



# Integrated Report of KGHM Polska Miedź S.A. for 2019



# Welcome to the Integrated Report of KGHM Polska Miedź S.A. and the KGHM Polska Miedź S.A. Group for 2019

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This comprehensive report on business and operating activities of the KGHM Polska Miedź S.A. Group and its Parent Entity KGHM Polska Miedź S.A. presents our activities and development directions to our stakeholders, in particular investors, financial institutions and insurers.

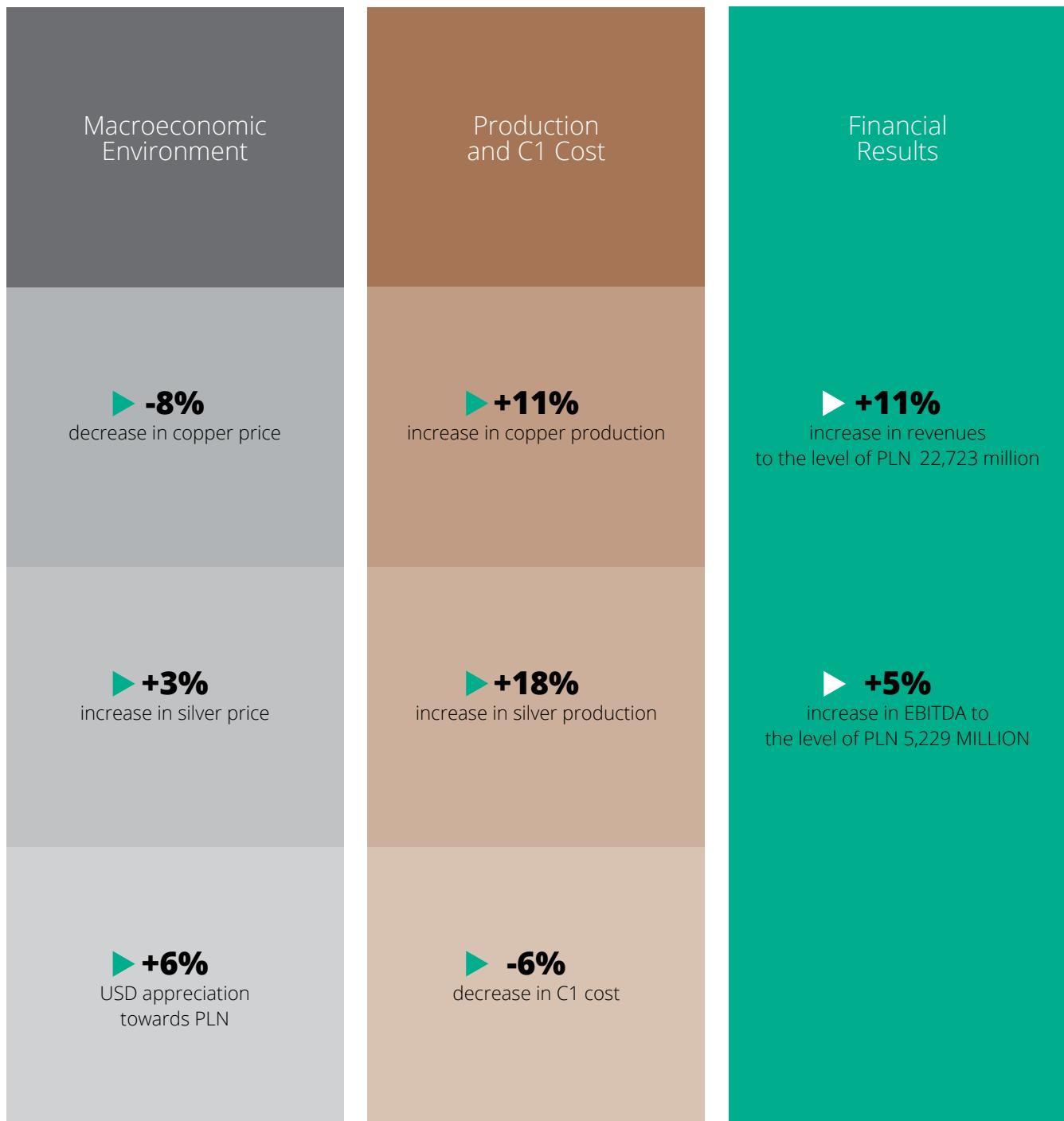
The 7th Integrated Report of the KGHM Polska Miedź S.A. Group covers non-financial and financial results of KGHM Polska Miedź S.A. and the KGHM Polska Miedź S.A. Group for 2019 (reporting period: 1 January – 31 December 2019) [GRI 102-50]. In line with our commitment to publish an annual integrated report [GRI 102-52], we are presenting the environmental, economic and social impact of the Company. The previous integrated report for 2018 was published in 2019 [GRI 102-51]. No restatements have been made to the 2018 report [GRI 102-48]. This report has been prepared using selected Global Reporting Initiative (GRI) indicators in the Standards version.



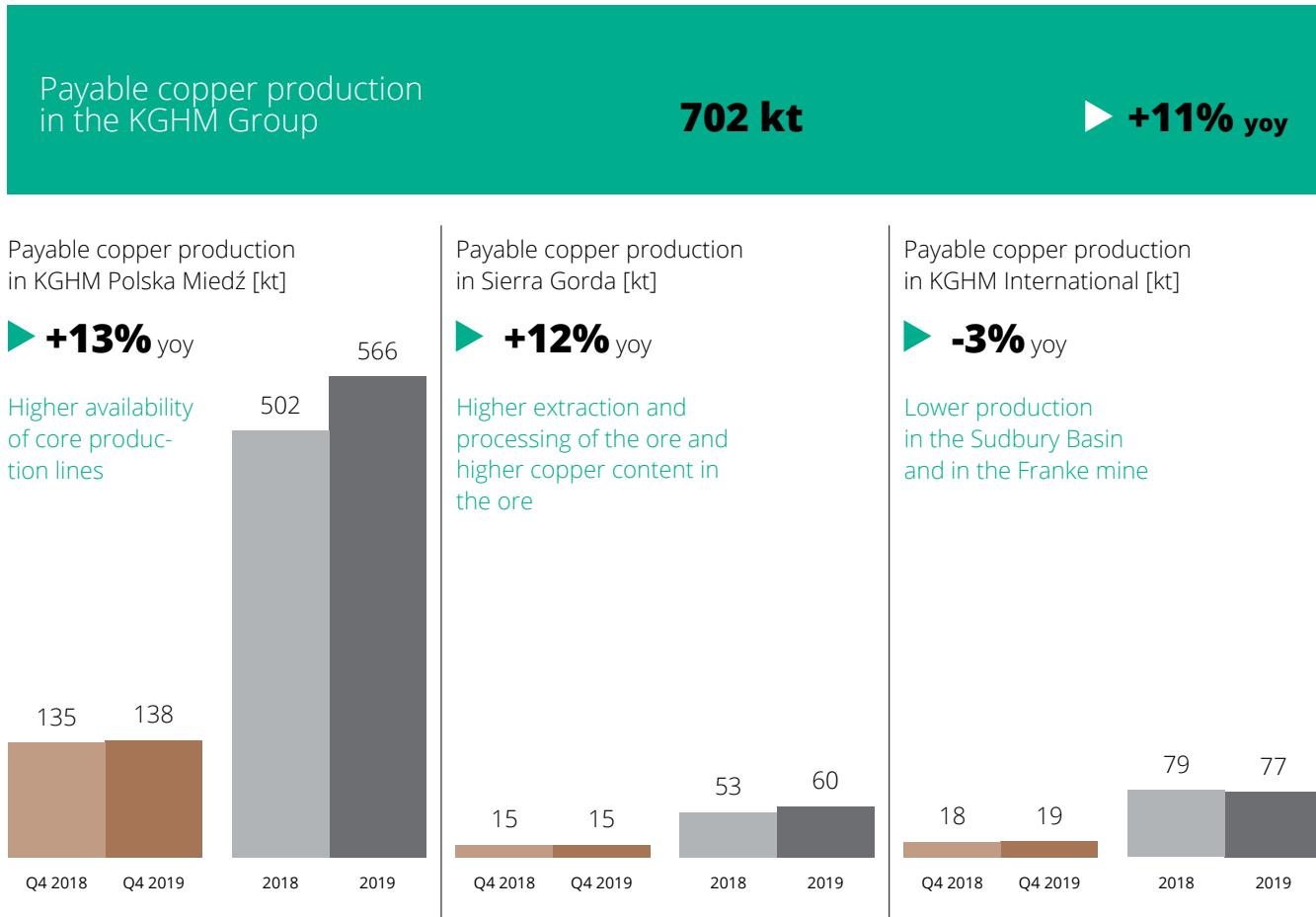
# Summary of 2019 and implementation of the 4E strategy

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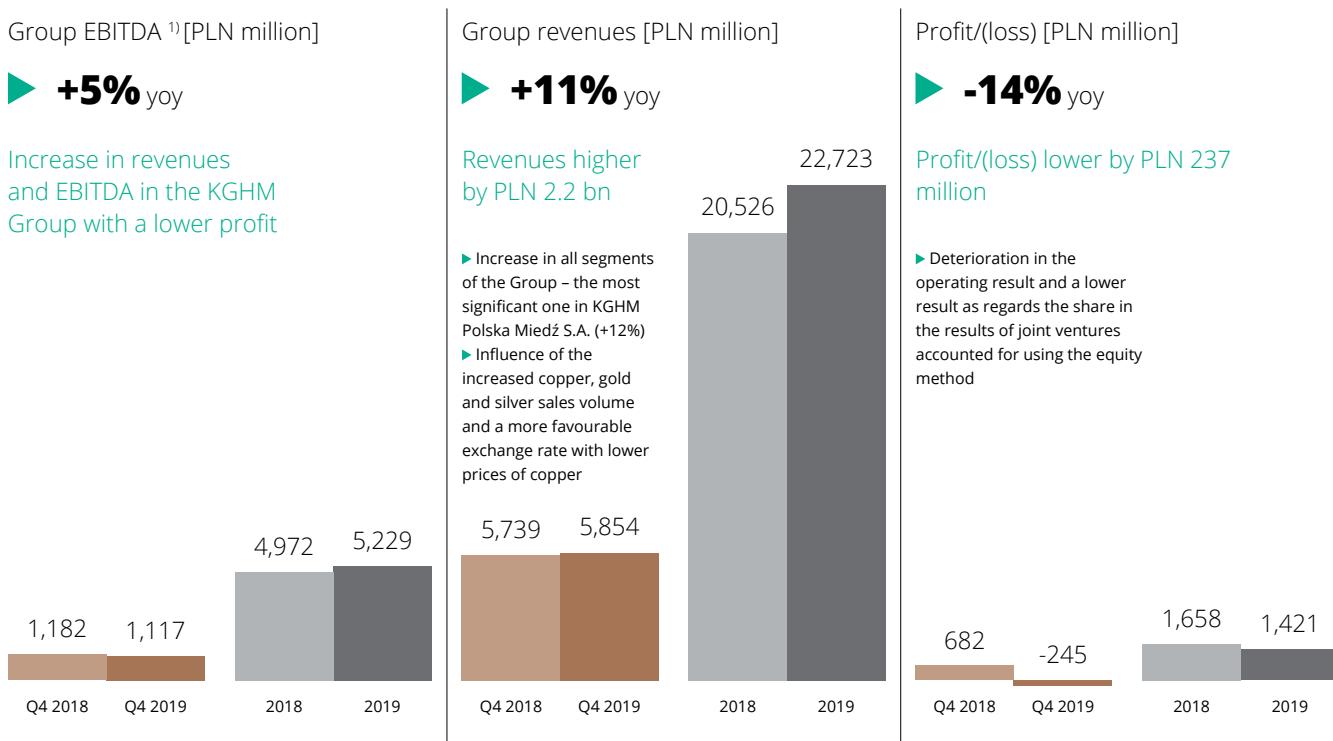
The KGHM Polska Miedź S.A. Group is a global and innovative organisation, which conducts technologically advanced exploration-mining and metallurgical activities. KGHM Polska Miedź S.A. is present on four continents: in Europe, South America, North America and Asia, and employs more than 34 thousand people worldwide.



## Key production indicators 2019



## Key financial indicators 2019

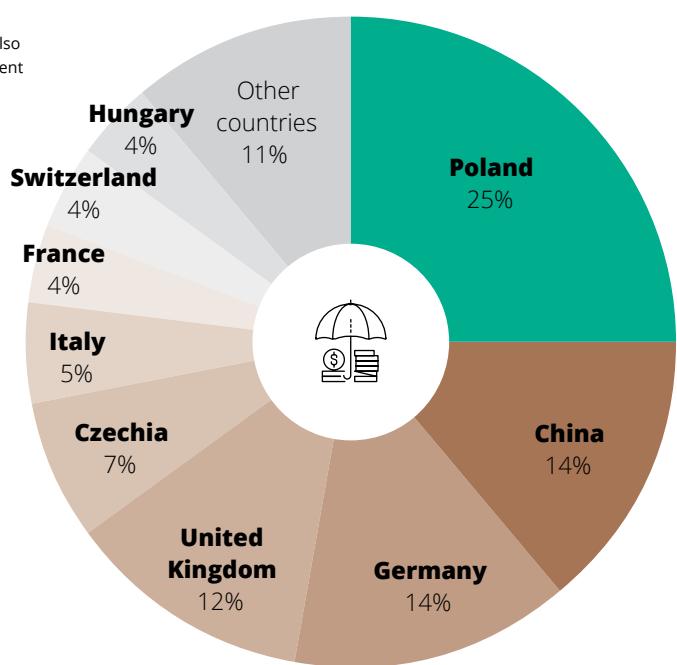


<sup>1)</sup> adjusted EBITDA = EBITDA (profit/(loss) on sales + depreciation/amortisation) adjusted by impairment losses / reversals on non-current assets

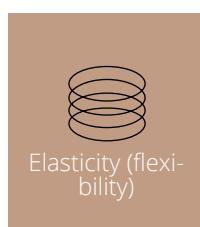
# Geographical breakdown of sales revenues in 2019

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%).

► Sales revenues include also the result from the settlement of hedging instruments.



## Key elements of strategy implementation



Adaptation of the KGHM Group operating model to the market environment

- Rational management of the LGOM deposit
- Optimisation of metallurgical production
- Exploration projects in Poland
- Optimisation of the portfolio of international assets
- Optimisation of the financing structure



Improved efficiency of resource utilisation and production processes

- Energy consumption reduction programmes
- Replacement and availability of mine machinery
- Innovations optimising the core production line; CuBR programme
- Works on increasing the use of factoring



Integration of the KGHM Group around the idea of sustainable development

- Compliance with the BAT conclusions
- Programme to Improve Occupational Health and Safety
- Circular Economy Programme
- Development of the Želazny Most Tailings Storage Facility
- Electromobility



Technological transformation as part of the KGHM 4.0 Programme

- Works on the implementation of projects as part of the KGHM 4.0 Programme
- Implementation of projects related to automation of production in mining and metallurgical divisions

# Our approach to sustainable development

As a signatory of the 2030 Agenda for Sustainable Development, KGHM operates based on the principles of sustainable development, in consideration of the following areas in its daily commitments: Society, Environment, Economy and Management, Security and Resource Efficiency.

## Impact of each objective on mining industry

**+**  
increase



**-**  
decrease



In 2018 KGHM was included in the FTSE4Good index. The FTSE4Good member status is an acknowledgement of the Company's activities oriented towards ESG areas, i.e. environmental protection, social responsibility, and corporate governance. In addition, KGHM is a member of the WIG-ESG index (previously: RESPECT Index) and the European Technology Platform on Sustainable Mineral Resources (ETP SMR).



## United Nations' Sustainable Development Goals for 2030 (2030 Agenda for Sustainable



**1.** No poverty



**2.** No hunger



**3.** Good health and quality of life



**4.** Good quality of education



**5.** Gender equality



**6.** Clean water and good sanitary condi-



**7.** Clean and available energy



**8.** Economic growth and decent work



**9.** Innovation, industry, infrastructure



**10.** Less inequality



**11.** Sustainable cities, towns and communities



**12.** Responsible consumption and production



**13.** Climate actions



**14.** Life under water



**15.** Life on the land



**16.** Peace, justice and strong institu-



**17.** Partnerships for objectives

## Copper production: emission versus impact on climate transition



Copper – strategic raw material in a carbon-neutral circular economy. Copper contributes to greenhouse gas reduction by the EU population by **~75%** and it accounts for only **0.4% of GHG emission**.

### ► Circular economy

**Circular metal:** nearly 50% of the copper produced in the EU comes from recycling

**Carrier of precious metals:** copper processing is necessary for reworking and recovering many other precious materials in electronics, batteries, etc.

### ► Energy transition and digitisation

**22 million tonnes of copper** required in the period 2020–2050 for the European economy to shift to climate neutrality

Source: International Copper Association



## ESG – a new dimension of sustainable development as regards the reporting of environmental, social and corporate actions

Protection of human rights, mining with a commitment to conservation of the natural environment, responsible management of a supply chain, and transparency in stakeholder relationships are crucial for us and constitute a pillar of our activity in the global market. The KGHM Group's 2019 achievements and actions in the E – environmental, S – social and G – governance areas include in particular:



- The Żelazny Most Tailings Storage Facility: the 18th International Conference on Technical Control of Water Dams "Monitoring and safety of hydro-engineering structures"
- Replacement of the absorption and drying towers of the sulphuric acid plant at the Legnica Copper Smelter and Refinery
- Expansion of 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 at Energetyka sp. z o.o.
- Modernisation of the sewage treatment plant, and continued construction of a new installation for the production of fuel additives, which will allow the re-use of concentrated acids in the production process in NITRO-ERG S.A.



- Organisation of the Lower Silesia Conference on Responsible Supply Chain "To Have Impact"
- A winner in the international Stevie Awards in the category "CSR Program of the Year – in Europe" for all actions in the area of corporate social responsibility
- Cooperation in the project "Together for Youth" for new development opportunities for youth in the region
- Joining the "Education Cluster of the Legnica Special Economic Zone"
- "Copper Heart" employee volunteerism
- ECO-Health Programme
- Appointment of the KGHM Medical Council responsible for supporting and initiating any works performed by the Company in the area of extensive local actions for health of employees and inhabitants of the region



- KGHM Polska Miedź S.A. with a distinction for The Transparent Company of the Year and an award for The Best of The Best Annual Report for its Sustainability Report for 2018
- The "Executive of the Year – Metals & Mining" award for the President of the Management Board of KGHM Polska Miedź S.A.
- Membership in the RESPECT and WIG-ESG indices and, since 2018, in the FTSE4Good Index Series
- Publication of information about the Company's compliance with the recommendations and rules contained in the Best Practice on its website

# **Letter from the President of the Management Board of KGHM Polska Miedź S.A. to Stakeholders**

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**Marcin Chludziński**  
President of the Management Board  
KGHM Polska Miedź S.A.

Dear Stakeholders,

Increased payable copper production (+11%), record-breaking production of silver (+18%), Group revenue growth by 11% and EBITDA growth by 5%, combined with the launch of new projects in our divisions – this is how we close the year 2019.

I am presenting our results to you with great satisfaction, which is additionally enhanced by the fact that the last year was not an easy one. Drops in copper prices (even by 5 per cent in December 2019 compared to 2018), the US–China trade war, concerns about Brexit – all this made us work in difficult macroeconomic conditions. However, we perceive difficulties as challenges being a test of our management skills and effectiveness.

The consistency with which we pursued the strategy adopted in December 2018 was crucial for the execution of our plans. When preparing this document, we gave consideration to four pillars of our activity: Elasticity (flexibility), Efficiency, E-industry and Ecology. They form the basis of the modern mineral resource industry. Efficient management, appropriate hierarchy of objectives corresponding to the specific nature of the market and business trends have allowed us to make investments and improve production parameters. We have achieved extremely ambitious assumptions that have a positive effect on the stability and development of the KGHM Group. We are working to gain a strong position of the world leader in the mineral resource industry.

KGHM Polska Miedź is a company of key importance to the Polish economy. Our resources ensure the maintenance of our current level of mining in Poland for the next 40 years and the concessions we are applying for will extend the period even further. We perform our mining and ore processing activities in a sustainable and rational manner with consideration given to global trends. Europe strives for climate neutrality and the raw material that is a key one in pursuit of the idea is copper. This metal, produced by KGHM, develops innovative sectors of the economy, including solutions for energy efficiency improvement.

Increased payable copper production (+11%), record-breaking production of silver (+18%), Group revenue growth by 11% and EBITDA growth by 5%, combined with the launch of new projects in our divisions – this is how we close the year 2019.

Efficient management, appropriate hierarchy of objectives corresponding to the specific nature of the market and business trends have allowed us to make investments and improve production parameters. We have achieved extremely ambitious assumptions that have a positive effect on the stability and development of the KGHM Group. We are working on a strong position of the world leader in the mineral resource industry.

We optimised our financing structure in 2019. We increased the use of factoring to secure financial liquidity and shifted to long-term financing, e.g. by launching a bond issue programme. The interest in the June issue proved that our assets are an attractive offering.

Copper is a raw material that is necessary for climate transition. We are committed to devising and implementing solutions to mitigate our environmental impact. Last year, we intensified our works on projects related to energy from renewable sources, developed the Circular Economy and engaged in the development of Electromobility.

In terms of investments in the Copper Basin, 2019 was exceptionally intensive. Following the adopted schedule, we executed individual stages of the construction project of the Southern Quarter of the Tailings Storage Facility as well as the tailings segregation and thickening station using our own technologies and materials.

We continued the Programme of Providing Access to Deposit, sinking of the shaft GG1 by which the Surface-based Central Air Conditioning System is being constructed, and we implemented mining projects, e.g. by advancing stage 2 of exploration and development work in the Retków-Ścinawa region.

