sp. z o.o. in liquidation	Poland	production of graphene and research into its properties
TUW Cuprum <sup>1)</sup>	Poland	Insurance services, including mutual insurance services for large companies and economic entities

<sup>1)</sup> Excluded from consolidation

### INTERNATIONAL COMPANIES (AND FUTURE 1 SP. Z O.O.)

Entity	Head Office	Activities
<b>DIRECT SUBSIDIARIES</b>		
Future 1 Sp. z o.o.	Poland	management and control of other companies, including the KGHM INTERNATIONAL LTD. Group
KGHM (SHANGHAI) COPPER TRADING CO. LTD.	China	commercial activities involving copper/silicon merchandise
<b>INDIRECT SUBSIDIARIES</b>		
<b>COMPANIES BELONGING TO Future 1 Sp. z o.o.</b>		
KGHM INTERNATIONAL LTD.	Canada	the founding, development, management or control of companies in the KGHM INTERNATIONAL LTD. Group
KGHM Kupfer AG	Germany	in 2019 did not engage in operations
<b>COMPANIES BELONGING TO KGHM INTERNATIONAL LTD.</b>		
KGHM Ajax Mining Inc.	Canada	exploration for and assessment of mineral deposits
Sugarloaf Ranches Ltd.	Canada	agricultural activities (this company owns assets in the form of land designated for future mining activities related to the Ajax project)
Robinson Nevada Mining Company	USA	copper ore mining, production and sale of copper
Carlota Copper Company	USA	copper ore leaching, production and sale of copper
FNX Mining Company Inc.	Canada	mining of copper and nickel ore, production and sale of copper and nickel
Sociedad Contractual Minera Franke	Chile	copper ore leaching, production and sale of copper
Aguas de la Sierra Limitada	Chile	the ownership and exercise of water rights in Chile
Robinson Holdings (USA) Ltd.	USA	technical and management services
DMC Mining Services Corporation	USA	contract mining services
KGHM Chile SpA	Chile	management and exploration services
Minera Carrizalillo Limitada	Chile	the ownership of water and deposits rights
Wendover Bulk Transshipment Company	USA	shipment services
Raise Boring Mining Services, S.A. de C.V.	Mexico	mine drilling services
KGHMI Holdings Ltd.	Canada	the management and control of other companies
Carlota Holdings Company	USA	the management and control of other companies
Quadra FNX FFI S.à r.l.	Luxembourg	financial services
Centenario Holdings Ltd.	Canada	the management and control of other companies
Franke Holdings Ltd.	Canada	the management and control of other companies
Quadra FNX Holdings Chile Limitada	Chile	the management and control of other companies
FNX Mining Company USA Inc.	USA	the management and control of other companies
Quadra FNX Holdings Partnership	Canada	the management and control of other companies
0899196 B.C. Ltd.	Canada	the management and control of other companies
DMC Mining Services Ltd.	Canada	contract mining services
DMC Mining Services Chile SpA	Chile	contract mining services

Entity	Head Office	Activities
Sierra Gorda S.C.M.	Chile	the operation of an open-pit copper and molybdenum mine
DMC Mining Services Colombia SAS	Colombia	contract mining services
DMC Mining Services (UK) Ltd.	United Kingdom	contract mining services
COMPANY BELONGING TO Przedsiębiorstwo Budowy Kopalń PeBeKa Spółka Akcyjna		
PEBEKA CANADA INC.	Canada	in 2019 did not engage in operations
COMPANY BELONGING TO KGHM ZANAM S.A. (99%) and to Przedsiębiorstwo Budowy Kopalń PeBeKa S.A. (1%)		
Obszczestwo s ograniczennoj otwietstwiennostju ZANAM VOSTOK	Russian Federation	sale and after-sales service of mining machinery produced by KGHM ZANAM S.A.