In-depth analyses and consistent management focused on rational utilisation of resources, not only mineral but also infrastructural and technological ones, involve specific steps. We had struggled the decreasing efficiency of the Lubin Mine, which is the oldest in KGHM, for many years. The Shaft L-VI, which was opened in October 2019, is a new chapter and a chance for this Division to optimise production processes with the simultaneous maintenance of the highest standards of our employees' safety.

We invested also in metallurgy. We successfully put a copper concentrate roasting installation into operation and included it in the Głogów Copper Smelter and Refinery's production and, in June 2019, we opened the largest project in the history of the Legnica Copper Smelter and Refinery. The launched revolving casting-refining (RCR) furnace is the only furnace of the kind in Poland dedicated primarily to the processing of scrap. The installation with the capacity of 300 tonnes will contribute to enhancing the present efficiency of the Company and increasing copper production. The RCR furnace complies also with the highest environmental protection standards the observance of which is ensured, among others, by a modern process gas treatment installation.

We have optimised the portfolio of international assets by concentrating on key projects. In the Sierra Gorda project, which used to generate losses, we have considerably improved operating results. As a result of increased ore extraction and processing, Sierra Gorda closed 2019 with a 4 per cent higher payable copper production with respect to the value assumed in the budget and a 12 per cent higher one than that of 2018.

KGHM's heart beats in Lower Silesia and it goes to great

We continued the Programme of Providing Access to Deposit, sinking of the GG1 shaft, next to which the Surface-based Central Air Conditioning System is built and we implemented mining projects, e.g. by advancing stage 2 of exploration and development work in the Retków-Ścinawa region.

KGHM's heart beats in Lower Silesia and it goes to great lengths to develop good neighbourly relations. Last year, we supported local municipalities and their residents not only with tax proceeds but also by establishing health programmes, e.g. in Głogów and Legnica.

lengths to develop good neighbourly relations. Last year, we supported local municipalities and their residents not only with tax proceeds but also by establishing health programmes, e.g. in Głogów and Legnica. We initiated programmes to aid families and sustainable development actions.

KGHM cares particularly for environmental issues and employee safety. We implement a Programme to Improve Occupational Health and Safety, we reach for out-of-the-box solutions and innovative technologies, we continue the dialogue with representatives of trade unions. I would like to express my appreciation to our employees for their efforts and hard work for the development of the Company and the KGHM Group. The engagement of all our employees moulds us into one team which competes for first prizes in international competitions.

I would also like to thank our shareholders and clients for the trust you place in us. I assure the local communities of our gratitude for our good neighbourly relations and joint initiatives for the development of the regions where we operate together.

We expect 2020 to be a difficult year for the industry. The challenges related to customs wars between global players and high rises in energy prices were coupled with the coronavirus epidemic, which is already significantly affecting global markets, not only mineral resource ones. Despite a not always friendly macroeconomic environment, we are not going to slow down. We want to not only remain the industry leader but also grow. This will be facilitated by rational yet bold investments.

On behalf of the Management Board of KGHM Polska Miedź S.A., I am presenting you with the Integrated Report of KGHM Polska Miedź S.A. and the KGHM Polska Miedź S.A. Group for 2019

Respectfully,

**Marcin Chludziński**

President of the Management Board  
KGHM Polska Miedź S.A.

Lubin, 13 May 2020

We expect 2020 to be a difficult year for the industry. The challenges related to customs wars between global players and high rises in energy prices were coupled with the coronavirus pandemic, which is already significantly affecting global markets, not only mineral resource ones. Despite a not always friendly macroeconomic environment, we are not going to slow down. We want to not only remain the industry leader but also grow. This will be facilitated by rational yet bold investments.

# Our values



KGHM's values bind all employees, regardless of their position in the organisation or nationality, and are a guidepost for all decisions and actions taken. For over 60 years they have been the Company's business compass, indicating its direction of development and the means of operation on the international market.

	<h3>Safety</h3> <p>Zero harm is the top priority of the Company's value hierarchy:</p> <ol style="list-style-type: none"><li>1. Protecting the lives and health of our employees is our priority.</li><li>2. Respect for the natural environment, in particular the resources we mine in a responsible manner.</li><li>3. The Company cares for the local communities within which it operates and maintains a dialogue with.</li><li>4. KGHM Polska Miedź S.A. puts emphasis on the continuity and stability of its operations.</li></ol>
	<h3>Results driven</h3> <p>Attainment of results while focusing on KGHM's long-term success.</p> <ol style="list-style-type: none"><li>1. Ambitious targets and ongoing development.</li><li>2. Taking initiative and making extra efforts for the benefit of KGHM.</li><li>3. Solid work using the right tools.</li></ol>
	<h3>Responsibility</h3> <p>All Company Employees are jointly responsible for the actions taken for the benefit of our shareholders.</p> <ol style="list-style-type: none"><li>1. Acting in a transparent and socially responsible manner, abiding by the standards of the Code of Ethics.</li><li>2. Responsibility for our decisions, obligations and constant, stable development.</li><li>3. Building long-term relationships with our business and social partners.</li></ol>
	<h3>Courage</h3> <p>Facing new challenges in a well thought-out manner:</p> <ol style="list-style-type: none"><li>1. Employees bravely face new challenges.</li><li>2. Courageous decisions are made and new, innovative solutions are constantly sought.</li></ol>
	<h3>Teamwork</h3> <p>Teamwork is the basis for the Company's success:</p> <ol style="list-style-type: none"><li>1. Work is performed in teams.</li><li>2. Respect for the views of others in a discussion.</li><li>3. Using the talents and experience of Employees.</li><li>4. Diversity and a multi-cultural environment are valued.</li></ol>

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# **KGHM Group and its cooperation environment**

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The KGHM Polska Miedź S.A. Group is a global and innovative organisation, which conducts technologically advanced exploration-mining and metallurgical activities. For several decades, the Company has been mining and processing valuable underground resources, providing the world with commodities that enable its sustainable development. The Company's history began in 1957 with the discovery of one of the world's largest deposits of polymetallic ores, predominantly copper and silver, located in south-western Poland. The deposit has been effectively and reasonably mined to this day. As the years went by, the KGHM Polska Miedź S.A. Group significantly grew its business both in terms of products and the market. KGHM Polska Miedź S.A. is present on four continents: in Europe, South America, North America and Asia. KGHM Polska Miedź S.A. Group is composed of its Parent Entity, KGHM Polska Miedź S.A. with

its registered office in Lubin, and 72 subsidiaries (including two closed-end, non-public investment funds), employing more than 34 thousand people globally, trusting that what they do is important for the world.

Owing to their knowledge, courage and responsibility, the KGHM Polska Miedź S.A. Group produces valuable commodities, predominantly metals. The Group's core line of business is the production of copper along with non-ferrous metals accompanying it and the development of the resource base. The Company is ranked among the world's top producers of silver and copper. It also produces gold, nickel, rhenium, lead and platinum. The high quality of the copper, silver and other commodities produced by the Company have been confirmed by certificates awarded by various international commodity exchanges.

Specifically, the business of the KGHM Polska Miedź S.A. Group covers the following areas:



The activities of the KGHM Polska Miedź S.A. Group with respect to the exploration and mining of e.g. copper and silver ore and precious metals deposits is based on the concessions held by KGHM Polska Miedź S.A. for the mining of deposits in Poland and the legal titles held by companies belonging to the KGHM INTERNATIONAL LTD. Group for exploration and extraction of raw materials in the USA, Canada and Chile.

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.

## Major 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
<b>Activities</b>	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>
<b>Main production assets</b>	Underground mines <ul style="list-style-type: none"> <li>- Lubin mine</li> <li>- Polkowice-Sieroszowice mine</li> <li>- Rudna mine</li> </ul> Metallurgical plants <ul style="list-style-type: none"> <li>- Legnica Copper Smelter and Refinery</li> <li>- Głogów I Copper</li> </ul>	Robinson mine in the USA (open pit)	Sierra Gorda mine in Chile (open pit)	
<b>Most important development projects</b>	<ul style="list-style-type: none"> <li>- Głogów Głęboki-Przemysłowy (Deep Głogów)</li> <li>- Pre-production projects and exploration projects in southwest Poland</li> </ul>	<ul style="list-style-type: none"> <li>- Victoria project in the Sudbury Basin in Canada: construction of an underground copper and nickel mine</li> <li>- Sierra Gorda Oxide project in Chile</li> </ul>		<p>The following companies were not included in any of the aforementioned segments:</p> <ul style="list-style-type: none"> <li>- Future 1 Sp. z o.o., which acts as a holding company with respect to the KGHM INTERNATIONAL LTD. Group,</li> <li>- 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.</li> </ul> <p>These companies do not conduct operating activities which could impact the results achieved by individual segments.</p>

1) joint venture of KGHM INTERNATIONAL LTD. and Sumitomo Group companies

**GRI 102-10** In 2019 there were no substantial changes to the principles of managing the Group. The undertaken actions 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

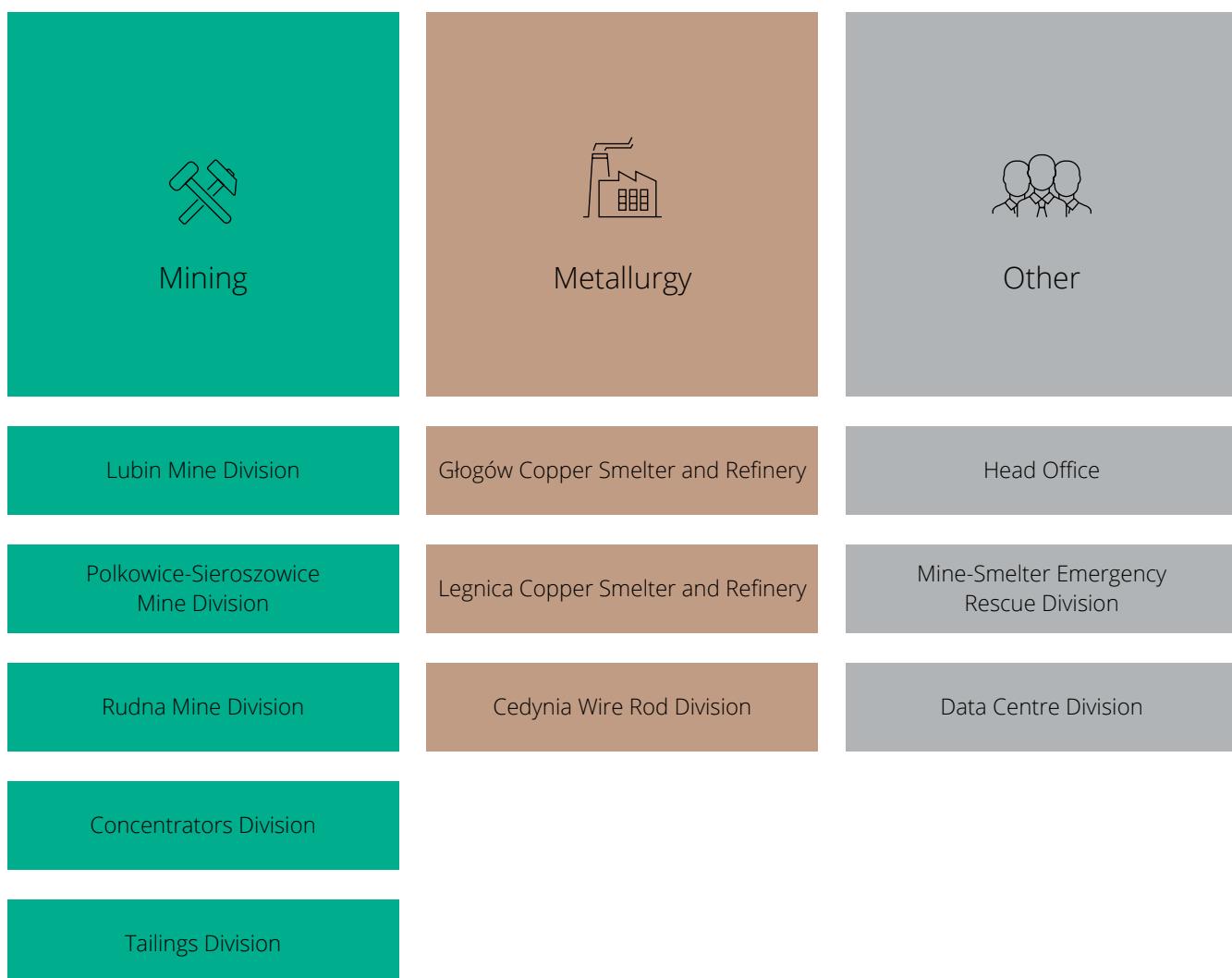
rights and entitlements of these companies' statutory bodies. The KGHM Group Council's mandate covers all matters of significance for the functioning of the Group. The Council comprises the management staff of the KGHM Head Office, which is responsible for managing all areas of substance. In justified cases, other persons may participate in the Council, including representatives of companies in the KGHM Group.

### 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.

**GRI 102-5**

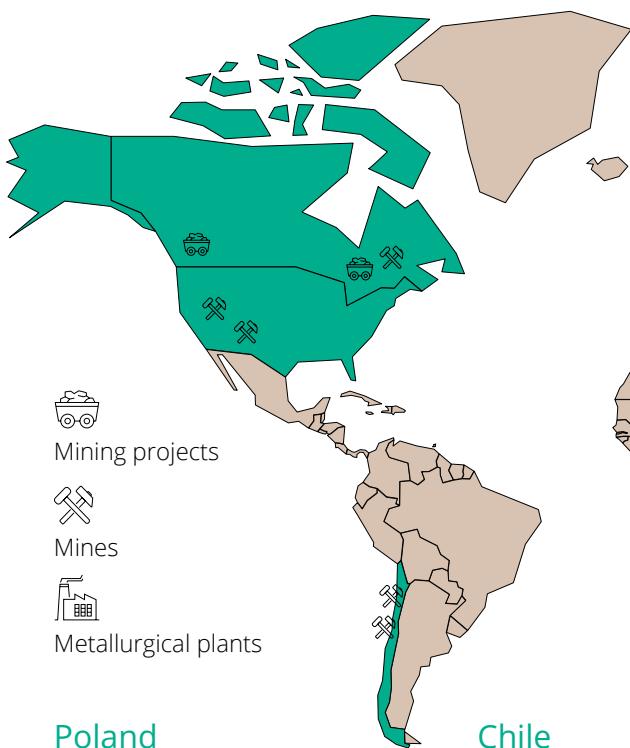
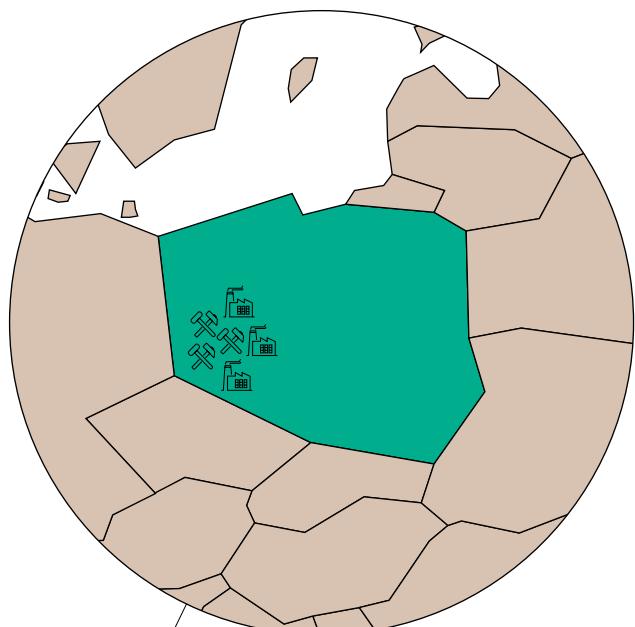
## Organisational structure of KGHM Polska Miedź S.A. as at 31 December 2019



# Our 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.

## Location of the KGHM Polska Miedź S.A. Group's assets



Poland

- Polkowice-Sieroszowice (Cu, Ag)
- Lubin (Cu, Ag)
- Rudna (Cu, Ag)
- Głogów Głęboki-Przemysłowy (Deep Głogów)
- Regional exploration
- Głogów I Copper Smelter and Refinery
- Głogów II Copper Smelter and Refinery
- Legnica Copper Smelter and Refinery

Chile

- Sierra Gorda (Cu, Mo, Au)
- Franke (Cu)
- Regional exploration

USA

- Robinson (Cu, Au, Mo)
- Carlota (Cu)

Canada (B.C.)

- Ajax (Cu, Au)

Canada (Ontario)

- Operating assets
- Sudbury (Cu, Ni, TPM\*)
- Victoria (Cu, Ni, TPM)
- Regional exploration

\* TPM – precious metals



## Geological assets

The KGHM Polska Miedź S.A. Group strives to develop its portfolio of geological assets based on two main criteria. The first is to have a sufficiently high amount of material in ore. This enables a sufficiently high economic efficiency to be achieved from the geological assets on the materials mined in the short term. The other criterion is to have the operations based on assets having a sufficiently long mine life. This enables a sufficiently high economic efficiency to be achieved in the strategic sense, which is possible thanks to the appropriately long lives of the mining projects. This is also important for KGHM due to its high standards in the area of corporate social responsibility.

For the reasons mentioned above and in connection with the issue of sources of the mined raw materials, which is fundamental for the mining activity, KGHM tries to locate its activity in the deposit districts the role of which is acknowledged worldwide and which are often the largest ones in a given part of the world. These criteria served the purpose of selecting and developing the current portfolio of KGHM's geologi-

cal assets. Polymetallic deposits mined by KGHM are situated in Poland in the Fore-Sudetic Monocline and in the North-Sudetic Basin. KGHM holds or is applying for exploration and mining concessions on the richest and most prospective deposits of copper, silver and other metals in Europe. They form the basis for the functioning of mining assets of KGHM Polska Miedź S.A. for the next 35 years. This concerns the already mined deposits in the vicinity of Lubin and Polkowice as well as the deposits near Głogów, Bytom Odrzański and Luboszyce. In connection with the mining of the deposit of Zechstein salt above the said polymetallic deposits for ten-odd years, KGHM has developed also its competences in the area of exploration and mining of salt deposits.

The geological assets of the KGHM Polska Miedź S.A. Group in South America and North America not only form part of the reservoir of copper assets for growth, but likewise for developing the skills of the Group in the mining and processing of metals both now and in the decades to come.

## Mining and metallurgical assets

Based on the abovementioned geological assets, mining and, subsequently, metallurgical assets are developed. They are described in the tables below:

### Poland

#### Polkowice-Sieroszowice mine

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.

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

#### Rudna mine

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 1,250 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.

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

## Lubin mine

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 1,006 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.

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

## Głogów Copper Smelter and Refinery

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 1,400 tonnes), gold (around 2 tonnes) and sulphuric acid (over 500 thousand tonnes).

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

## Legnica Copper Smelter and Refinery

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.

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

## Cedyניה Wire Rod Plant

Production at the Cedyinia 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 Cedyinia Wire Rod Plant is copper wire rod produced in a Contirod line amounting to around 250 thousand tonnes annually and around 18 thousand tonnes annually of oxygen-free copper wire rod produced in an UPCAST line, including oxygen-free, silver-bearing copper wire rod.

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

## The United States

### Robinson mine

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 2,130 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.

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

### Carlota mine

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.

► 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

## Canada

### Sudbury Basin

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; however, since April 2019, mining has only been conducted in the underground McCrae West mine due to the fact that the Morrison/Levack mine was 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.

► 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

### Victoria project

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 2,200 meters below the surface.

► 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
► Forecast annual production	17 kt Ni, 19 kt Cu

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 the existing infrastructure and project terrain, as well as preparatory work aimed at conducting additional exploratory work and work related to an application for 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 of 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.

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 reflecting the substantial engagement of provincial and federal governmental agencies, First Nations and a broad spectrum of stakeholders, including thousands of local citizens.

In 2019 only necessary work related to securing the existing infrastructure and the required monitoring of the terrain was carried out. 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 representatives of First Nations, e.g. 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.

## Ajax project

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 enrichment plant, with associated infrastructure. In January 2012, 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 an 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 the identified risk factors and the potential for increasing the project's value.

► 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
► Forecast annual production	53 kt Cu, 114 thousand ounces Au

# Chile

## Sierra Gorda mine and Sierra Gorda Oxide project

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 the 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.

► 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%

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 Q1 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 aimed at preparing the project for execution was continued. This work included verifying the block model for the heaped oxide ore at the storage site. The required changes for updating the project's environmental permits were reviewed. Additional work was carried out in order to define the technical solutions for the heaped ore's crushing and transport operations more precisely. Tests involving the leaching of the crushed ore in columns were completed and the required analyses of the post-leaching material were commenced for the purpose of preparing a final report.

## Franke mine

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. 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.

► Location	Antofagasta Region, Chile
► Ownership	100% KGHM INTERNATIONAL LTD.
► Type of mine	open pit
► Type of orebody	IOCG (ore type containing iron, copper and gold)
► End product	copper cathodes
► Payable copper production in 2019	19.0 kt

## 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, it 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.

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.

# Our stakeholders

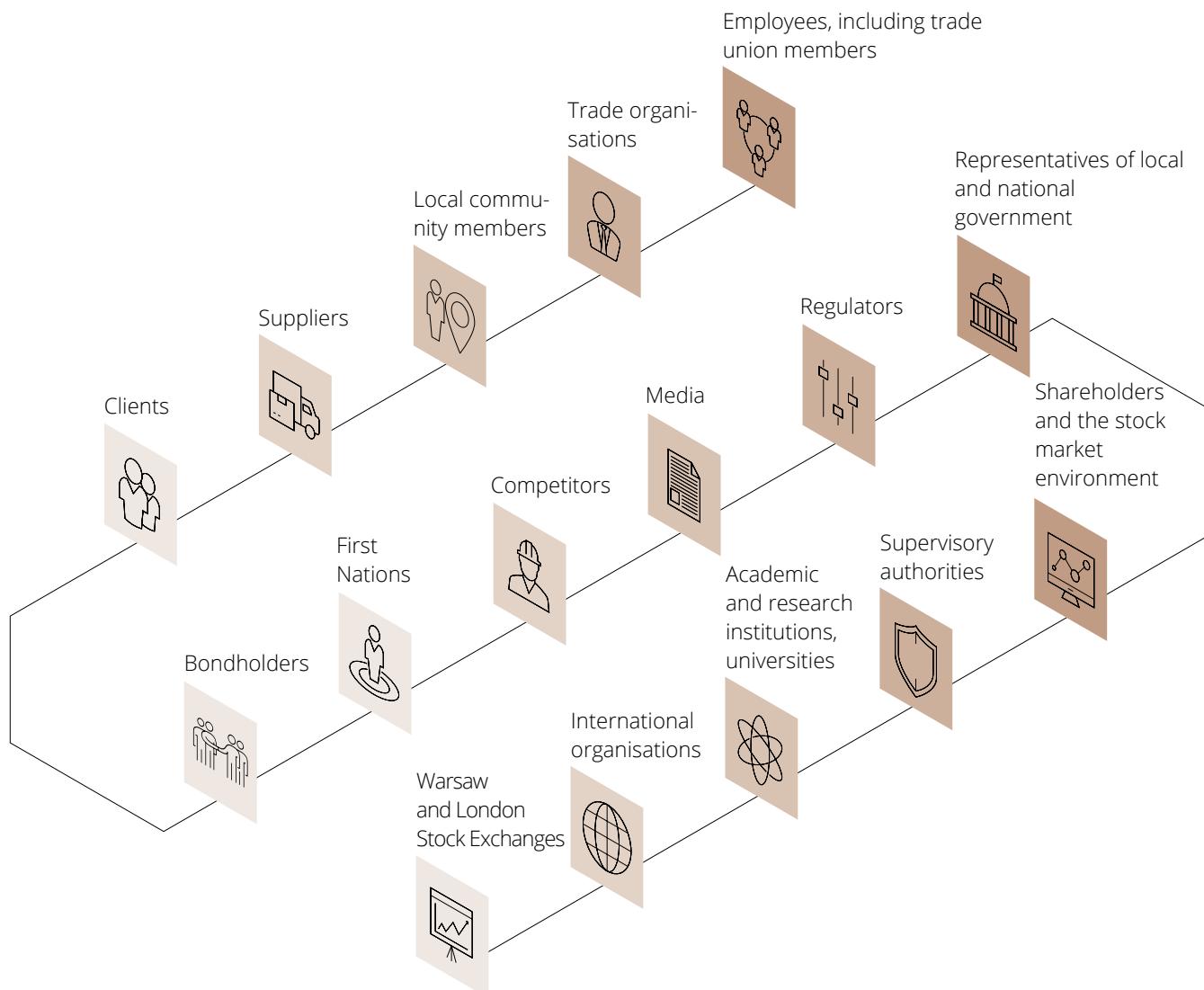
GRI 102-40 GRI 102-42 GRI 102-43 GRI 102-44

Good relations with our stakeholders based on mutual understanding and trust are of crucial importance to the KGHM Polska Miedź S.A. Group as an organisation exerting a significant impact on its economic, social and natural environment, of which it is fully aware and for which it is prepared to accept responsibility. Cooperation – one of the company's values – is the basis for its success in business and social activity. The Group builds relationships with Stakeholders based on partnership and complete transparency, with an awareness of their importance in its long-term strategy and sustainable approach to business. The basis of this process is dialogue geared towards learning about mutual expectations and capabilities and implementing agreements. During

the strategic review conducted in 2019 in order to implement the 2019–2023 Strategy of KGHM Polska Miedź S.A., it was established that the Stakeholder map of the KGHM Polska Miedź S.A. Group developed during the earlier mapping in 2016 should be revised for the new strategic perspective.

As a result of the above, a process to identify and map the KGHM Polska Miedź S.A. Group's Stakeholders was conducted based on the Johnson & Scholes methodology. Its first stage was to distinguish Stakeholder groups. This was accomplished in the same manner as in 2016, by using a questionnaire filled out by senior managers of each member of the KGHM Polska Miedź S.A. Group representing various business

## Key Stakeholders in the KGHM Polska Miedź S.A. Group:



areas. During a validation workshop conducted at the second stage of this process, these same respondents assessed the degree of Stakeholders' interest in and orientation towards the organisation and vice versa, as well as the levels of their mutual Impact. In addition to the individuals identified above, this workshop was also attended by external experts, including professors of Polish universities, members of organisations focusing on responsible business and representatives of local communities. The results of this research allowed us to identify four categories of Stakeholders presented in the Johnson & Scholes matrix for the KGHM Polska Miedź S.A. Group. One of these groups is the Key Stakeholders, who are the KGHM Polska Miedź S.A. Group's most influential and significant Stakeholders. It was established that the category includes not only all of KGHM's current Key Stakeholders (identified in 2016) but also Bondholders, which is associated with the bond issuances that are likely to be conducted by the Group in the future. During the round of discussion meetings with the representatives of KGHM Polska Miedź S.A. and the KGHM Group, it was determined on this basis (i.e. the strength of interest and the strength of impact of the individual Stakeholders and the organisation, for Key Stakeholders) that the aspects of reporting by the KGHM Polska Miedź S.A. Group resulting from the above will not change significantly as compared to the past and only a slightly greater weight will be attached to environmental matters.

The KGHM Group joins in actions within the European Green Deal concept ([GRI 102-12](#)) announced on 13 December 2019 and Implementing the Recommendations of the Task Force on the Climate-related Financial Disclosures (TCFD) of June 2017 as well as the Communication from the European Commission 2019/C 209/01 of 19 June 2019 Guidelines on non-financial reporting: Supplement on reporting climate-related information. KGHM Polska Miedź S.A. has been implementing many of the recommendations indicated in the abovementioned documents for a much longer time, following the path of sustainable, environmentally responsible development.

## Cooperation with trade organisations

GRI 102-13

As the KGHM Polska Miedź S.A. Group, we take part in the works performed by numerous Polish and international organisations and associations. In its relations with clients, employees, external partners and local communities, the KGHM Polska Miedź S.A. Group complies with the laws which are in effect in the countries where it operates. The Group also complies with voluntary obligations resulting from ISO and ASTM standards as well as from membership in international organisations such as International Copper Association, European Precious Metals Federation, Eurometaux, Euromines, the London Bullion Market Association, the European Technology Platform on Sustainable Mineral Resources, the European Innovation Partnership, and domestic organisations, including: the Polish Association of Listed Companies, Stowarzyszenie Inżynierów i Techników Metalu Nieżelaznych [Association of Non-Ferrous Metals Engineers and Technicians], the Economic Chamber of Non-Ferrous Metals and Recycling, the Polish Committee of the World Mining Congress, Polish-Canadian Chamber of Commerce, the Polish Chamber of Commerce for High Technology, and the Employers' Organization of Polish Copper. The KGHM Polska Miedź S.A. Group does not participate in undertakings which involve breaking the law and pose a threat to its reputation.

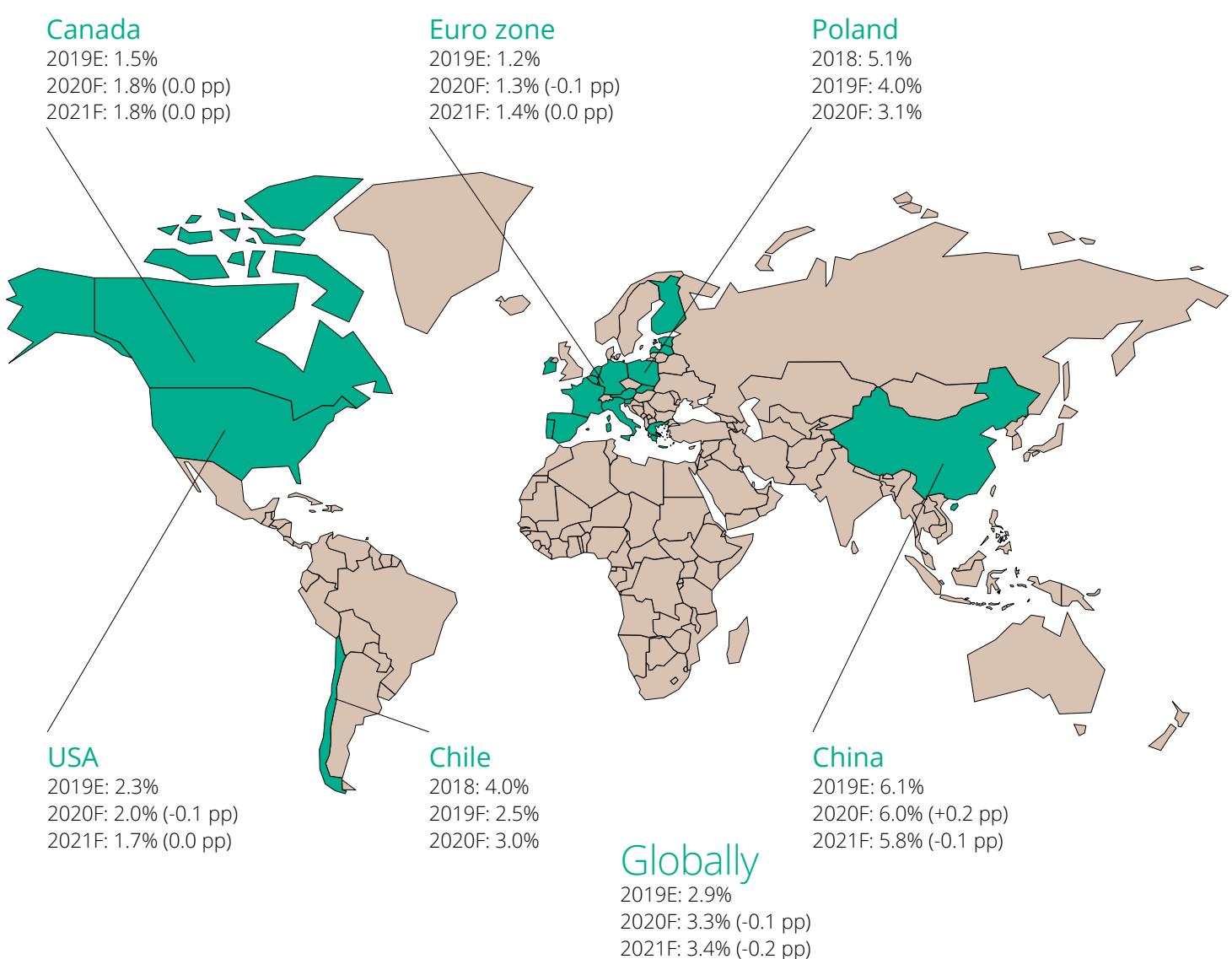


# Market environment and trends

## 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 forecast 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.

## Forecasts of real GDP growth according to the IMF from January 2020 versus previous forecasts



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). In late November/early 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 (yoY). However, the commodities market was weakest compared to the American S&P500

(+31.5% yoY) and to the bond market measured by the Barclays U.S. Aggregate Index (+8.7% yoY). The greatest impediment to a higher rate of return in the general BCOM index were the prices of agricultural goods and livestock (+0.4% yoY). The greatest impact on raising the index came from precious metals (+17% yoY) and energy materials (+11.8% yoY) and, to a lesser extent, industrial metals (+7% yoY).

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 the industrial sector, where the PMI reading fell to record lows, substantially below 50 points, demarcating the theoretical boundary of the slowdown from growth.

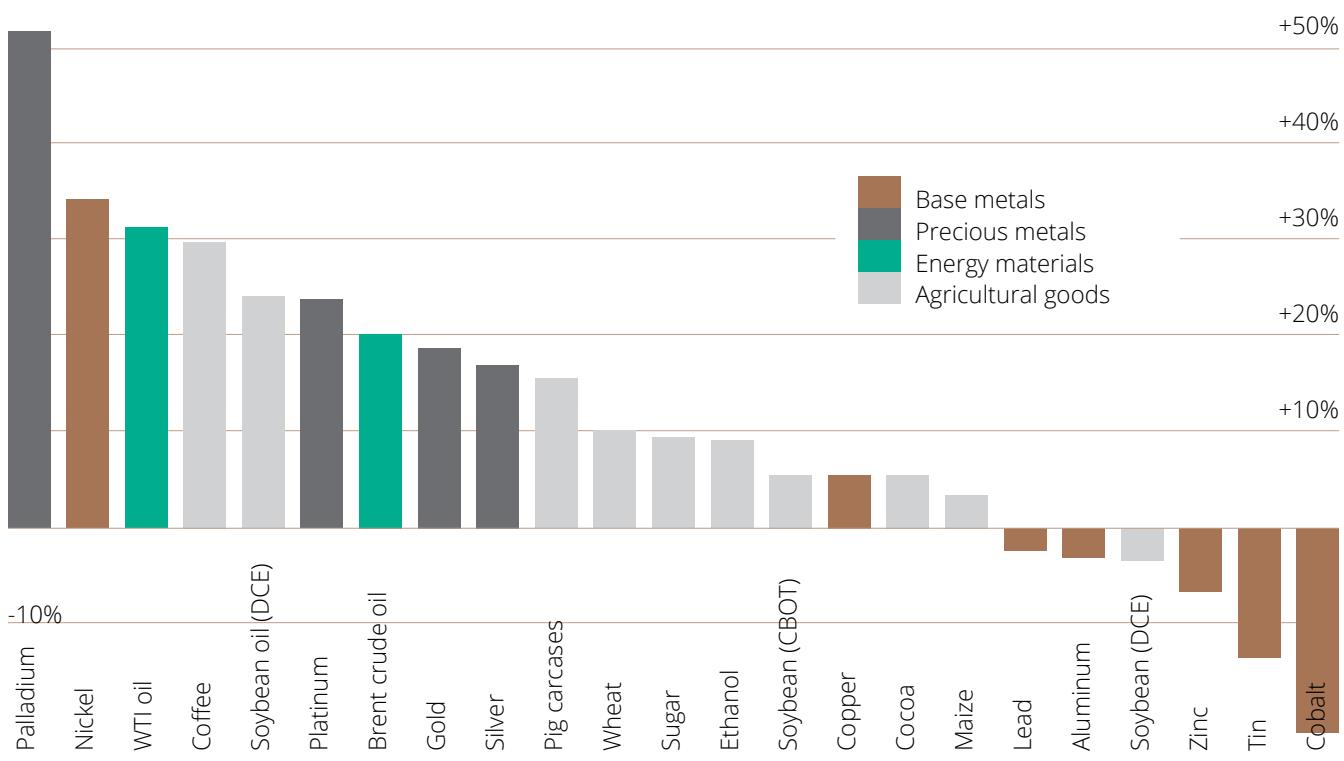
In terms of fundamentals, the copper price was stabilised by information on higher costs in the sector and lower availability of concentrate and copper scrap. This had a significant impact on the decrease in discounts (including TC/RC) to a level which to a significant degree reduces the profitability of non-integrated refined copper producers, located mainly in China. The first signals about restrictions to production appeared in the fourth quarter of 2019, yet 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.

## Change in commodities prices in 2019

Source: Refinitiv, KGHM Polska Miedź S.A.



## 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

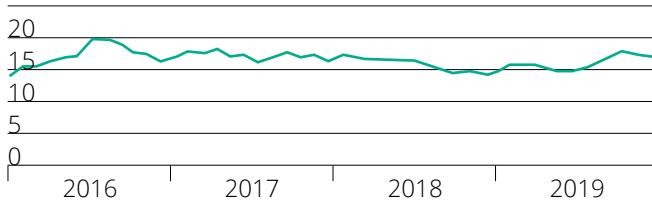
1) arithmetic average of daily quotations

## Copper price per the LME (USD/t)



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).

## Silver price per the LBMA (USD/oz 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 market participants to avoid risky assets in favour of safer, preserving value, ones. At the time, silver recorded its yearly minimum of 14.38 USD/oz t. The upsurge in prices of gold, followed by silver, which began in late May/early 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, the monetary policy was reviewed in the USA, while the announced easing led to a large extent to higher prices of precious metals. 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.

## Molybdenum price per the CRU (USD/lb)



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

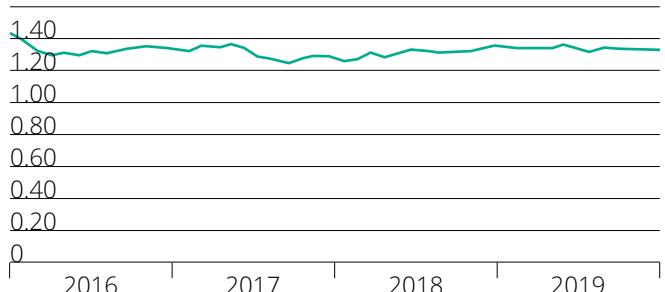
10 USD/lb, despite the decrease in inventories. As a result the average price of the metal in 2019 amounted to 11.85 USD/lb and was 2.4% lower than the average price recorded in 2018 (12.14 USD/lb).

## USD/PLN exchange rate per the NBP



From the start of 2019 the Polish złoty 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).

## USD/CAD exchange rate per the Bank of Canada



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).

## USD/CLP exchange rate per the Bank of Chile



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).

## 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 travelling 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, yet hard to judge now, impact on economic activity and global commerce – the emergence of the COVID-19 epidemic 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 of 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, causes not only further interruptions 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 6,300 USD/t to the level of last year's lows, and in subsequent weeks remained in a range of 5,500–5,800 USD/t. While the epidemic brings the risk of a global slowdown, the scope of any potential negative consequences is difficult to determine at present and demands monitoring of development of the situation in the coming months.

# Analysis of the global market for the Group's basic products

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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 pricing standards. 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

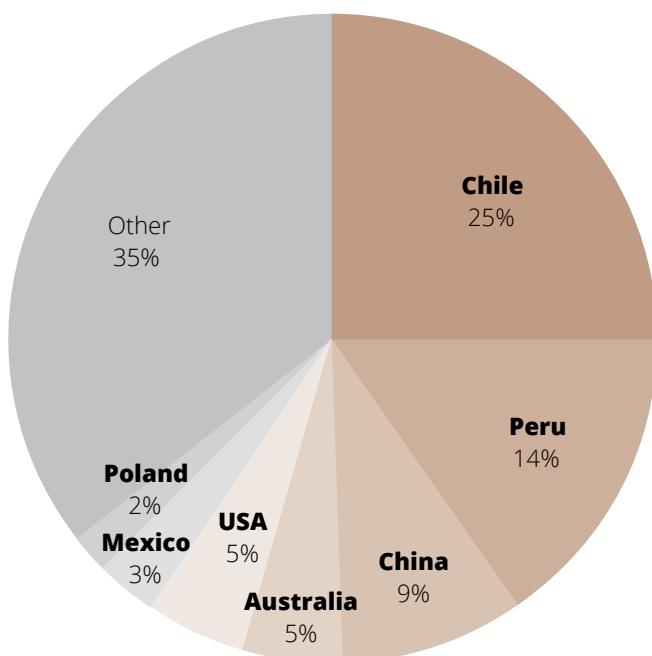
settlement of the London Metal Exchange (LME) being most commonly used. Less commonly used are alternative quotations of copper on stock exchanges in New York (COMEX) and Shanghai (Shanghai Futures Exchange). Grade "A" type, with a copper content of at least 99.99% (standard BS:EN 1978:1998 – Cu-CATH-1) 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 to 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). 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 the 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.

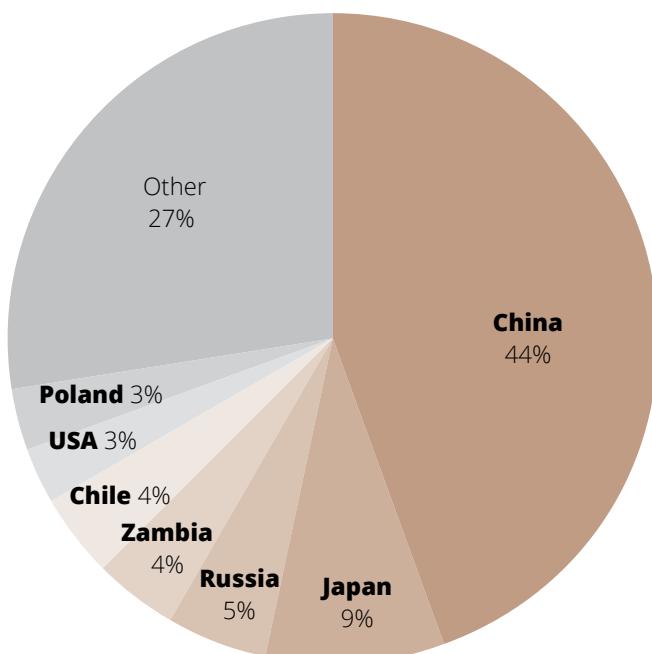
## Geographical breakdown of copper concentrates production in 2019

(source: CRU, KGHM Polska Miedź S.A.)



## Geographical breakdown of blister copper production from copper concentrates in 2019

(source: CRU, KGHM Polska Miedź S.A.)