## LIST OF TABLES, CHARTS AND DIAGRAMS

### TABLES

Table 1.	Changes in the Group's structure and organisation in 2019 .....	18
Table 2.	Macroeconomic factors significant for the operations of the KGHM Polska Miedź S.A. Group – average prices <sup>(1)</sup> .....	24
Table 3.	Production in the Group .....	37
Table 4.	C1 cost of producing copper in concentrate in the Group (USD/lb) .....	38
Table 5.	Financial results of the Group (in PLN million) .....	38
Table 6.	Main factors impacting the change in profit or loss of the Group .....	39
Table 7.	Cash flow of the Group (in PLN million) .....	40
Table 8.	Consolidated assets (in PLN million) .....	41
Table 9.	Consolidated equity and liabilities (in PLN million) .....	42
Table 10.	2019 targets versus achievements and targets for 2020 .....	43
Table 11.	Net debt structure of the Group (PLN million) .....	44
Table 12.	Net debt structure of the Parent Entity (PLN million) .....	45
Table 13.	Amount available and drawn by the Group (PLN million) .....	45
Table 14.	Net debt / EBITDA of the Group .....	46
Table 15.	Loans granted by companies of the Group as at 31 December 2019 .....	47
Table 16.	Mine production of KGHM Polska Miedź S.A. ....	49
Table 17.	Metallurgical production of KGHM Polska Miedź S.A. ....	49
Table 18.	Sales volume of basic products of KGHM Polska Miedź S.A. ....	51
Table 19.	Revenues from contracts with customers of KGHM Polska Miedź S.A. (in PLN million) .....	51
Table 20.	Expenses by nature of KGHM Polska Miedź S.A. (in PLN million) .....	52
Table 21.	Basic items of the statement of profit or loss of KGHM Polska Miedź S.A. (in PLN million) .....	54
Table 22.	Main reasons for the change in profit/(loss) of KGHM Polska Miedź S.A. ....	54
Table 23.	Statement of cash flows of KGHM Polska Miedź S.A. (in PLN million) .....	56
Table 24.	Assets of KGHM Polska Miedź S.A. (PLN million) .....	57
Table 25.	Equity and liabilities of KGHM Polska Miedź S.A. (PLN million) .....	58
Table 26.	Structure of expenditures on property, plant and equipment and intangible assets of KGHM Polska Miedź S.A. (in PLN million) .....	59
Table 27.	Production of KGHM INTERNATIONAL LTD. ....	61
Table 28.	Volume and sales revenue of KGHM INTERNATIONAL LTD. (USD mn) .....	61
Table 29.	Sales revenue of KGHM INTERNATIONAL LTD. (PLN million) .....	61
Table 30.	C1 unit cost of KGHM INTERNATIONAL LTD. ....	62
Table 31.	Financial results of KGHM INTERNATIONAL LTD. (USD million) .....	62
Table 32.	Financial results of KGHM INTERNATIONAL LTD. (PLN million) .....	62
Table 33.	Key factors impacting the change in financial result of KGHM INTERNATIONAL LTD. ....	62
Table 34.	Cash expenditures of KGHM INTERNATIONAL LTD. (USD million) .....	63
Table 35.	Cash expenditures of KGHM INTERNATIONAL LTD. (PLN million) .....	63
Table 36.	Production of copper, molybdenum and precious metals by Sierra Gorda S.C.M. ....	64
Table 37.	Sales volume and revenues of Sierra Gorda S.C.M. ....	64
Table 38.	Costs (prior to the impairment loss on non-current assets) and unit production cost of copper (C1) of Sierra Gorda S.C.M. ....	65
Table 39.	Results of Sierra Gorda S.C.M. in USD million (on a 100% basis) .....	65
Table 40.	Results of the segment Sierra Gorda S.C.M. proportionally to the interest held (55%) in PLN million .....	66
Table 41.	Main factors impacting the change in the financial result of the segment Sierra Gorda S.C.M. ....	66
Table 42.	Cash expenditures of Sierra Gorda S.C.M. ....	67
Table 43.	Financial results of other segments (prior to consolidation adjustments) .....	68
Table 44.	Shareholder structure as at 31 December 2019 and at the date this report was signed .....	69
Table 45.	Key share price data of the Company on the Warsaw Stock Exchange .....	70
Table 46.	Brokerages which prepare reports on KGHM Polska Miedź S.A. ....	72
Table 47.	Average employment in KGHM Polska Miedź S.A. ....	84
Table 48.	Average employment in the Group .....	84
Table 49.	Potentially-due remuneration of Members of the Management Board of KGHM Polska Miedź S.A. for 2019 .....	103
Table 50.	Structure of diversity amongst management and supervisory staff as at 31 December 2019 .....	118

### CHARTS

Chart 1.	Forecasts of real GDP growth per the International Monetary Fund from January 2020 versus previous forecasts .....	22
Chart 2.	Change in commodities prices in 2019 .....	24
Chart 3.	Copper price per the LME (USD/t) .....	24