## Copper cathodes

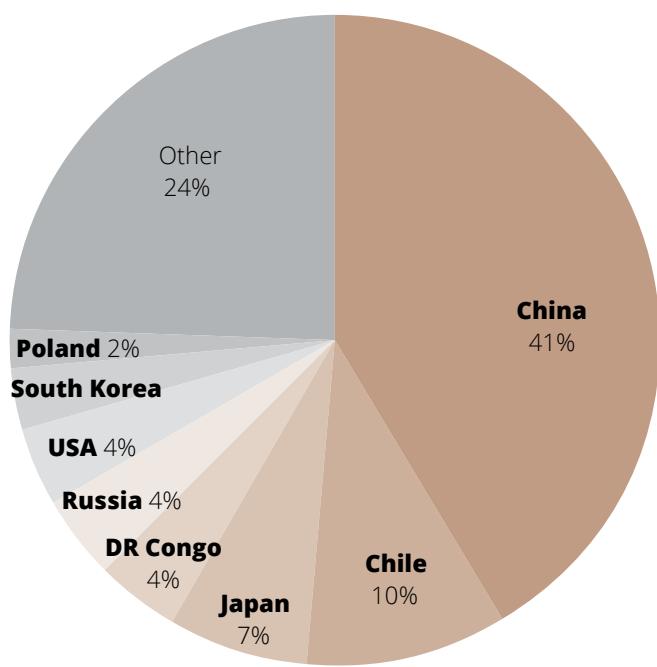
Refined copper in the form of copper cathodes is the end product of the smelting and refining processes, to which the copper-bearing materials are subjected (including concentrates, blister copper, anodes and copper scrap). Primary commodities exchanges (including the LME and SHFE) enable cathodes to 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. 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

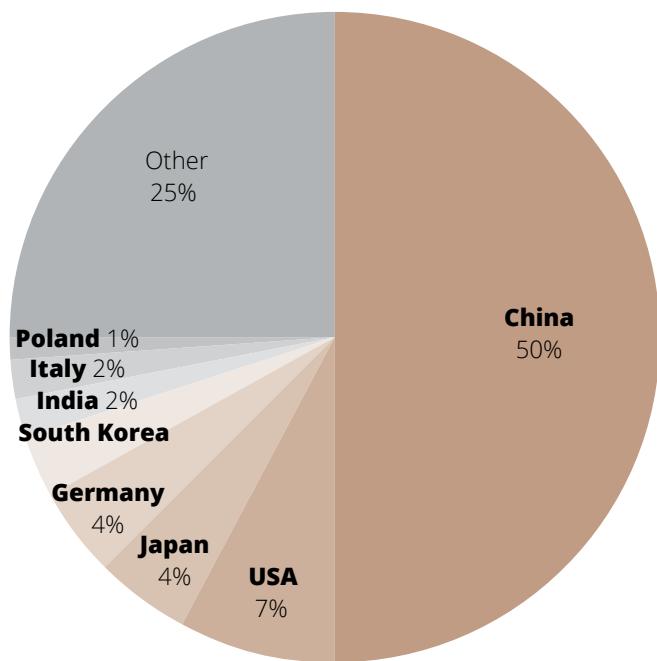
## Geographical breakdown of refined copper production in 2019

(source: CRU, KGHM Polska Miedź S.A.)



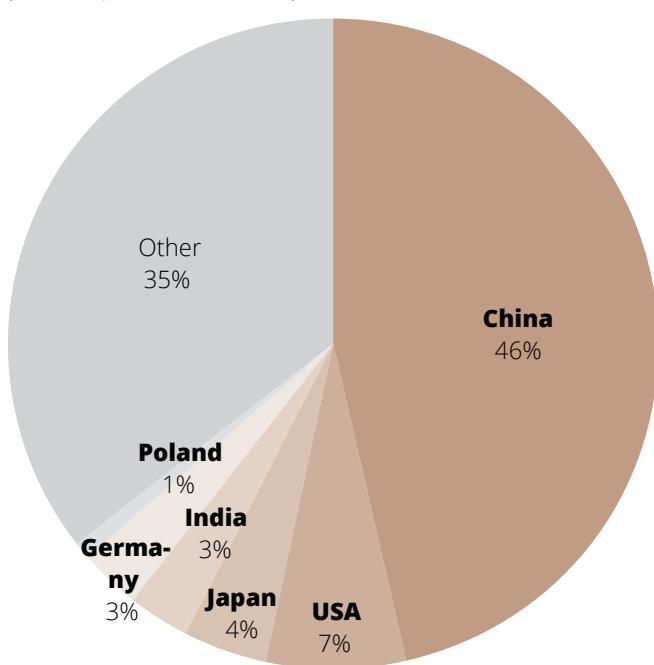
## Geographical breakdown of refined copper consumption in 2019

(source: CRU, KGHM Polska Miedź S.A.)



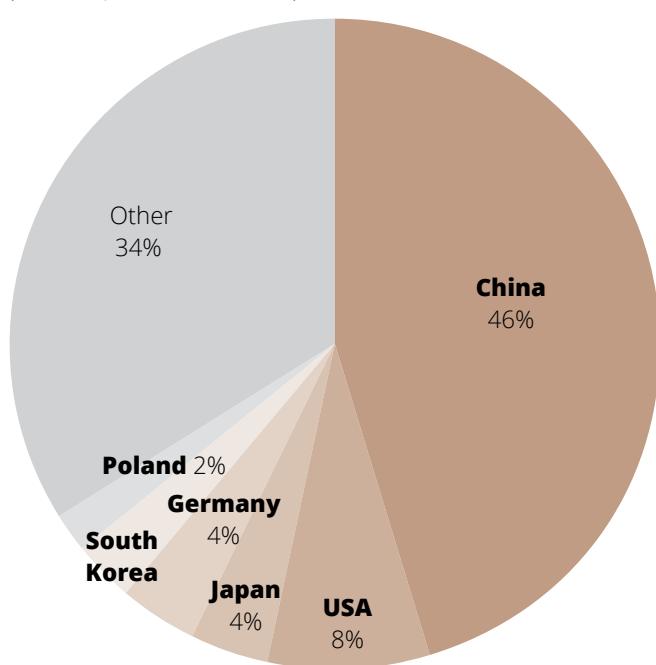
## Geographical breakdown of copper wire rod production in 2019

(source: CRU, KGHM Polska Miedź S.A.)



## Geographical breakdown of global wire rod consumption in 2019

(source: CRU, KGHM Polska Miedź S.A.)



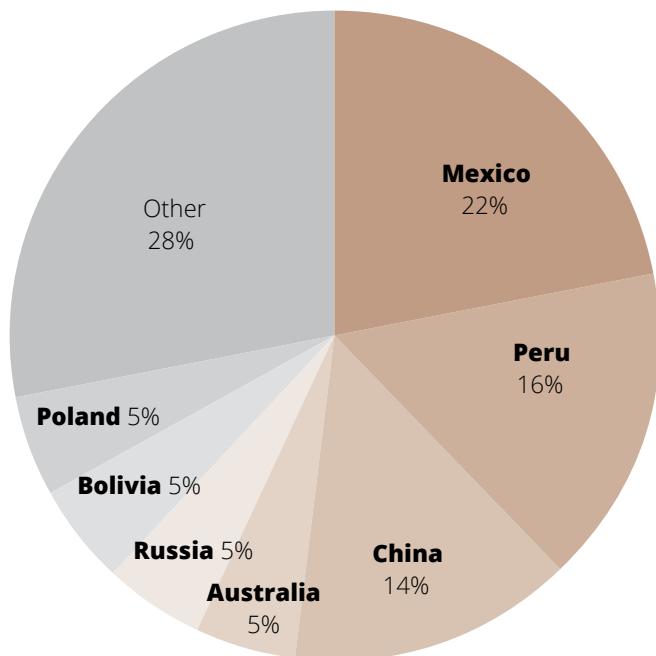
demanding. In 2019, total global production of copper in the form of wire rod is estimated by CRU at 17.8 million tonnes. Wire rod's price structure, apart from the copper quotations on the London Metal Exchange, also includes a producer's fee (added to cathodes) and the refining charges due to the costs 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. 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 1,200 tonnes of this valuable metal. In 2019, KGHM produced approx. 1,400 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 KGHM HG brand 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.

## Geographical breakdown of global mined silver production in 2019

(source: Metal Focus, KGHM Polska Miedź S.A.)



# Our competitive advantages

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The scope of activities of the KGHM Polska Miedź S.A. Group, the unique comprehensiveness of our mining and processing operations on a global scale, our pursuit of innovation and continued financial stability, along with our extensive in-depth experience allow us to market products that satisfy the expectations of even the most demanding buyers of our products and services.

## Competitive advantages of KGHM

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### Global reach of operations

In the 21st century, KGHM Polska Miedź S.A. became a global miner present on four continents. On the one hand, such a large scale of operation substantially curtails the risk of disturbance in the continuity and quality of production, while on the other hand, it facilitates the continual transfer of knowledge and experience between its various units. Its mobility policy enables it to post the Company's most prominent experts wherever their expert knowledge is needed to derive business benefits. That also leads to the diversification and enlargement of its product portfolio.

### Unique know-how and skills

During its nearly 60 years of history, KGHM Polska Miedź S.A. has acquired experience, knowledge and skills that have enabled the Company to transform its business from a local miner into an international Group acting as a major player in the global market for non-ferrous metals. The skills developed by our employees are and will be used in the future as one of the fundamental assets for winning a competitive edge in the industry and for building a strong position of Poland as an industrial centre. Also unique is the KGHM Polska Miedź S.A. Group's complete business chain: from the exploration of deposits, opening of deposits and their mining, including the manufacturing of mining machinery and explosives, processing, smelting, refining and sales to recycling, all the while keeping in mind during the execution of these processes the principles of sustainable development and corporate social responsibility.

### Innovation

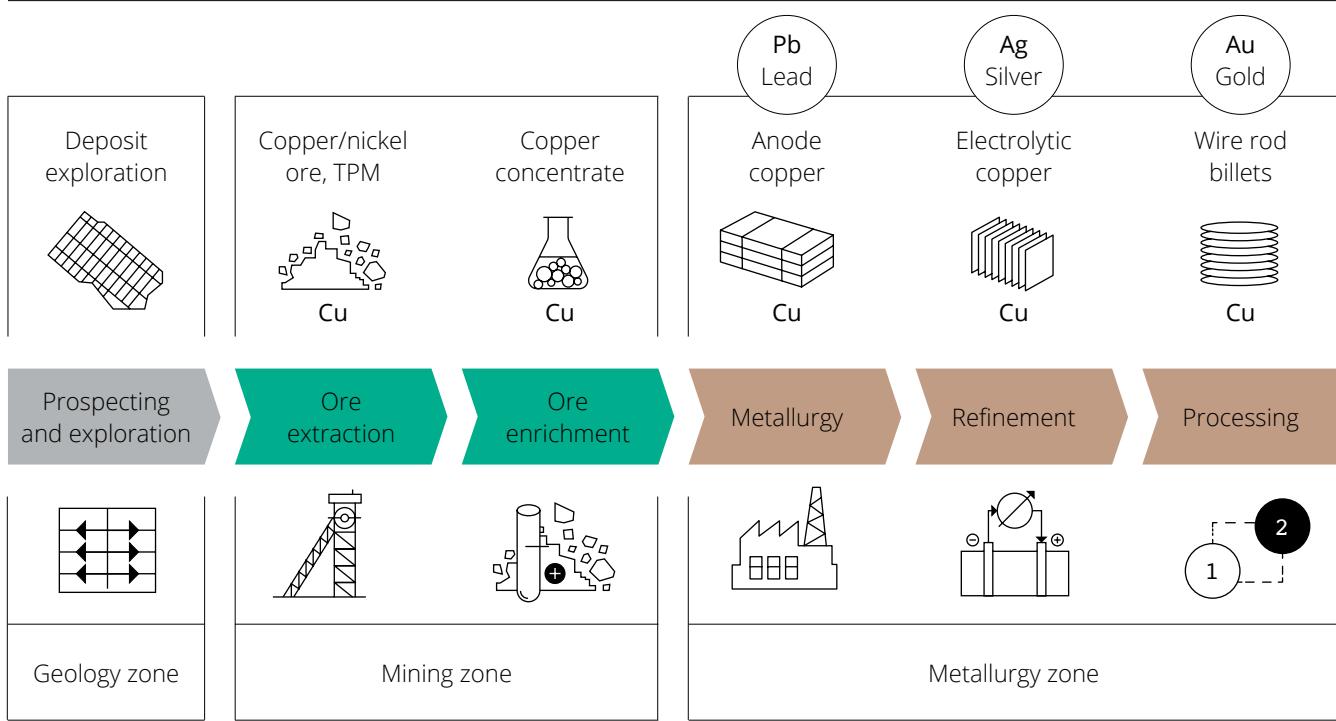
Innovation is one of the competitive advantages of the KGHM Polska Miedź S.A. Group. Work on innovative solutions is conducted at various business levels, drawing on cooperation with independent entities while appreciating the potential

and ingenuity of our own employees. They are the most familiar with our specific needs and are able to identify areas and solutions that translate into better performance and greater safety. Creating change and innovation should be an everyday practice of each employee of the KGHM Polska Miedź S.A. Group. The KGHM Polska Miedź S.A. Group's success hinges on the innovation, commitment and collaboration of many thousands of employees representing diverse knowledge and experience. The identification of in-house talent and the creation of individual development paths aligned to the organisation's potential and needs are the key to the future development of the KGHM Polska Miedź S.A. Group.

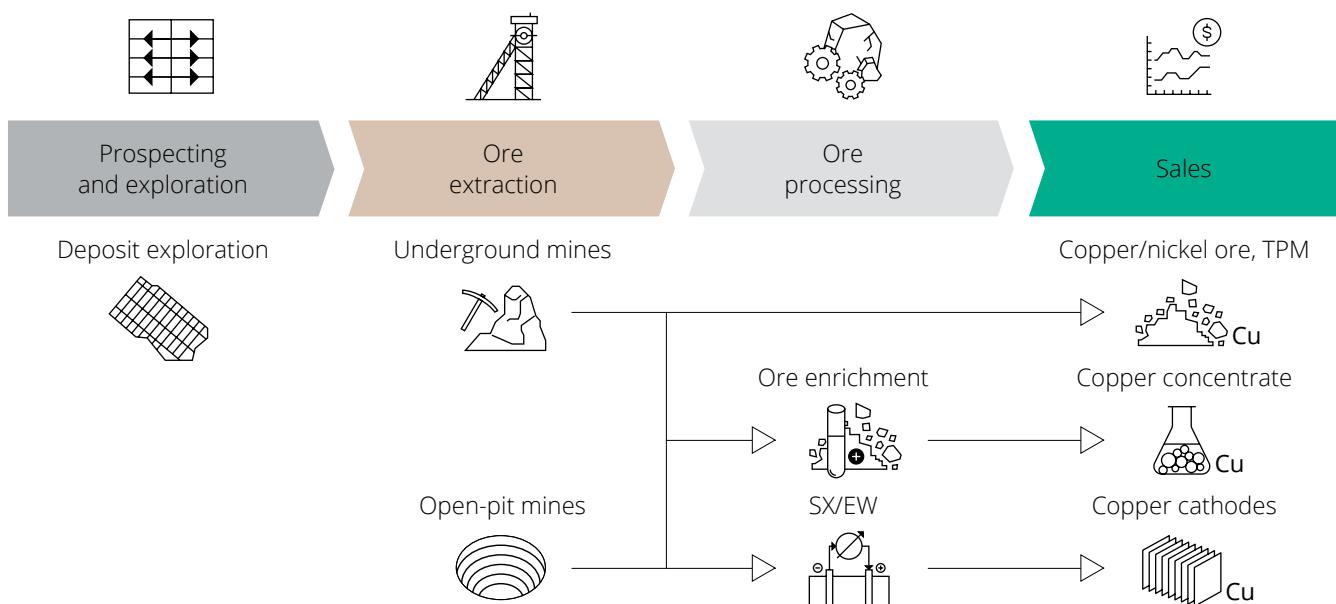
### Integrated process from exploration to sales

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 Polska Miedź S.A. 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. A fact worth noting is that recently, as part of its business, KGHM Polska Miedź S.A. has been rapidly developing and implementing certain elements of the circular economy concept. To this end, it has been making progress in the areas of recycling and further improving the utilisation of post-production waste as the so-called secondary sources of raw materials. In the KGHM Polska Miedź S.A. Group, production and production-related processes are performed in accordance with the

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



## Simplified flowchart of the core business of the KGHM INTERNATIONAL LTD. Group



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 drawing above shows a simplified flowchart of the core business of the KGHM INTERNATIONAL LTD. Group.

### Financial stability

Ensuring financial stability is one of the pillars of the Group's development. As part of enhancing its competitive advantage in this respect, KGHM Polska Miedź S.A. strives for relying the Group's financing structure on long-term instruments, shortening the cash conversion cycle and managing market and credit risk effectively.

# KGHM on the capital market

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 included in the WIG-Mining sector index. Moreover, KGHM Polska Miedź S.A. forms part of the FTSE4Good Index Series, which 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.

## 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 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 billion	19.1	17.8
Average trading volume per session	thousand	575	601
Turnover value	PLN million	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 programme up 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 Organisers 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 Programme, 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.

## Investor relations

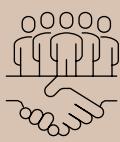
The investor relations team maintains an on-going dialogue with the capital market pursuant to its policy of ensuring a transparent company and adherence to stock exchange Best Practices. For KGHM Polska Miedź S.A., as a global company operating on four continents, it is a priority to ensure equal access 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 offi-



**Janusz Krystosiak**  
Investor Relations  
Department Director  
KGHM Polska Miedź S.A.

"For KGHM's Management Board, investor relations are an element of a strategic effort involving an open dialogue with the capital market. The Company's value is based on maintaining investor trust and good relations, which is ensured by on-going dialogue with the capital market. The key task of KGHM's Investor Relations programme is to effectively communicate the Company's and the Group's equity story and its strategic directions, in a way that results in a fair valuation and a satisfactory rate of return on investment in the Company's shares. Investor relations in KGHM also means properly meeting the Company's reporting obligations so as to satisfy the expectations of the market as well as legal requirements."

The important role of Investor Relations in KGHM is evident in the need to provide the highest quality of communications and their continual enhancement, among others by carefully listening to the needs of our audience and using the feedback we receive, implementing modern tools and solutions and adapting internal standards to a continually changing legal and regulatory environment."



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:

#### Investor conferences in Poland and abroad

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.

#### Results conferences

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, [www.kghm.com](http://www.kghm.com), in the Investors section.

#### Capital Market Day

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 Investors – Investor Events.

#### WallStreet conference

In 2019, representatives of KGHM Polska Miedź S.A. once again took active part in the 3-day WallStreet conference – the largest event in the region organised 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 the so-called Shareholders Fair.

#### Investor chats

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.

#### Active Investor Relations section on the Company website

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 current pending initiatives for the capital market.

#### Quarterly IR Newsletter

In 2019, the Investors page was extended by adding a section named Newsletter for Investors, 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.

## Brokerage houses preparing reports on KGHM Polska Miedź S.A. Polska

### Poland

Biuro Maklerskie mBanku

JP Morgan

Vestor Dom Maklerski

Dom Maklerski BOŚ

Erste Group

Pekao Investment Banking

Santander Biuro Maklerskie

IPOPEMA Securities

Trigon Dom Maklerski

### Abroad

Bank of America Merrill Lynch

Morgan Stanley

BMO

UBS

Goldman Sachs

WOOD & Company

## Awards and distinctions in 2019 for investor communication and capital market activities:

► 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.

## 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 of the shares are bearer shares. Each share represents 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:

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	10,104,354	5.05%
Otwarty Fundusz Emerytalny <sup>2)</sup>		
Aviva Otwarty Fundusz	10,039,684	5.02%
Emerytalny Aviva Santander <sup>3)</sup>		
Other shareholders	116,266,062	58.14%
<b>Total</b>	<b>200,000,000</b>	<b>100.00%</b>

1) based on a notification received by the Company dated 12 January 2010

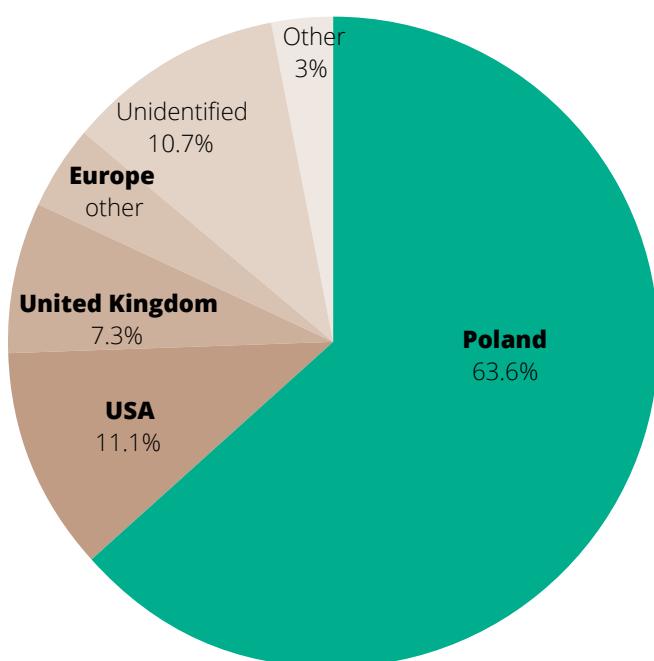
2) based on a notification received by the Company dated 18 August 2016

3) 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.

## 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 the 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 the 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 programme in 2019.

# The Group's development directions

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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. Information on the KGHM Polska Miedź S.A.'s strategy is presented on our website at <https://kghm.com/en/about-us/strategy>

In 2019, we continued our policy of development directions for the KGHM Group. 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. With respect to domestic companies, the main goal of the development intent is to ensure continuity of operations and occupational safety within the KGHM Polska Miedź S.A.'s core production business and to integrate the KGHM Group around the sustainable development concept. One of the most important actions is the implementation of development initiatives under the circular economy programme 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. In terms of the development directions adopted in the Company's Strategy, investments 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 Programme (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 programme to adapt to the requirements of BAT Conclusions for the non-ferrous metals industry and to restrict emissions of arsenic (BAT-As);
- ▶ 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 and 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 Programme 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 2019–2023 published in 2018, it is expected that **by the end of 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.**

## Energy development programme

Development of renewable energy sources	Optimisation and development of conventional sources	Seeking alternative options through R&D activities	Competence building
<ul style="list-style-type: none"> <li>▶ Photovoltaics: 200 ha of own land for PV projects, including 160 ha in the vicinity of energy consumption sites</li> <li>▶ Onshore wind farm: Power Purchase Agreements<sup>1)</sup> - virtual, purchases / acquisitions</li> </ul>	<ul style="list-style-type: none"> <li>▶ Increase in electricity production from the existing gas-steam blocks</li> <li>▶ Construction of local gas engines</li> </ul>	<ul style="list-style-type: none"> <li>▶ Waste heat utilisation from mining and metallurgical processes</li> <li>▶ Electricity storage – stabilisation and optimisation functions</li> <li>▶ Alternative fuel utilisation, e.g. waste/RDF</li> </ul>	<ul style="list-style-type: none"> <li>▶ Adjusting the organisational structure to the changing environment</li> <li>▶ Building competencies to ensure energy supply</li> <li>▶ Supporting legislation maintaining competitiveness of the energy intensive industry</li> </ul>

1) PPA – Power Purchase Agreement

### First PV projects<sup>1)</sup>

#### design phase

##### **PV 1. HMG**

4 MW in the Głogów Copper Smelter and Refinery Commencement of production Q3 2021

##### **PV 2. Piaskownia Obora**

5 MW in the reclamation area of the Obora sandpit Commencement of production Q2 2022

#### pre-design phase

##### **3. Wierzba I**

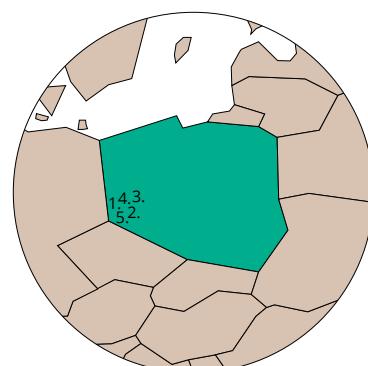
16 MWp<sup>2)</sup> at a willow plantation

##### **4. Wierzba II**

50 MWp at a willow plantation

##### **5. Konrad**

30 MWp at the former Konrad mine



1) PV – photovoltaic

2) MWp – megawatt peak

# **Strategy of KGHM Polska Miedź S.A.**

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# Mission and Vision

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We believe that copper and the other minerals that we provide to our customers on every continent are, and will remain, critical for the development of all sectors in the foreseeable future. Our mission is "To always have copper" with the vision "To use our resources efficiently to become a leader in sustainable development".

The principle of running our business based on the sustainable development concept and of being a leader in this respect has numerous consequences. The considerable scale and the multi-faceted nature of our business and the long history of the Group produce a great sense of responsibility for the rational and sustainable utilisation of our resources and for the Group's enormous impact on its environment, both social and natural.

## **Mission:**

**"To Always Have Copper"**

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## **Vision**

**"Use our resources efficiently  
to become the leader in  
sustainable development."**

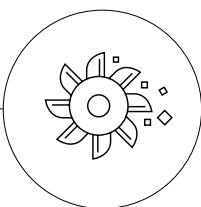
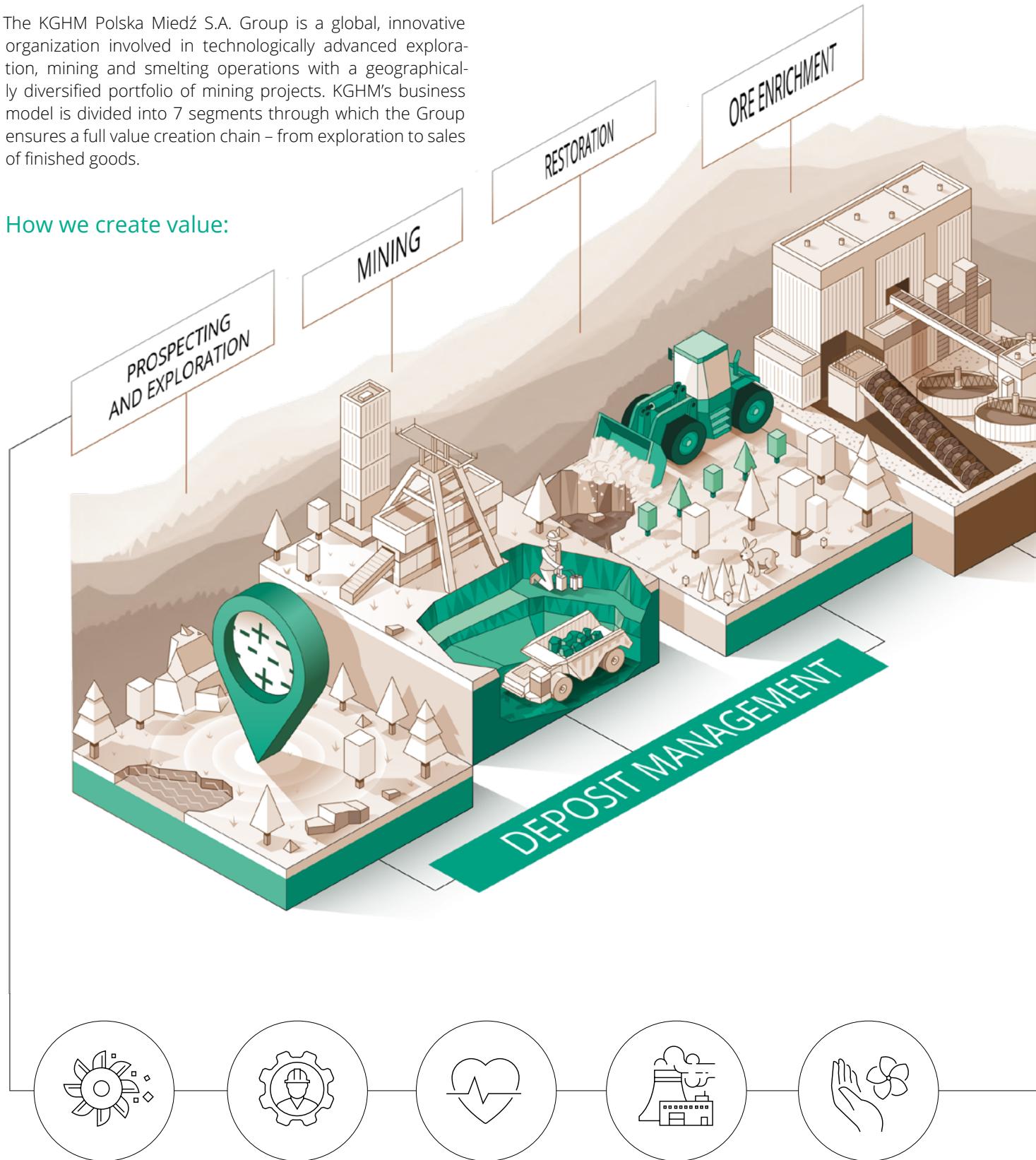


# Business model

GRI 102-9

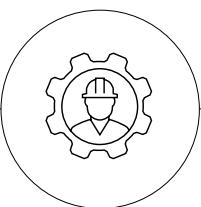
The KGHM Polska Miedź S.A. Group is a global, innovative organization involved in technologically advanced exploration, mining and smelting operations with a geographically diversified portfolio of mining projects. KGHM's business model is divided into 7 segments through which the Group ensures a full value creation chain – from exploration to sales of finished goods.

How we create value:



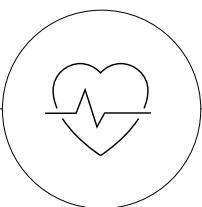
#### **KGHM ZANAM S.A.**

Manufacturer of machinery and equipment for the mining sector.



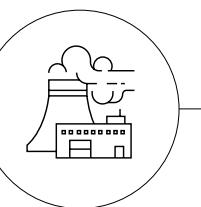
#### **PeBeKa S.A.**

Investments in mining projects mine drilling, tunnel drilling, as well as infrastructure all over the world.



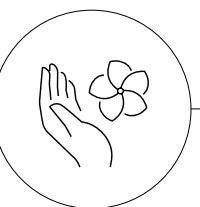
#### **Miedziowe Centrum Zdrowia S.A.**

It is a business providing a broad range of medical services.



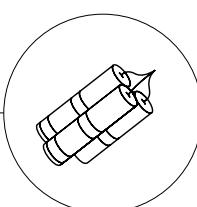
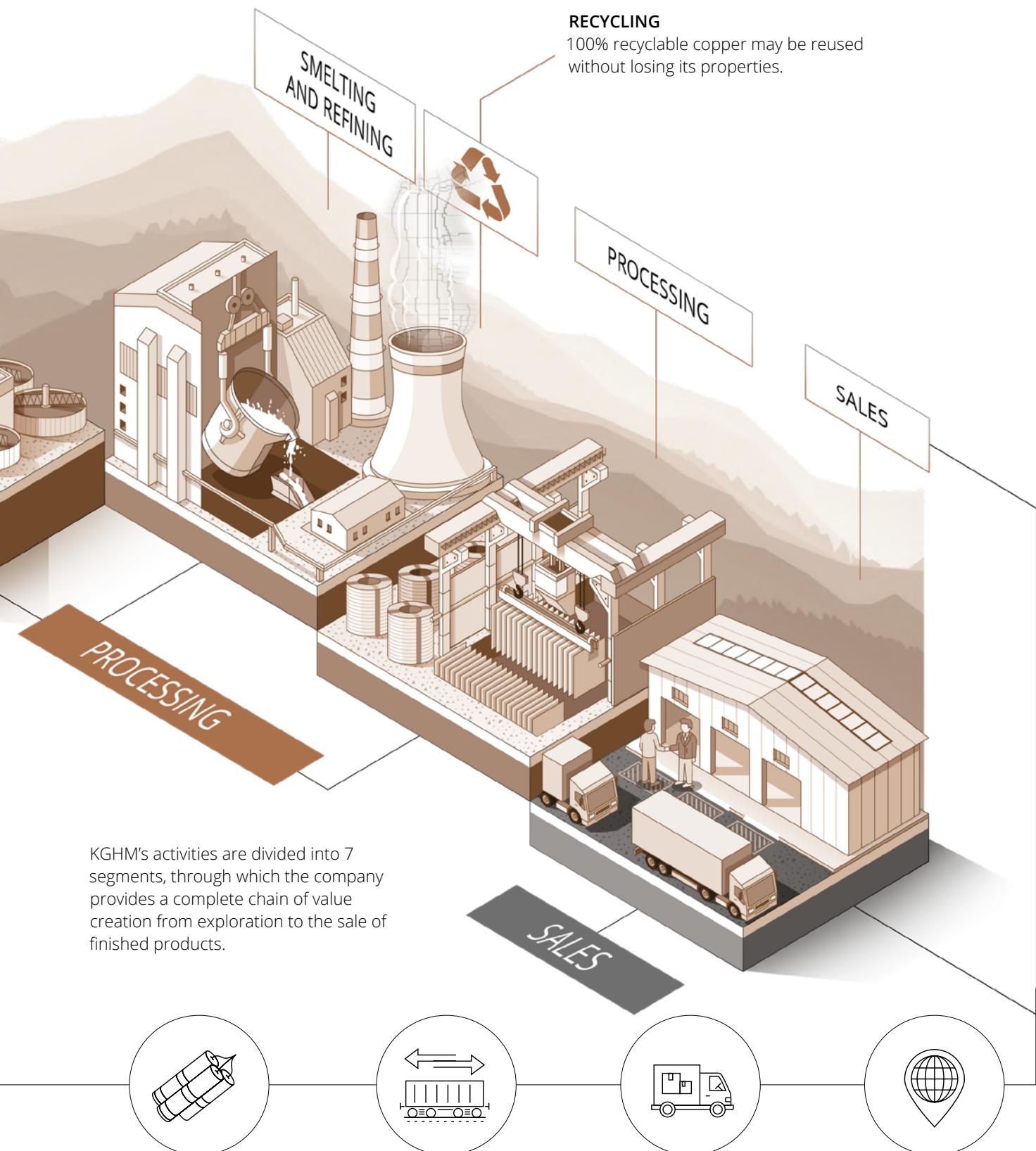
#### **Energetyka sp. z o.o.**

One of the largest heat companies in the Lower Silesia region.



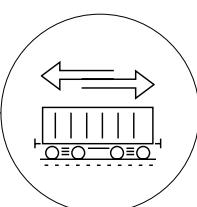
#### **Uzdrowiska Kłodzkie S.A.**

- PGU Group,  
the largest spa complex in Poland.



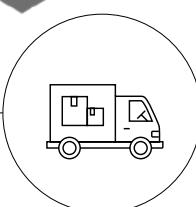
#### NITROERG S.A.

It offers two main types of products: explosives and initiation systems and a diesel oil additive 2-EHN (NITROCET 50®).



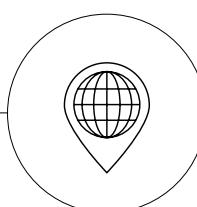
#### POL-MIEDŹ TRANS Sp. z o.o.

Its activities include mainly relating to railway and passenger transport and rolling stock maintenance.



#### Mercus Logistyka Sp. z o.o.

It sells materials, goods and services traded in with the KGHM Group.



#### KGHM INTERNATIONAL LTD.

This Canadian company mining industry, engaged in the production of copper, nickel, platinum, palladium, gold, cobalt and molybdenum.

# KGHM Polska Miedź S.A.'s Strategy for 2019–2023

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**Marcin Chludziński**

President of the Management Board  
of KGHM Polska Miedź S.A.

The consistency with which we pursued the strategy adopted in December 2018 was crucial for the execution of our plans. When preparing this document, we gave consideration to four pillars of our activity: Elasticity (flexibility), Efficiency, E-industry and Ecology. They form the basis of the modern mineral resource industry. Efficient management, appropriate hierarchy of objectives corresponding to the specific nature of the market and business trends have allowed us to make investments and improve production parameters. We have achieved extremely ambitious assumptions that have a positive effect on the stability and development of the KGHM Group. We are working on a strong position of the world leader in the mineral resource industry.

The Company advanced the "Strategy of KGHM Polska Miedź S.A. for the years 2019-2023" which was approved on 19 December 2018.

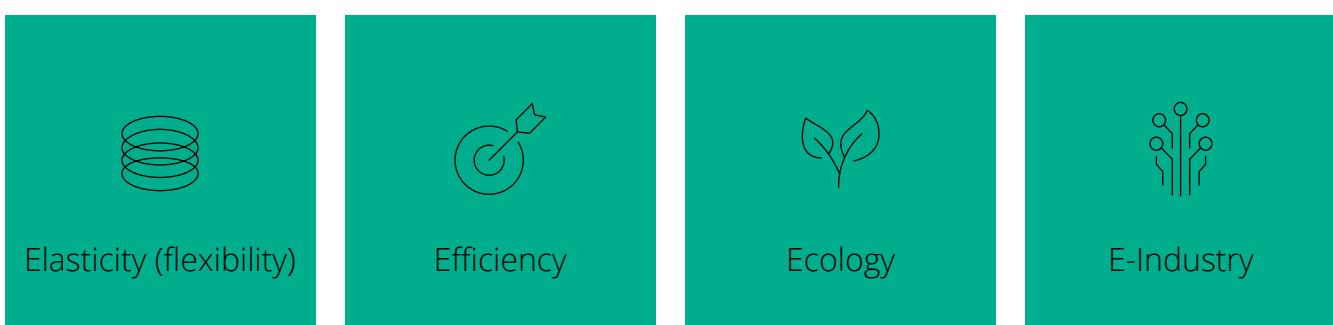
## Strategic directions

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6 global megatrends affecting the KGHM Polska Miedź S.A. Group:



As a result of the analysis of key global market trends, four strategic development directions were developed for the KGHM Polska Miedź S.A.:



The aforementioned directions are reflected in six identified strategic areas, with individualised and measurable main goals:

					
Production	Development	Innovation	Financial stability	Efficient organisation	People and the environment
Maintain cost-effective Polish and international production	Increase the KGHM Group's efficiency and flexibility in terms of its Polish and international assets	Increase the KGHM Group's efficiency through innovation	Ensure long-term financial stability and the development of mechanisms supporting further development	Implement systemic solutions aimed at increasing the KGHM Group's value	Growth based on the idea of sustainable development and safety as well as enhancing the KGHM Group's image of social responsibility

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.

## Advancement of the strategy in 2019

We are analysing progress in the advancement of our strategy having in mind the vision, or the ultimate position of the Group in the future. KGHM Polska Miedź is a company of key importance to the Polish economy and the Group is one of the top global producers of silver and copper. In terms of investments in the Copper Basin, 2019 was exceptionally intensive.

## Selected development projects

### ► Deposit Access Program

In the maintenance and development category, individual projects were systematically implemented in the group of mining projects (48.1 km of mining excavations were made), shaft projects (GG-1 shaft sinking has reached a depth of 1099.3 meters), air-conditioning and energy-mechanical projects. As part of the access works in the "Deep Głogów" area, the GG-1 shaft is being built, the central air conditioning system is extended and the main mining pits are built and equipped. The new GG-1 shaft is built in stages and the project should be completed in 2022. It will be the deepest of the 31 shafts existing in the Copper Basin, with the final depth of 1351 and the diameter of 7.5 m.

### ► Copper concentrate roasting installation

The installation has been successfully commissioned and

incorporated in the core production line of the Głogów Copper Smelter and Refinery. Since the commencement of the installation's continuous operation (in January 2019), 79 thousand tonnes of roasted ore has been produced.

### ► RCR furnace in the Legnica Copper Smelter and Refinery

The RCR furnace with associated installations has been built and brought on-line. The guarantee parameters have been achieved. The RCR furnace operates in the core production line of the Legnica Copper Smelter and Refinery. The copper scrap processing in the RCR furnace allowed the Legnica Copper Smelter and Refinery to achieve in 2019, for the first time in its history, the total processing of scrap and copper-bearing materials in anode and RCR furnaces at the level of 26 thousand tonnes.

### ► Development of the Źelazny Most Tailings Storage Facility

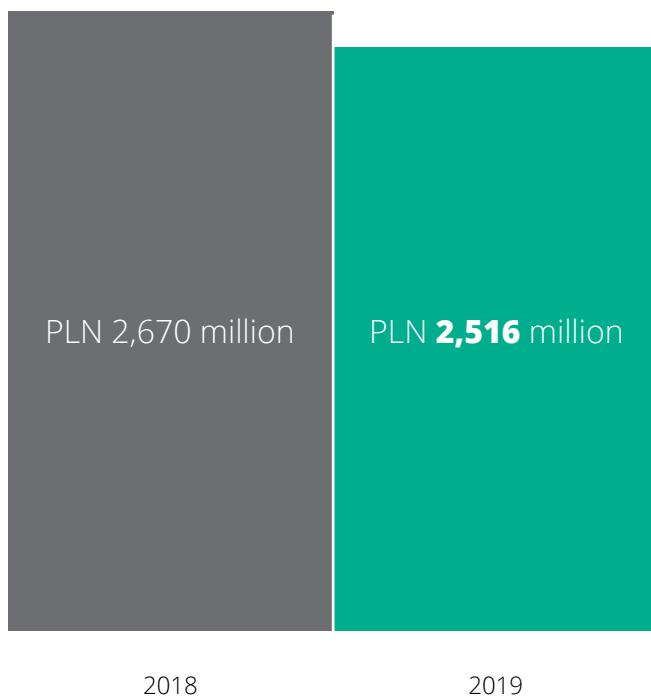
The individual stages of the construction project of the southern quarters of the facility were executed on schedule (In December 2019, the overall material progress of the project was at 59%). The work was also under way on building the tailings segregation and compacting station (the overall material progress of the project was 49% in December 2019).

### ► Program to adapt the technological installations to the requirements of BAT Conclusions

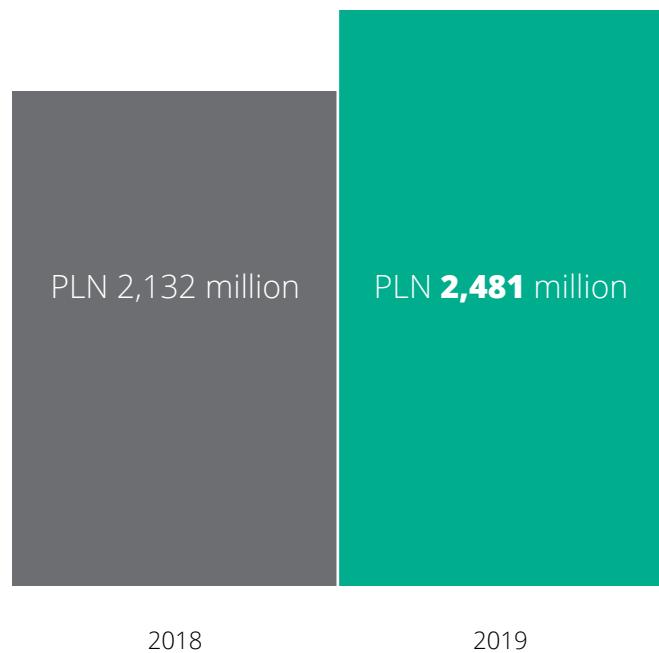
Projects under this program are implemented in the Głogów Copper Smelter and Refinery and in the Legnica Copper Smelter and Refinery. In 2019, hermetic sealing of the conveyor belt system in Głogów and modernization of the dedusting system in shaft furnaces in Legnica were completed. Gas desulphurisation installation for the Kaldo furnace was started up for testing in the Głogów Smelter and Refinery.