Chart 4.	Silver price per the LBMA (USD/oz t) .....	25
Chart 5.	Molybdenum price per the CRU (USD/lb) .....	25
Chart 6.	USD/PLN exchange rate per the NBP .....	25
Chart 7.	USD/CAD exchange rate per the Bank of Canada.....	25
Chart 8.	USD/CLP exchange rate per the Bank of Chile.....	26
Chart 9.	Geographical breakdown of copper concentrates production in 2019..... (source: CRU, KGHM Polska Miedź S.A.).....	27
Chart 10.	Geographical breakdown of copper blister production from copper concentrates in 2019 .....	27
	(source: CRU, KGHM Polska Miedź S.A.).....	27
Chart 11.	Geographical breakdown of refined copper production in 2019 (source: CRU, KGHM Polska Miedź S.A.).....	28
Chart 12.	Geographical breakdown of refined copper consumption in 2019 (source: CRU, KGHM Polska Miedź S.A.) ..	28
Chart 13.	Geographical breakdown of copper wire rod production in 2019 (source: CRU, KGHM Polska Miedź S.A.)....	28
Chart 14.	Geographical breakdown of global wire rod consumption in 2019 (source: CRU, KGHM Polska Miedź S.A.) ..	28
Chart 15.	Geographical breakdown of global mined silver production in 2019 .....	29
	(source: Metal Focus, KGHM Polska Miedź S.A.).....	29
Chart 16.	Geographic structure of Group sales .....	38
Chart 17.	Product structure of Group sales .....	38
Chart 18.	Change in profit/loss for the period in 2019 (in PLN million).....	39
Chart 19.	Cash flow in 2019 ( <i>in PLN million</i> ).....	41
Chart 20.	Change in assets in 2019 ( <i>in PLN million</i> ) .....	41
Chart 21.	Change in equity and liabilities in 2019 ( <i>in PLN million</i> ).....	42
Chart 22.	Sales revenue of KGHM Polska Miedź S.A. by market (in PLN million) .....	52
Chart 23.	Structure of expenses by nature in 2019 .....	53
Chart 24.	Cost of producing copper in concentrate – C1 (USD/lb).....	53
Chart 25.	Pre-precious metals credit unit cost of electrolytic copper production – from own concentrate (PLN/t) .....	53
Chart 26.	Change in profit for the period of KGHM Polska Miedź S.A. ( <i>in PLN million</i> ) .....	55
Chart 27.	Cash flows of KGHM Polska Miedź S.A. ( <i>in PLN million</i> ) .....	56
Chart 28.	Change in assets of KGHM Polska Miedź S.A. in 2019 ( <i>PLN million</i> ) .....	57
Chart 29.	Change in equity and liabilities of KGHM Polska Miedź S.A. in 2019 ( <i>PLN million</i> ).....	58
Chart 30.	Structure of expenditures on the replacement of equipment .....	59
Chart 31.	Structure of expenditures on maintaining mine production.....	59
Chart 32.	Structure of expenditures on development .....	60
Chart 33.	Change in profit or loss of KGHM INTERNATIONAL LTD. (USD million) .....	63
Chart 34.	Change in profit/loss ( <i>USD million</i> ) .....	66
Chart 35.	Geographic shareholder structure of KGHM Polska Miedź S.A. (%).....	69
Chart 36.	Percentage change of share price of KGHM Polska Miedź S.A. versus the WIG index..... and FTSE 350 mining index (compared to the quotations from the last trading day in 2018).....	70
Chart 37.	Structure of employment in the Group in 2019 .....	84
Chart 38.	LTIFR <sub>KGHM</sub> ratio in the Parent Entity.....	88
Chart 39.	TRIR <sup>1</sup> ratio in KGHM INTERNATIONAL LTD.....	89

## DIAGRAMS

Diagram 1.	Business model of the KGHM Polska Miedź S.A. Group.....	8
Diagram 2.	Main reporting segments of the KGHM Polska Miedź S.A. Group .....	9
Diagram 3.	Organisational structure of the Company as at 31 December 2019.....	10
Diagram 4.	Location of mining assets of the KGHM Polska Miedź S.A. Group .....	11
Diagram 5.	Integrated mining, processing, smelting and refining processes in KGHM Polska Miedź S.A. ....	16
Diagram 6.	Simplified flowchart of the core business of the KGHM INTERNATIONAL LTD. Group.....	18
Diagram 7.	Strategic areas and primary goals of the Strategy of KGHM Polska Miedź S.A. ....	30
Diagram 8.	Organisational structure of risk management in KGHM Polska Miedź S.A. ....	74
Diagram 9.	Risk categories in the Risk Model of KGHM Polska Miedź S.A. ....	75
Diagram 10.	Corporate governance structure in KGHM Polska Miedź S.A. ....	109

## SIGNATURES OF ALL MEMBERS OF THE MANAGEMENT BOARD

This report was authorised for issue on 16 March 2020

President of the Management Board

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Marcin Chludziński

Vice President of the Management Board

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Adam Bugajczuk

Vice President of the Management Board

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Paweł Gruza

Vice President of the Management Board

---

Katarzyna Kreczmańska-Gigol

Vice President of the Management Board

---

Radosław Stach