# Capital expenditures of KGHM Polska Miedź S.A. in 2019

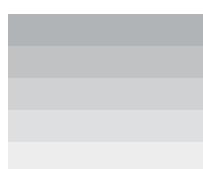
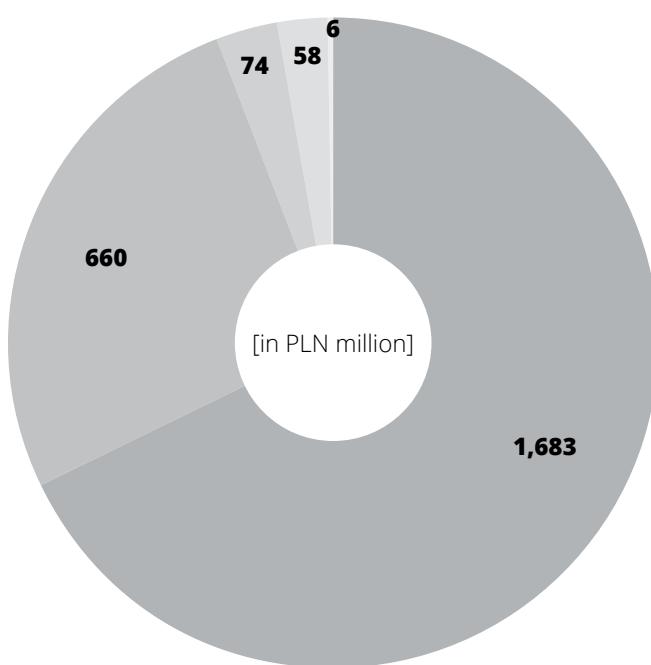
Budgetary assumptions for CAPEX:



CAPEX execution:

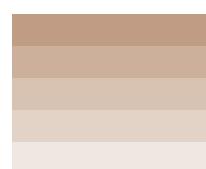
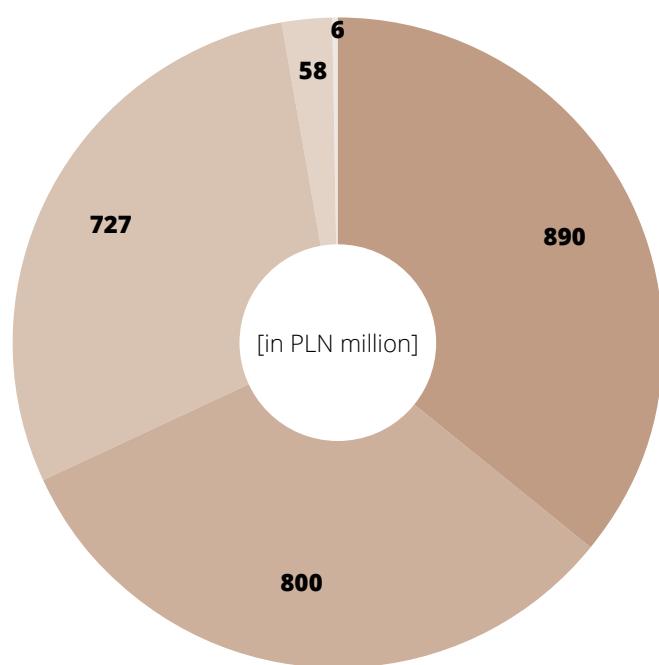


Fulfilment in 2019, by area:



- Mining (68%)
- Metallurgy (27%)
- Other activities (3%)
- Leases per IFRS 16
- Development work - uncompleted

Fulfilment in 2019, by analytical category:



- Replacement (36%)
- Development (32%)
- Maintenance (29%)
- Leases per IFRS 16
- Development work - uncompleted

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 in 2019:**

## Production



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

The advancement of projects aimed at automatisation 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 efficiency law. In 2020, subsequent energy efficiency audits are planned.

- 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.

Sierra Gorda mine in Chile – Phase 1

(KGHM INTERNATIONAL LTD. Group 55%, Sumitomo Metal Mining and Sumitomo Corporation 45%)

- 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).

- 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.

Pyrometallurgy Modernisation Program at the Głogów I Copper Smelter and Refinery	<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>
Metallurgy Development Program	<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>
Increasing cathode production at the Legnica Copper Smelter and Refinery to 160 kt/year	<ul style="list-style-type: none"> <li>► Revolving-Casting-Refining (RCR) Furnace</li> <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> <li>► Permanent starter sheet technology</li> <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



Deposit Access Program	<ul style="list-style-type: none"> <li>► Construction of the GG-1 shaft</li> <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> <li>► Construction of the GG-2 "Odra" shaft</li> <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> <li>► Access and development tunnels</li> <li>- 48.1 kilometres of tunnelling 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> <li>► Surface-based Central Air Conditioning System (SCA)</li> </ul>
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	<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> </ul> <p>- 90% of the cooling tower's supporting structure was assembled.</p> <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>
Development of the Żelazny Most Tailings Storage Facility	<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 gradual storage of tailings is planned for March 2021, and completion of construction by June 2022.</li> </ul> <p>► Construction of the Tailings Segregation and Compacting Station (TSCS)</p> <ul style="list-style-type: none"> <li>- The detailed design of TSCS project was prepared 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 TSCS 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 TSCS was purchased.</li> </ul>
Exploration projects in Poland: concessions to explore for and evaluate copper ore deposits	<p>► Retków-Ścinawa and Głogów</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, the 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>

Exploration projects  
in Poland: other concessions

► Puck region

- 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.

► Nowe Miasteczko

- 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.

Projects involving development of the international assets

► Victoria project

- 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.  
  
- 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.

► Ajax project

- 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.  
  
- 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.

► Sierra Gorda Oxide

- 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. The required changes for updating the project's environmental permits were reviewed. Additional work was carried out in order to define the technical solutions for the heaped ore's crushing and transport operations more precisely. 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.



## 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.

## 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 Centre, 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 KGHM Head Office 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.

## Efficient organisation



### 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.

## 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.

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.

# Innovation ecosystem

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Innovation is one of the competitive advantages of the KGHM Polska Miedź S.A. Group. KGHM gradually increases the knowledge it has accumulated over more than half a century of its operations. Its success is based on rich tradition as well as on innovation. The company continuously seeks technologies to help it, on the one hand, reduce production costs, while on the other hand enable higher rates of recovery of copper and associated metals. The Company is committed at the same time to the safety of its employees and protection of the natural environment. Through these efforts, KGHM is not only a domestic but also a global innovation leader.

**In 2023, KGHM Polska Miedź S.A. intends to allocate 1 percent of the Company's annual revenue towards innovation and research and development projects, which should amount to nearly PLN 200 million per annum.** This constitutes a significant increase of R&D expenditures, which currently are at approximately PLN 40 million per annum. The Company focuses on improving the quality of the tasks it performs and the results it achieves. The main stream of R&D finance and innovation is directed to activities of the core production business (75% in the 2019-2023 period), which have a higher implementation or commercialization potential. **KGHM has in place a consistent management model for innovation and research and development work.**

The development of technology and raising the level of innovation are very important for the company. The projects undertaken by KGHM focus on developing new copper mining systems in deep deposits as well as efficient technologies for their processing and for producing end materials. Research is also conducted to increase automation of mining processes, develop energy-efficient technologies or reduce the environmental impact of the mining industry.

**The Company is building its future on the basis of e-industry. The implemented solutions include robotization, digitization, knowledge management and targets for the 4.0 industry (including data mining aimed at better utilization of machinery and equipment, building a consistent supply chain, energy savings and safety).** KGHM does not only promote projects that can be implemented in the short term. The company is not afraid of ambitious challenges and is undertaking work on cutting-edge technologies, which will change the method and nature of mining copper in the future.

**KGHM grows by combining the experience and intellectual potential of its employees with external research entities, firms and institutions.** The Company uses its resources and funds efficiently, creating value and building its image as a global leader in the mining industry.

## Selected initiatives and projects advanced by KGHM Polska Miedź S.A. in 2019:

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### Innovation

CuBR program	<p>Under the CuBR venture, co-financed by the National Centre for Research and Development (NCRD), R&amp;D projects having a total value of around PLN 150 million which were selected in the four editions of the competition are being advanced.</p> <p>In 2019, 8 projects were completed.</p> <p>4 projects were commenced under the 4th edition of the CuBR competition, which involve subjects related to the Circular Economy concept.</p>
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Intellectual property	<p>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.</p> <p>Protection was received for the word and figurative KGHM trademark in Canada.</p> <p>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.</p> <p>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.</p> <p>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".</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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&amp;D work".</p> <p>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.</p>

# Sustainable development integration

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**Lidia Marcinkowska-Bartkowiak**

Executive Director for Communication at KGHM Polska Miedź S.A.

"Protection of human rights, mining with a commitment to environmental protection, responsible supply chain management, and transparency in stakeholder relationships are crucial for us and constitute a pillar of our activities in the global market."

At the same time, we create value for our stakeholders. Confirmation of the highest standards of social responsibility applied on a daily basis in KGHM is demonstrated among others by our participation in the FTSE4Good Index."

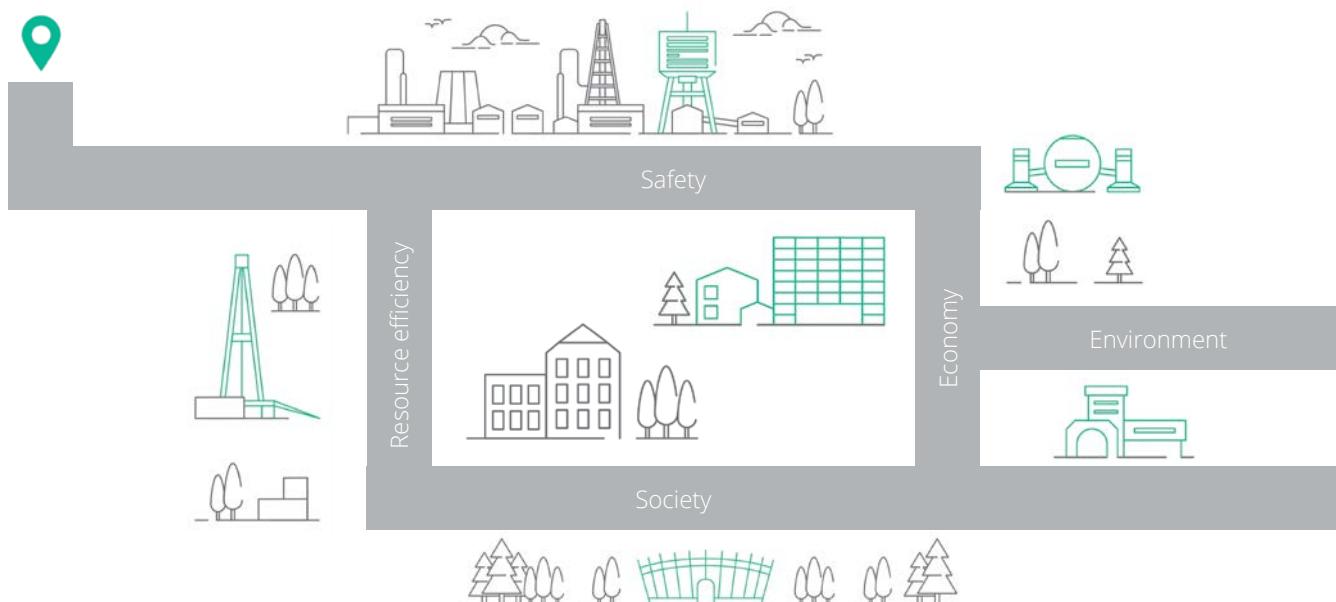
KGHM Polska Miedź S.A. is a global company, open to development aimed at ensuring its stable operation for many decades to come for the benefit of present and future generations. In the pursuit of its objectives, KGHM Polska Miedź S.A. focuses on creating added value while ensuring solid foundations for its enterprise and employees and achieving long-term success. The Company wants to make smart investments in new technologies, innovative solutions, best available practices and employee development. KGHM Polska Miedź S.A. is aware that sustainable development of the mineral resource industry has become a global challenge

for the modern world. Sustainable development is essential to our mineral resource safety and to ensuring the comfort of life of our employees and society as a whole as well as to protecting the natural environment. The Company operates based on the principles of sustainable development, reflecting in its daily activities obligations in areas such as Society, the Environment, the Economy, Safety and Resource Efficiency.

The diagram below presents the Sustainable Development Areas of KGHM Polska Miedź S.A.

## Sustainable Development in KGHM Polska Miedź S.A.

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As part of its involvement in sustainable development activities, **KGHM Polska Miedź S.A. is a member of the European Technology Platform on Sustainable Mineral Resources (ETP on SMR) in Brussels, where KGHM's representative also serves as President. The European Technology Platform on Sustainable Mineral Resources serves as a think-tank for the resolution of problems involving the raw materials sector.** The primary goal of the Platform is to transform the sector from one which is conservative and less disposed to change into an industry which is innovative and focused on change and on cooperation

with academia. The Platform acts in an advisory capacity with respect to commodities policy, which is of such tremendous importance for KGHM Polska Miedź S.A.

In 2017, KGHM Polska Miedź S.A. joined the Partnership for Sustainable Development. The sustainable development activities undertaken by KGHM Polska Miedź S.A. are fully and comprehensively consistent with the United Nation's sustainable development goals (2030 Agenda)

## United Nations' sustainable development goals for 2030 (2030 Agenda for Sustainable Development)

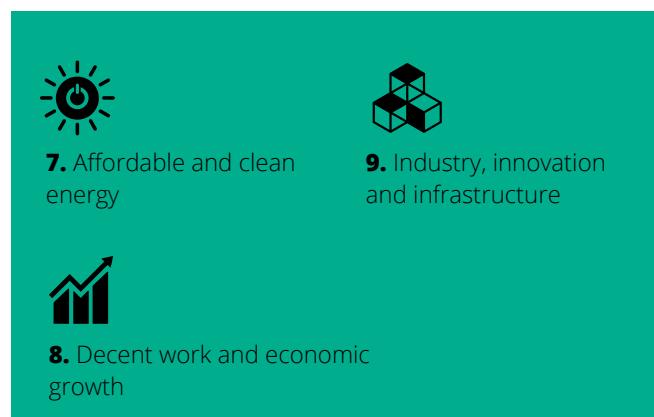
	<b>1.</b> No poverty		<b>2.</b> Zero hunger		<b>3.</b> Good health and well-being		<b>4.</b> Quality education		<b>5.</b> Gender equality
	<b>6.</b> Clean water and sanitation		<b>7.</b> Affordable and clean energy		<b>8.</b> Decent work and economic growth		<b>9.</b> Industry, innovation and infrastructure		<b>10.</b> Reduced inequalities
	<b>12.</b> Responsible consumption and production		<b>13.</b> Climate actions		<b>14.</b> Life below water		<b>15.</b> Life on land		<b>16.</b> Peace, justice and strong institutions
									<b>17.</b> Partnerships for the goals

Based on its in-depth analysis of the 2030 Agenda for Sustainable Development, the Company takes action to increase the positive impact of KGHM Polska Miedź S.A. on the achievement of goals 07 through 09 and weakening the negative impact in the case of goals 06, 13 and 15. These issues are presented in the following diagram.

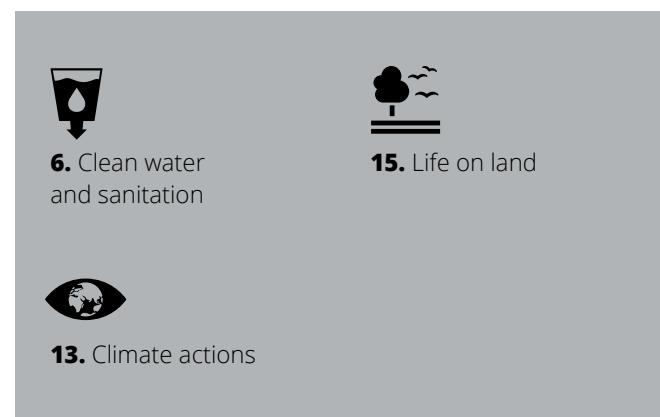
### Impact of each goal set under the 2030 Agenda for Sustainable Development on the mining industry:



Strengthening



Weakening



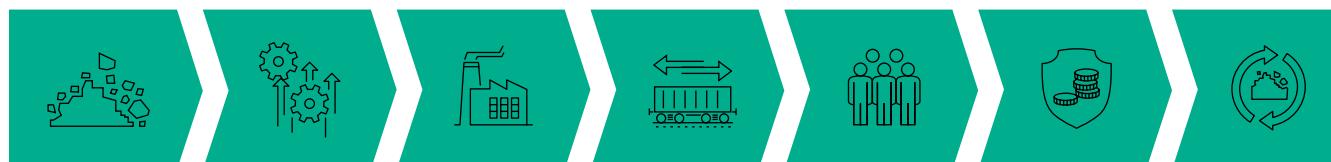
Striving to implement sustainable development in the organization, KGHM Polska Miedź S.A. seeks to incorporate this idea at each stage of the value chain. KGHM Polska Miedź S.A. is characterized by a unique – and unknown to other mineral resource industry companies – and highly integrated technological chain. The Company independently performs tasks ranging from deposit exploration, prospecting and raw materials sourcing, through extraction, production, transport,

contact with customers and stakeholders and ending with responsible waste management to reduce its adverse environmental impact to the greatest degree possible.

The activities described above resulted in the development of KGHM Polska Miedź S.A.'s sustainable value chain, as presented in the diagram below.

## KGHM Polska Miedź S.A.'s sustainable value chain

### Responsible Supply Chain Policy in the KGHM Group



<b>Raw materials</b>	<b>Extraction</b>	<b>Production</b>	<b>Logistics</b>	<b>Stakeholders</b>	<b>Trade</b>	<b>Tailings</b>
Responsible use of raw materials while caring for natural resources	Rational deposit management - Intelligent production solutions-KGHM 4.0	Reduction of the environmental product and organisational footprint	Reduction of emissions, making logistics structures and procedures more efficient	Customers, consumers and partners as guideposts for the Company's standards of responsible actions	Trade based on "Fair Trade" principles	Product life cycles based on the Circular Economy and adherence to its principles at every stage of the value chain

### Key non-financial indicators of KGHM Polska Miedź S.A. identified and reported in accordance with the Sustainable Development concept for 2016-2019

	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>Society</b>				
Maintaining membership in the RESPECT Index <small>/ continuation in WIG-ESG</small>	YES	YES	YES	YES
Maintaining position in the FTSE4Good Index Series	-	-	YES	YES
0% investment activity without a social dialogue policy	n/a	YES	YES	YES
Conclusion and maintaining of long-term contracts; achievement of a proper sales structure ensuring long-term relations with customers	n/a	YES	YES	YES

	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Sponsorship and charitable activities in building corporate social responsibility [sponsorship expenses for the purposes of the Company's promotion and regional support. i.e. sports/culture/science]	PLN 26.6 million	PLN 25.8 million	PLN 29.6 million	PLN 33.3 million
<b>Resource efficiency</b>				
Ore extraction (wet weight) per mine employee [tonne]	2,712	2,641	2,558	2,527
Production of electrolytic Cu per Company / metallurgical employee [tonne]	29 / 152	29 / 148	27 / 139	31 / 156
Maintaining Cu yields [%]	98.18	98.23	97.82	97.96
<b>Safety</b>				
LTIRFKGHM (Lost Time Injury Frequency Rate KGHM)	12.65	10.4	10.3	10.3

Since 3 September 2019, the Company has been part of the WIG-ESG index, which includes companies listed on the Warsaw Stock Exchange that observe the principles of corporate social responsibility. From 19 November 2009 until the final calculation and publication date, i.e. 1 January 2020, the Company was continuously included in the RESPECT Index. Additionally, since September 2018, KGHM Polska Miedź S.A. has been included in the FTSE4Good Index Series, which is part of the group of ethical investment indices taking into account the criteria of corporate social responsibility and ESG risk management.

The company observes the "license to operate" principle regulating such activities. Ultimately, they will be formally spelled out in the Social Dialogue Policy to be developed. In this context, investment activities mean projects to which KGHM has no legal title, such as a construction permit, etc.

The new Strategy of KGHM Polska Miedź S.A for the years 2019-2023 comprises 6 strategic areas. One of those areas

is "People and the Environment", which relates to, inter alia, the Company's sustainable development. Its major objective is to grow based on the idea of sustainable development and safety and to enhance the Group's image as a socially responsible organization. The effectiveness of the "People and the Environment" strategic area is measured by:

- ▶ a minimum level of annual improvements in LTIFR (for domestic assets) and TRIR (for overseas assets),
- ▶ maintaining a participation budget at the level of 20% of the amount of deduction for donations from the minerals extraction tax by 2020,
- ▶ the level of the KGHM Group's employees' dedication and satisfaction, based on pre-defined measures being implemented by 2023.

# Financing model

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Under the current model, the activity of KGHM Polska Miedź S.A. is financed with funds from core operations, debt financing in the form of loans from commercial banks and bond programmes, loans from Bank Gospodarstwa Krajowego and loans from multilateral institutions, such as the European Investment Bank. Within the group we have introduced a cash-pooling system to ensure efficient management of liquidity.

## 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.

## Net debt structure of the Group (PLN million)

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	31.12.2019	31.12.2018	Change (%)	30.09.2019	30.06.2019	31.03.2019
<b>Liabilities due to:</b>	7,873	7,949	(1.0)	9,141	8,960	8,662
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>	982	949	+3.4	734	1,097	583
<b>Net debt</b>	6,891	7,000	(1.5)	8,407	7,863	8,079

1) Amount includes the impact of implementation of IFRS 16 in the amount of PLN 627 million

## Net debt structure of the Parent Entity (PLN million)

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	31.12.2019	31.12.2018	Change (%)	30.09.2019	30.06.2019	31.03.2019
<b>Liabilities due to:</b>	7,620	7,873	(3.2)	8,897	8,699	8,511
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>1)</sup>	-	×	504	505	391
<b>Free cash and cash equivalents</b>	489	625	(21.8)	336	723	325
<b>Net debt</b>	7,131	7,248	(1.6)	8,561	7,976	8,186

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.

Unsecured, revolving syndicated credit facility in the amount of USD 1.5 billion	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.  The funds acquired under this credit were used to finance general corporate goals.
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	Financing agreements signed by the Parent Entity with the European Investment Bank:  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,  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 core production line. Interest on the instalments drawn is based on a fixed interest rate.
Debt securities in the amount of PLN 2.0 billion.	The program to issue bonds on the Polish market was established under an issue agreement dated 27 May 2019.  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 LIBOR plus a margin.  The funds acquired under this credit were used to finance general corporate goals.
Bilateral bank loans in the amount of up to PLN 3.9 billion	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.  The funds obtained under the aforementioned bank loan agreements are a tool supporting the management of current financial liquidity.

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.

### Amount available and drawn by the Group (in PLN million)

	Amount drawn as at 31.12.19 <sup>1)</sup>	Amount drawn as at 31.12.18 <sup>2)</sup>	Change (%)	Amount available as at 31.12.19	Amount drawn (%) 31.12.19
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>

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

2) 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.

## 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>

1) 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.

## 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.

# Opportunities and risks

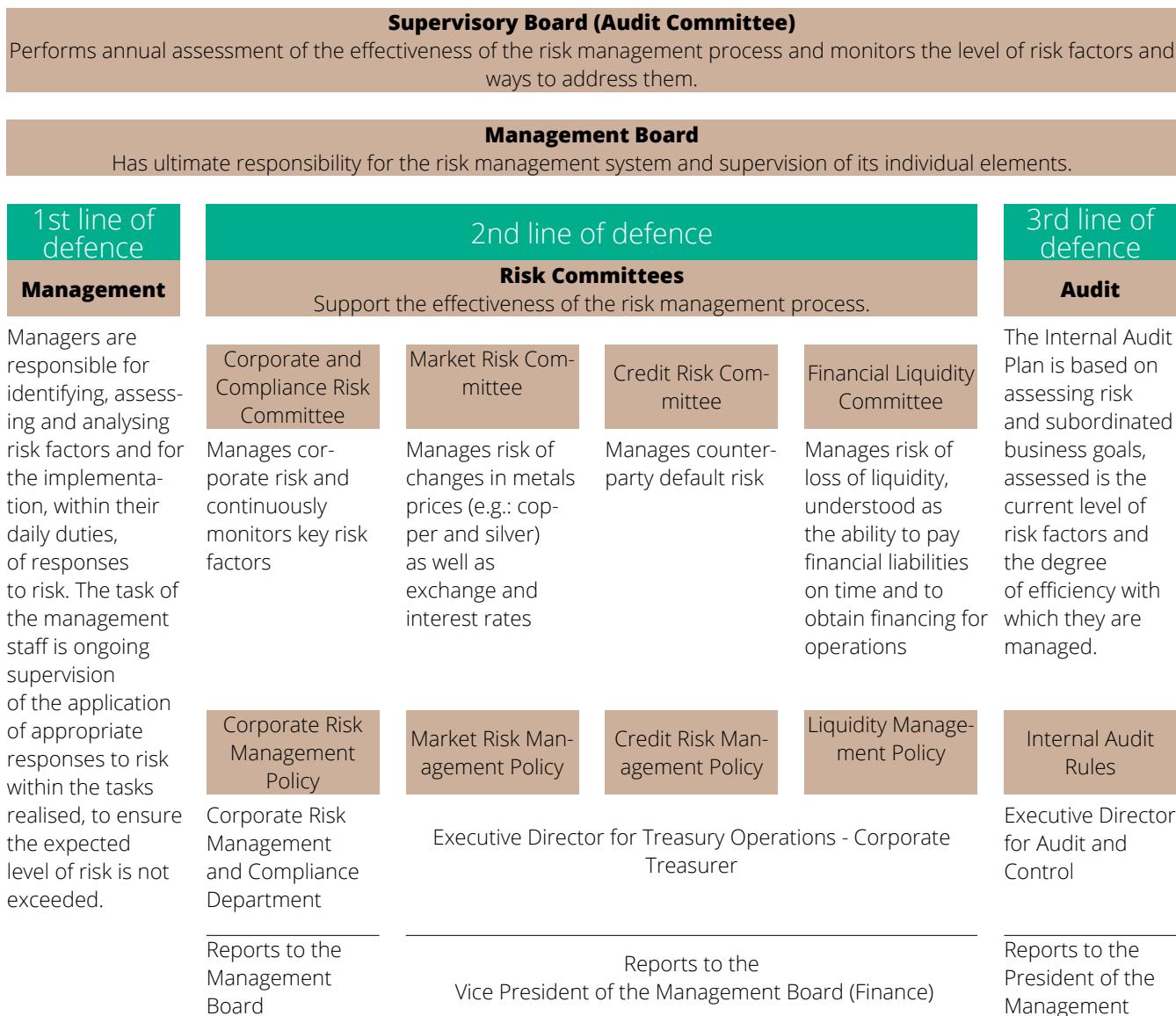
## Comprehensive Risk Management System in the KGHM Group GRI 102-11

The KGHM Polska Miedź S.A. Group defines risk as impact of uncertainty, inherent in the operations, that may result in both opportunities and threats to attainment of business objectives. We assess the current and future, actual and potential impact of risk on the KGHM Polska Miedź S.A. Group's activities. Based on the assessment, management practices are verified and adapted in response to risks. 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. The system of corporate risk

management is annually subjected to an effectiveness audit (in compliance 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 Corporate Risk Management and Compliance Department, 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 defence, as shown on the following graph:

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



## Corporate risk in the KGHM Polska Miedź S.A. Group – Key risks and their mitigation

GRI 102-15

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.

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

	Technology
	Value chain
	Market
	External
	Internal

Risk and description of risk	Mitigation
<h2>Category – Technology</h2> <p><b>(Parent Entity)</b> Risk of failure to adhere to the efficient working time parameter and of failure to fully utilise the capacity of metallurgical equipment to process own concentrate.</p> <p>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.</p>	 <p>Optimum utilisation of infrastructure, maintaining an appropriate mix of concentrates, R&amp;D initiatives and advancement of the Metallurgy Development Program (MDP) at the Głogów Copper Smelter 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.</p>
<h2>Category – Value chain</h2> <p><b>(KGHM Group)</b> 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.</p> <p>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 forecast 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.</p> <p><b>(KGHM INTERNATIONAL Group)</b> Risk related to the precision of estimated costs of decommissioning certain mines.</p> <p>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.</p>	 <p>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.</p> <p>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.</p>

**(KGHM INTERNATIONAL 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 modelling 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. It is a typical feature of projects at the exploration stage that the deposit has not been documented. 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 utilities.

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 that emergency supply systems are in place for key utilities and conduct ongoing evaluation of security of grid power supply. Conducting a number of investment projects to strengthen 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 prices of copper and silver and risk of changes in USD/PLN 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 of the Management Board's Report on activities.

**(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 of the Management Board's Report on activities.

**(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 of the Management Board's Report on activities.

## Category – External risks

**(KGHM Group)**

Risk of seismic tremors and associated roof collapses or destressings 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 rock bursts and roof 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, limiting activities or increasing costs, involving geological conditions, the temperature of the air sent into the mines and underground mining conditions.

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 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 anticorruption 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 Miedź 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 2019. 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 Miedź 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 ageing 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 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 loss of reputation of the KGHM Group.

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.

**(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.

## 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,
- ▶ 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.

## 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:

- 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,
- liabilities due to borrowings (i.e. due to bank and other loans drawn and leases with fixed interest rates): PLN 4,000 million.

	<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>
Price risk related to the change in share prices of listed companies	<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>
Result on derivatives and hedging transactions	<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,</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:

Credit risk related to trade receivables	<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>
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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.

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.

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%).

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.

#### Credit risk related to cash and cash equivalents and bank deposits

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.

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%)

#### 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 main 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.

# Principles of Governance

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# Corporate governance

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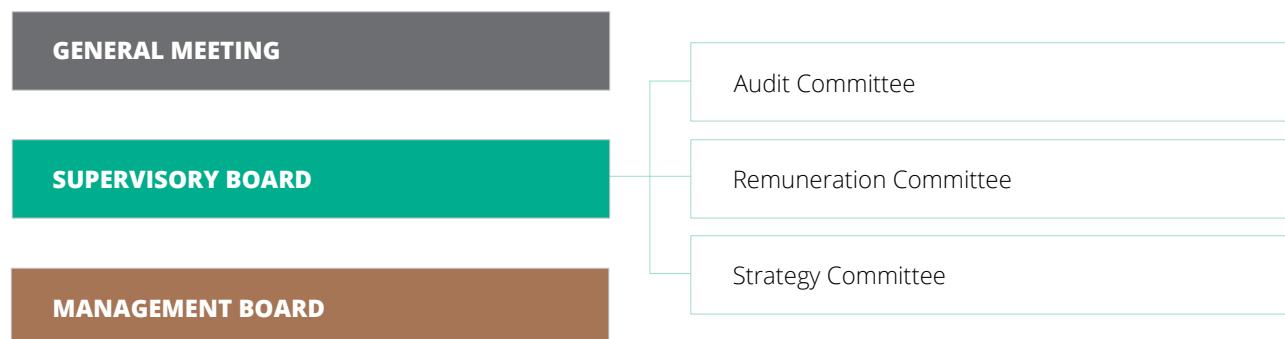
KGHM Polska Miedź S.A., whose shares are listed on the Warsaw Stock Exchange, in 2019 was subject to the corporate governance principles described in the document "Code of Best Practice for WSE Listed Companies 2016" (hereafter "Best Practice"), which was adopted by Resolution No. 26/1413/2015 of the Warsaw Stock Exchange Supervisory Board on 13 October 2015. These principles are available on the official website of the Warsaw Stock Exchange devoted to this subject (<https://www.gpw.pl/best-practice>) as well as on the website of KGHM Polska Miedź S.A. under the section devoted to corporate governance (<http://kghm.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. KGHM Polska Miedź S.A. did not apply the Recommendation IV.R.2 belonging to the "Best Practice" in 2019, 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 broad-

cast 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.

## Corporate governance structure in KGHM Polska Miedź S.A.

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# General Meeting

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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". General Meetings 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 introduc-

tion 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 the obligatory regulations, 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

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

GRI 102-18

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 Chairperson of the Supervisory Board, his/her 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 Supervisory Board operates on the basis of generally prevailing law, the Statutes of the Company and the Bylaws of the Supervisory Board. The Bylaws of the Supervisory Board and the Statutes of the Company are available on the Company's website, [www.kghm.com](http://www.kghm.com).

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.

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 Audit Committee is responsible for supervision in the areas of financial reporting, the internal control system, risk management and internal and external audits. The composition of the Audit Committee is presented in the following table:

<b>The composition of the Audit Committee in 2019:</b>	<b>1 January – 31 December</b>
Marek Pietrzak	✓
Bogusław Szarek	✓
Agnieszka Winnik-Kalemba	✓ Chairwoman
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,
1. 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;
2. 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 another Member of the Management Board;
3. 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;
4. 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;
5. 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;
6. assessing the independence of the certified auditor and expressing consent for the certified auditor to provide permitted non-auditing services in the Company;
7. developing a policy to select the auditing firm for conducting audits;
8. developing a policy for the auditing firm conducting audits, through entities related to the said auditing firm and by
9. 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 sec. 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 having 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 having 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

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.

<b>Composition of the Remuneration Committee in 2019:</b>	<b>1 January - 31 December</b>
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 other tasks ordered by the Supervisory Board.
6. 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.

## Strategy Committee

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. The composition of the Strategy Committee is presented in the following table:

<b>Composition of the Strategy Committee in 2019:</b>	<b>1 January - 10 November</b>	<b>11 November - 31 December</b>
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;
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

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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 dismissal of an employee-elected member of the Management Board. The members of the Management Board, including any such chosen by the employees, may be dismissed 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 dismissing, shall be binding upon the Supervisory Board, as long as in the said voting for either their

appointment or dismissing at least 50% of the Company's employees have participated. The election and dismissal 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 retired upon shareholder consent through acquisition by the Company. A resolution of the General Meeting on the retirement 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.



# 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:

1. activities related to overall risk management at the corporate level as well as auditing and internal controlling within the Group,
2. the preparation, implementation and execution of the Company's Strategy and Sustainable Development Policy,
3. activities related to comprehensive management of security and preventing losses in the Group,
4. corporate supervision standards and compliance with the corporate governance standards adopted by the Company,
5. overall corporate oversight over the Group's subsidiaries in Poland and abroad,
6. compliance with formal reporting and publishing obligations within the scope required by law,
7. activities related to creating, updating and maintaining the uniformity of the organisation's internal regulations to maintain consistent operating principles,
8. providing organisational and legal services to the Company's bodies, corporate supervision standards and compliance with the corporate governance standards adopted by the Company,

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- 9.** providing legal services to the Company,
  - 10.** activities related to communications and image-building within the Group,
  - 11.** the shaping of relations with the Company's external business environment,
  - 12.** 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,
  - 13.** the activities of the Data Centre Division (COP1) with respect to:
    - supplying and developing information and communication services required for the proper functioning of the Head Office,
    - the management's rational utilisation of ordered and contracted goods and services, and
  - 14.** 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 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:

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



## Paweł Gruza

Appointed as at 10 September 2018

### Vice President of the Management Board (International Assets)

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 shareholder 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 for the Artur Andersen and Ernst & Young consultancy firms 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:

1. the preparation and implementation of strategy for international assets,
2. activities related to acquiring and developing the international resource base,
3. analysis, assessment and preparation of new international exploration projects,
4. preparation of studies and expert opinions concerning international resource base projects,
5. coordination of tasks with respect to the plan of the Company's equity investments in international subsidiaries,
6. substantive oversight over the Group's international production subsidiaries, including the creation and execution of their production plans,
7. the shaping of the Company's commercial and logistics policies.



Appointed as at 6 July 2018

## Katarzyna Kreczmańska-Gigol

### Vice President of the Management Board (Finance)

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:

1. the shaping of the Group's financial policy;
2. review of the Main Strategy's projects in terms of their financial feasibility;
3. finances in all of the Group's operations and activities;
4. the creation of Group's tax policy; and
5. the Company's accounting services.



# Radosław Stach

Appointed as at 6 July 2018

## Vice President of the Management Board (Production)

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 completed the prestigious management program, "Personal Leadership Academy" 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 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 has also served 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 "Koncepcje 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:

1. the integrated planning and optimisation of the Company's current production;
2. occupational health and safety and control of environmental risks;
3. activities with respect to maintaining readiness of the production and non-production assets and achievement of the main goals of the Energy Strategy;
4. activities with respect to manufacturing products and development of the primary mine and metallurgical production;
5. overseeing activities connected with the implementation, maintenance and improvement of management systems in the Company; and integrated supply chain management.

## 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 the University of Wrocław. Obtained a doctorate degree in mathematics at the Polish Academy of Sciences in Warsaw. He obtained his title of doctor habilitatus from the University of Wrocław, and he obtained the title of professor in mathematics in 2001. Currently, he is a professor at the University of Wrocław, 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 in 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 "Environment" area 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 "Energy" negotiating area 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 in the Ministry of State Assets since November 2019). Has many years of experience working in 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 since 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-Sępolno-Bartoszowice-Dąbie in the years 2009–2013, a volunteer

in Ilford Park Polish Home (UK) 2009–2010, member of the Wrocławskiego 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 Czyczerski**

*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 Sek-

cja 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 since 2014.

## **Ireneusz Pasik**

*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 restructuring 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 restructuring. 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 restructuring 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 the Lazarski 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 Asfalt 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.

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.

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

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 the University of Wrocław. 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.

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.

She passed her bar exam in 2003 under the District Bar Council in Wrocław and was licensed to work in the profession.

Was Deputy Chairwoman and member of the Supervisory Board of PKO BP S.A.

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 Natalli-Świąt. In the years 1999–2003 gained experience as an apprentice attorney-at-law

## 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:

First, last name	Position
Marcin Chludziński	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-Gigol	Vice President of the Management Board (Finance)
Radosław Stach	Vice President of the Management Board (Production)

### Supervisory Board of the

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:

First, last name	Position
Andrzej Kisielewicz	Chairman
Leszek Banaszak	Deputy Chairman
Jarosław Janas	Secretary
Janusz Marcin Kowalski	
Marek Pietrzak	
Bartosz Piechota	
Agnieszka Winnik-Kalemba	
<b>And elected by employees:</b>	
Józef Czyczerski	
Ireneusz Pasis	
Bogusław Szarek	

# Remuneration of the Parent Entity's bodies and of other key managers of the Group

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## 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 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 indi-

viduals managing certain companies, the Supervisory Board set Management Goals for the Members of the Management Board for 2019.

- ▶ application of the principles of remunerating members of management and supervisory bodies, pursuant to the Act of 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.

The Supervisory Board also set goals under which variable remuneration for the year 2019 may be received, contingent upon achieving the following conditions:

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.

## Potentially-due remuneration of Members of the Management Board of KGHM Polska Miedź S.A.

<b>First, last name</b>	<b>Position</b>	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 Programme under the terms of the existing Collective Agreement, with the proviso that the amount of the monthly contribution under this Programme is included in the amount of the fixed remuneration for the given period.

In 2020, the Supervisory Board, based on the wording of agreements connecting individual Members of the Management Board with the Company, gave consent for the Company to cover 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 the management, 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 costs of travel and accommodation 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 publicly-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).

## 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 Statistics Poland. 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.

## 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 Statistics Poland.
- ▶ 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 Programme, a Health Care Package, and
- ▶ a company car.

The contracts with the Members of the Management Board – both during the period of employment as well as following the period of employment – contain also "no competition" clauses. 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 competitive activities. For adherence to the "no competition" clause, KGHM pays the Management Board Member compensation in a total amount calculated as a multiple of the monthly fixed remuneration and the 6-month "no competition" period. 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.

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.

## 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, marital status, 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,

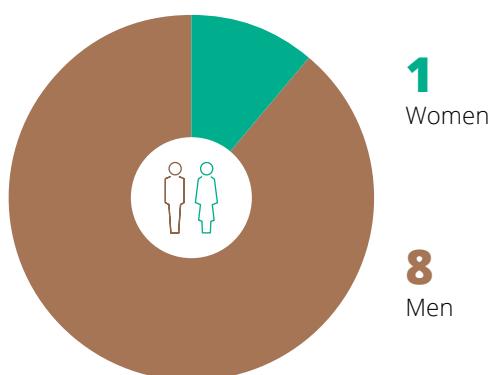
equal treatment, access to development opportunities and the utilisation of employee potential. The approach to management of diversity is defined by the "Diversity Declaration of KGHM Polska Miedź S.A."

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.

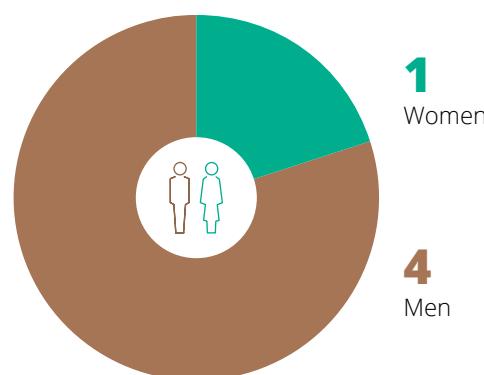
The management of diversity also applies to members of the Supervisory Board and Management Board of KGHM Polska Miedź S.A. The management and supervisory staff are diverse in terms of gender, age and experience:

## Structure of diversity amongst management and supervisory staff as at 31 December 2019

GRI 102-22



Supervisory Board of KGHM Polska Miedź S.A.



Management Board of KGHM

## Structure of age diversity

	<40 years	40–50 years	51–60 years	>60 years
Supervisory Board of KGHM Polska Miedź S.A.	2	2	3	2
Management Board of KGHM Polska Miedź S.A.	-	4	1	-

## Length of experience in KGHM Polska Miedź S.A.

	5 years	5–10 years	11–20 years	>20 years
Supervisory Board of KGHM Polska Miedź S.A.	7	-	-	2
Management Board of KGHM Polska Miedź S.A.	4	-	-	1

## Organisational structure

### Corporate structure of the KGHM Group GRI 102-5

As at 31 December 2019, the Group was composed of KGHM Polska Miedź S.A. as the Parent Entity and 72 subsidiaries (including two closed-end, non-public investment funds) located on four continents: Europe, North America, South America and Asia. Some of these subsidiaries formed their own groups. The largest of them, both in terms of the number of members and the value of equity, is the KGHM INTERNATIONAL LTD. Group, the main assets of which are located in Canada, the United States and Chile. It was comprised of a parent entity and 26 subsidiaries. As at the end date of the reporting period, the KGHM Polska Miedź S.A. Group held a stake in two joint ventures – Sierra Gorda S.C.M. and NANO CARBON Sp. z o.o.

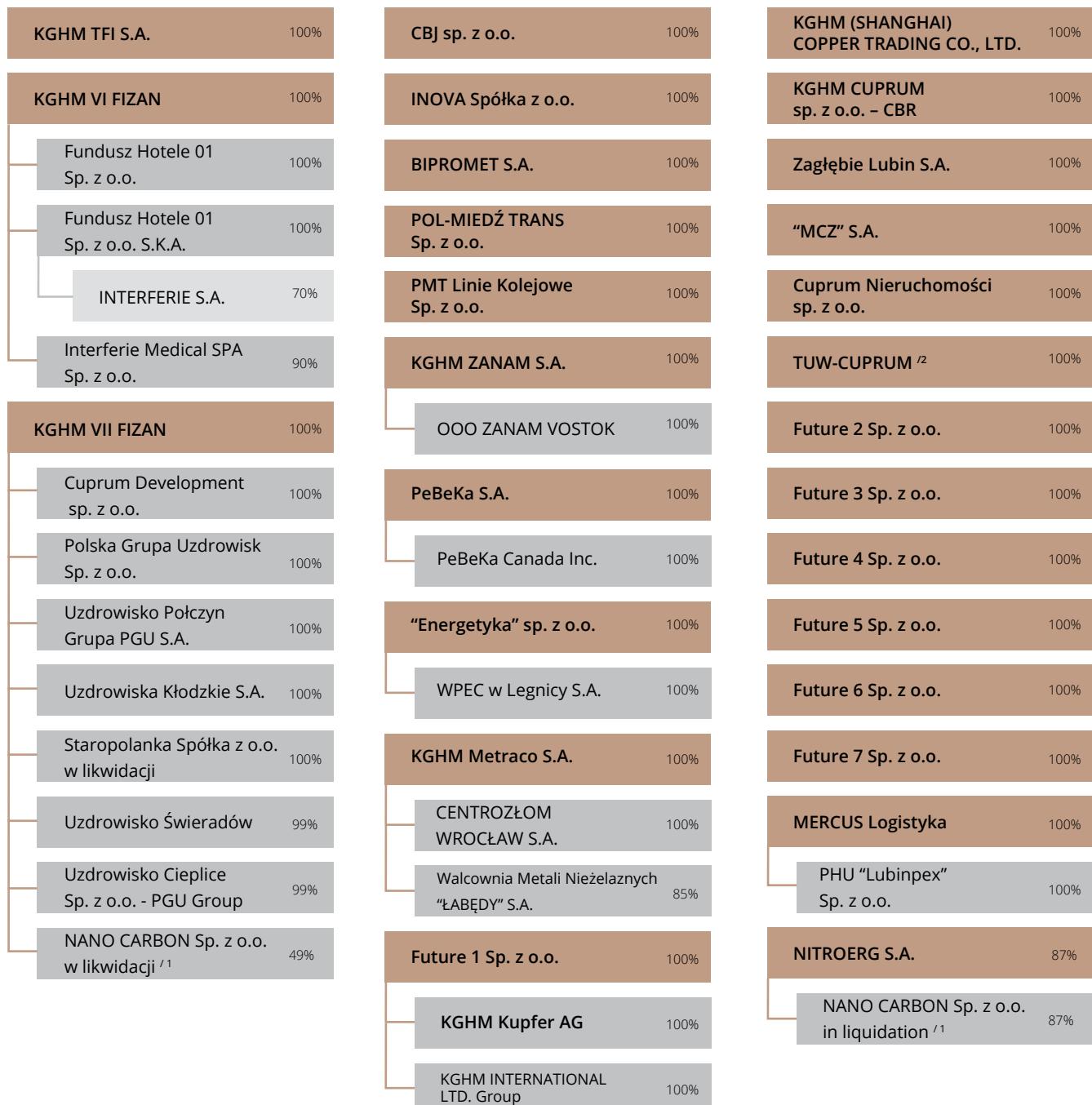
The detailed structure of the KGHM Polska Miedź S.A. Group, along with interconnections between its members, is depicted in the two following diagrams.

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.



# Organizational structure of the KGHM Polska Miedź S.A. Group,

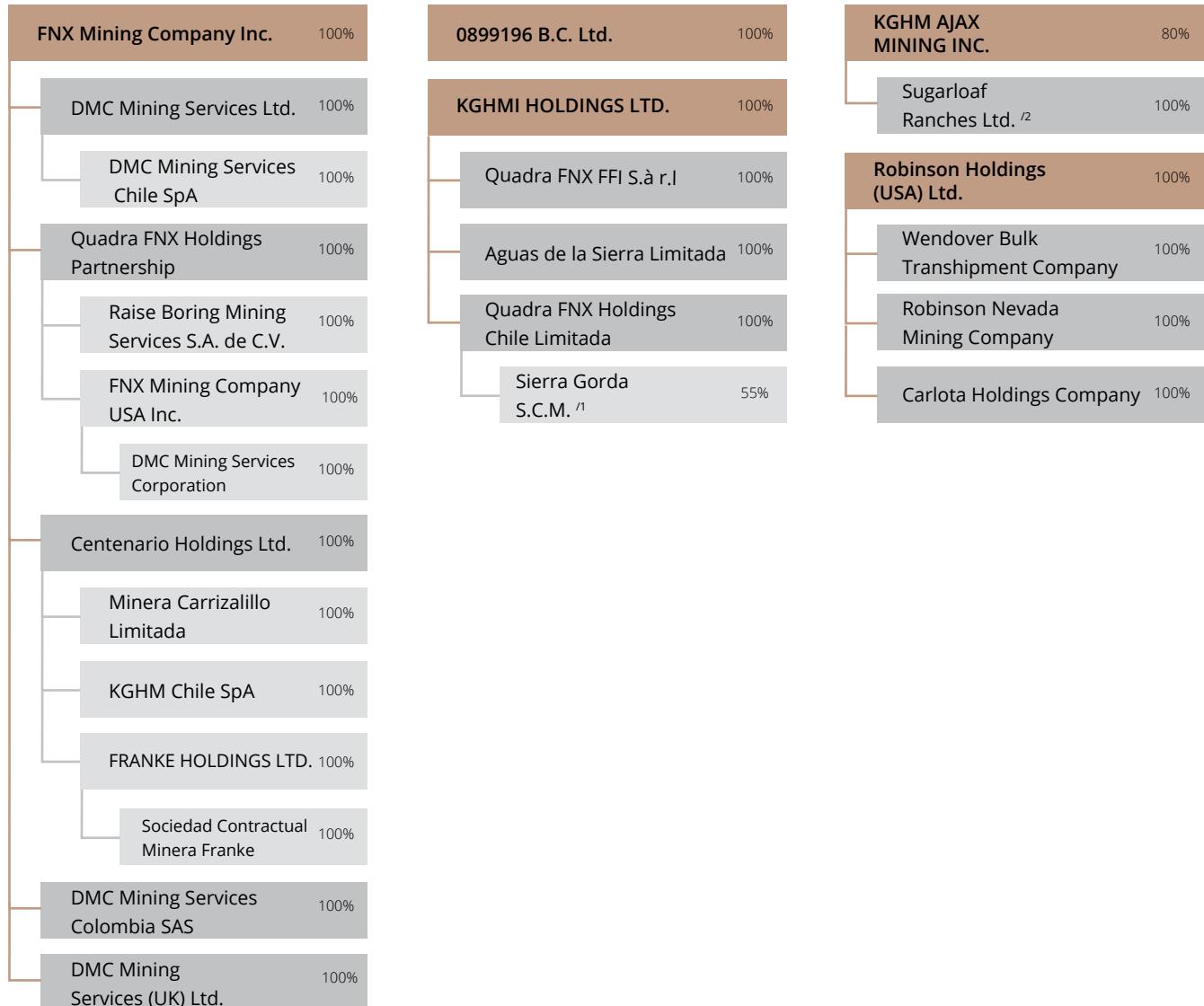
including the position of KGHM Polska Miedź S.A. as the Parent Entity  
and its stakes in each company GRI 102-45



1/ joint venture accounted for using the equity method

2/ unconsolidates subsidiary

# Organisational structure of the KGHM International Group



1/ joint venture accounted for using the equity method

2/ actual Group's stake: 80%

# Organisational culture of the KGHM Polska Miedź S.A. Group

In order to ensure an optimal model for managing and supervising the business processes of the KGHM Polska Miedź S.A. Group, particularly in the context of its rapid development in recent years, the process of establishing a new corporate governance framework relying on systemic legal and corporate solutions was carried out. The project was based on the KGHM Group's values and the need for having in place a set of formal and legal regulations governing the principles of cooperation within the KGHM Polska Miedź S.A. Group. On this basis, the Code of the KGHM Polska Miedź S.A. Group was adopted.

The following are some of the benefits arising from having the Code in place:

- ▶ Ensuring effective monitoring of key business decisions made by each company.
  - ▶ Ensuring the implementation of unified standards in the companies.
  - ▶ Elevating the level of security of the activities carried out by corporate authorities.
- In 2019 there were no material changes introduced to the Management Rules of 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.
- ▶ Outlining the legal basis for a joint strategy of all members of the KGHM Group, making it possible to base the strategy of each subsidiary on the Strategy of KGHM Polska Miedź S.A. and forcing the requirement to maintain consistency.
- ▶ Harmonizing the interests of each company with that of the KGHM Group as a whole.
- ▶ Streamlining management in various business areas.
- ▶ Integrating the KGHM Group's operating rules, e.g. in terms of information transfer, reporting, etc.

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.



# Ethical standards

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KGHM is a company with nearly 60 years of history, operating on the basis of deeply rooted values and principles which its Employees follow in their daily work. Zero harm, teamwork, results driven, accountability and courage – these values bind all of KGHM's employees, regardless of whether they work in a mine, processing plant or smelter, in Poland or in other

parts of the world. KGHM builds its global position in the world as a reliable producer, trusted business partner and a company pursuing a sustainable development policy.

## Key Ethical Standards translating into principles of conduct in KGHM Polska Miedź S.A.

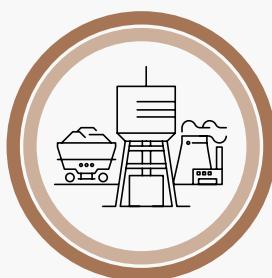
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1



WHAT IS GOOD  
FOR THE PEOPLE

2



WHAT IS GOOD  
FOR THE COMPANY

3



WHAT IS GOOD  
FOR OUR STAKEHOLDERS

Human capital is our crucial and most important resource and as such people are subject to special protection and are at the centre of attention of the Company's corporate bodies. KGHM Polska Miedź S.A. aspires to create an organizational culture whose cornerstone is cultivating relations predicated on absolute respect for employees' dignity and personal rights regardless of their place of work and professional status.

We take care of the KGHM Polska Miedź S.A. Group's good by striving for securing the stable development of individual Companies and ensuring the process continuity and by mitigating the risk of losses.

A good relationship with stakeholders based on mutual understanding and trust are of crucial importance to KGHM Polska Miedź S.A. as an organisation exerting a significant impact on its economic, social and natural environment.

The fundamental Ethical Standards are implemented through the principles of ethical conduct, which are described in the diagram below:

## Division of ethical conduct rules

### WHAT IS GOOD FOR THE PEOPLE



We are all jointly responsible for our own safety as well as that of our workplace.



In KGHM Polska Miedź S.A. we do not tolerate abuse



We shape high employer-employee standards.



In KGHM Polska Miedź S.A. we create an environment and workplace free of discrimination.



Teamwork is the foundation of success.

### WHAT'S GOOD FOR THE COMPANY



We ensure compliance with Company rules and regulations.



We strive for information security, we protect personal data.



We avoid conflicts of interest.



We apply the principle of "Zero tolerance for corruption."



We accept responsibility for the quality of our products and services.



We accept responsibility for our impact on the environment.



We take care of our Company's property, we manage it honestly.

### WHAT'S GOOD FOR OUR STAKEHOLDERS



We are committed to the sustainable development of our world.



We develop relationships with our external partners based on transparency, honesty, trust and professionalism.



In relations with our shareholders we follow the tenets of Best Practice on the Warsaw Stock Exchange.



We engage in partnerships with renowned domestic and international organisations.

The communication and implementation of Ethical Standards in KGHM Polska Miedź S.A. is facilitated by a system of codes, policies and procedures, introduced and maintained by appropriately trained Ethics and Anticorruption Representatives and Ethics Committees. Their implementation satisfies global corporate governance standards as well as the increasing expectations of our stakeholders, includ-

ing our clients and financial institutions. In accordance with the best corporate governance practices, we have adopted the following principles, policies and instructions, which introduce global, unified standards adapted to the laws applicable in all jurisdictions in which the KGHM Polska Miedź S.A. Group operates.

# Competition Law Policy in the KGHM Polska Miedź S.A. Group

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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.

## Anticorruption Policy in the KGHM Polska Miedź S.A. Group

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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.

## Responsible Supply Chain Policy in the KGHM Polska Miedź S.A. Group

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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, tungsten 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.

## Security Policy in the Group

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The Security Policy sets forth common principles and goals for the entities and organisational units of the KGHM Group related to security and loss prevention. 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, shared responsibility for security and loss prevention 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 [GRI 102-16](#) 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. The Procedure regulates the management of the risk of conflict of interest. The Business Gifts Instruction constitutes an integral part of it.

In 2019, the KGHM Group adopted a Security Policy that establishes the common rules and objectives for entities and organizational units of the KGHM Group relating to security and loss prevention. KGHM's domestic and international entities also adopted a procedure for reviewing business partners in procurement, sales and investment proceedings, which sets out consistent and uniform rules for reviewing the performance of counterparties in connection with the processes of procurement, sales and investment.

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 security and loss prevention 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 Whistleblowers 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 detecting and resolving situations related to the occurrence of irregularities, which represent 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 for Counteracting the Threat of Corruption.

In 2019, an additional channel for whistleblowers was implemented – the "KGHM Ethics Line" [GRI 102-17](#) 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 Security and Loss Prevention Section of KGHM Polska Miedź S.A. was implemented. Audits conducted by the Security and Loss Prevention 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.



In 2018, KGHM Polska Miedź S.A. started the implementation of a global Security and Loss Prevention System in the KGHM Polska Miedź S.A. Group.

The system is designed to protect the employer's interest by preventing acts that expose the company to material loss and reputational harm, as well as by the optimization of expenses and investments, which generates savings for the KGHM Polska Miedź S.A. Group. The key elements of the system include:

- ▶ defined procedures and control mechanisms,
- ▶ standardisation of procedures and processes in the aforementioned area across the KGHM Group,
- ▶ effective prevention of abuse that can lead to losses for the KGHM Group.
- ▶ effective detection of committed abuse, inspection and control activities and implementation of corrective counteracting corruption, and
- ▶ improving the ethical awareness of employees.

The Security and Loss Prevention Section in the KGHM Polska Miedź S.A. Head Office is responsible for the implementation, functioning and oversight of the system. Currently, the Section is made up of two Departments:

1. the Security Department, comprising, among others, the Ethics and Anticorruption Procedures Unit, the Security and Loss Prevention Unit, and the Physical and Technical Security Unit.
2. The Supply Chain Security Department, consisting of the Supply Chain Monitoring Unit and the Analyses Unit.

In 2018, Ethics and Anticorruption Representatives were appointed in the Divisions and the Polish and international subsidiaries of the KGHM Group. Their work is monitored, supervised and coordinated by the Ethics and Anticorruption Representative for the KGHM Group (as per the applicable procedure, the function is discharged by the Director of the KGHM Security Department).

In 2019, security and loss prevention units were established in KGHM Polska Miedź S.A. Divisions and in seven companies in Poland selected on the basis of their level of expenses and domestic threats. The unit heads are responsible for implementation and supervision over the security and loss prevention system, ethics and anticorruption procedures, supply chain security and physical and technical security. They report to the Executive Director for Security and Loss Prevention in KGHM Polska Miedź S.A.

Since 2017, regular anticorruption training has been organised for the employees of all KGHM entities. In 2018, a specialised training course was carried out, addressed to senior management and their representatives (40 people). All materials and instructions are readily available to Employees through the internal corporate Intranet, via a dedicated tab, devoted to the issues of ethics and anticorruption.

In 2019, on-site training on anticorruption was conducted by an expert from the Central Anticorruption Bureau for persons in managerial and executive positions as well as persons responsible for the procurement processes in companies in the KGHM Group. 5 training courses were held in total, attended by 143 persons.

Regular meetings and training sessions are organised for the Ethics and Anticorruption Representatives (40 persons). In 2019, 3 such sessions were held. The objective was to improve the abilities of the Representatives and to share knowledge. The Representatives are responsible for the organisation and performance of training sessions on ethics and anticorruption in KGHM's companies.

In 2020, KGHM Polska Miedź S.A. launched two e-learning training modules on ethics, prevention of irregularities (in particular, corruption, abuse, and discrimination) and receiving whistleblower reports in its Head Office and Divisions:

In 2020, KGHM Polska Miedź S.A. launched two e-learning training modules on ethics, prevention of irregularities (in particular, corruption, abuse, and discrimination) and receiving whistleblower reports in its Head Office and Divisions:

- 1.** for senior management, the Ethics and Anticorruption Representatives and Members of the Ethics Committee (695 persons).
- 2.** for the remaining employees with access to the e-learning platform (5818 persons).



In 2019, a number of communication activities were also carried out, addressed to the employees of the KGHM Group, promoting ethical standards and contributing to the culture of the organization:

- ▶ 5 educational films on the Code of Ethics, abuse prevention, the Whistleblower Platform and protection of Whistleblowers, rules of acceptance and giving of business gifts, as well as corruption prevention were broadcast,
- ▶ 6 articles on the related topics were published in Curier,
- ▶ a special supplement focusing on Whistleblowers was published in Curier,
- ▶ the updated Anticorruption Manual was published in an electronic version,

## The Code of Ethics of the KGHM Polska Miedź S.A. Group

The primary document of the Security and Loss Prevention System of the KGHM Group is the KGHM Polska Miedź Code of Ethics, the amended and extended version of which was adopted pursuant to the Resolution of the Management Board of KGHM Polska Miedź S.A. in June 2018. Hence the frequent reference to the Code in this document.

The KGHM Group's Code of Ethics is based on the aforementioned values and constitutes a guidepost for all the decisions and actions taken in the Parent Entity and the KGHM Polska Miedź S.A. Group. There are supporting acts regulating the areas of: prevention of corruption, prevention of conflict of interests, security and transparency of procurement processes, verification of external counterparties and prevention of employee rights violations, including discrimination and abuse. The KGHM Group's Code of Ethics is a collection of rules applicable to the employees of the Parent Entity, the KGHM Group and cooperating entities. It is one of the pillars of KGHM's organisational culture, which is deeply rooted in the mining and metallurgical traditions. They constitute the genetic code of our community, building its professional identity.

The KGHM Group's Code of Ethics aims to ensure that the employees follow the highest standards based on the adopted values. The status of a global leader and international corporation obligates us to keep the highest business ethics standards. It is also related to the challenges resulting from the richness of national cultures within which we operate.

## KGHM Polska Miedź S.A. Code of Conduct

In keeping with current business practice, including in the mineral resource industry, our business partners, suppliers, customers and Stakeholders expect companies to have clearly declared ethical regulations.

In June 2018, the Management Board of KGHM Polska Miedź S.A. adopted the KGHM Polska Miedź S.A. Code of Conduct. By doing this, the Company declared its orientation towards sustainable development, based on respect for ethical principles, transparency and best industry practice, and commitment to being a socially and environmentally responsible enterprise. The Code of Conduct is based on the KGHM Group Code of Ethics. Both documents regulate behaviour standards by which the Company is guided. The Codes are an integral, mutually interconnected whole, based on consistent assumptions and values followed by the Company.

The Code of Conduct is a powerfully practical document. Its purpose is to be a guide and support for the employees, showing where to look for answers and who to approach if in doubt about decisions made in everyday situations. The Code of Conduct provides an easy to understand presentation of the Company's values for all employees, regardless of their position.

The Code of Conduct is a product of efforts in several parallel areas. On the one hand, a benchmarking analysis of similar competitors' documents was carried out. The top 10 copper producers worldwide were analysed to see if they apply a Code of Conduct and what scope is covered. On the other hand, an internal analysis of the Company was performed. The normative acts in effect at KGHM were catalogued, and

those of special importance from the perspective of the future Code of Conduct were selected. Those which might provide the employees with the instructions on how to proceed in a number of everyday situations were selected in agreement with the relevant organisational units. Finally, consultations with senior management made it possible to establish the ultimate Code of Conduct.

The adoption and functioning of the Code of Conduct and the Code of Ethics was presented to KGHM Polska Miedź S.A.'s employees both via the internal portal (intranet: "KGHM to My" at [extranet.kghm.com](http://extranet.kghm.com)), as well as distributed with monthly payment slips. The Codes are distributed in the printed version during training sessions held by the Ethics and Anticorruption Representatives in all Divisions and Companies of the KGHM Polska Miedź S.A. Group. The Code of Conduct and the Code of Ethics are published for the general audience on [www.kghm.com](http://www.kghm.com), in the Investors/Corporate Governance/Code of Ethics tab <https://kghm.com/en/investors/corporate-governance/code-ethics>

## Ethics Committees in the KGHM Polska Miedź S.A. Group

Every KGHM Group Entity establishes an Ethics Committee. The primary task of the Committee is to conduct investigations in response to reports on irregularities consisting in violation of the ethical standards defined in the Code of Ethics, and to recommend corrective and disciplinary actions to the workplace manager.

A report can be filed by:

- ▶ Every Employee who has been harmed by actions described in the list of issues reportable to the Ethics Committee;
- ▶ Every person who has witnessed actions described in the list of issues reportable to the Ethics Committee.

The list of issues reportable to the Ethics Committee is as follows:

- ▶ Actions displaying features of abuse, discrimination, harassment or other type of unequal treatment of the Company's employee or a group of employees;
- ▶ Breaches of employee duties arising from the Labour Code as well as internal regulations of a given KGHM Group Entity, regardless of the position held;
- ▶ Breaches of the rules of community life;
- ▶ Improper performance of professional duties;
- ▶ Unethical behaviour towards other employees and third persons in the work place and outside of the working hours;
- ▶ Exposing the good name of the Company to harm.

## The Procedure of Disclosing Irregularities and Protection of Whistleblowers in the KGHM Polska Miedź S.A. Group

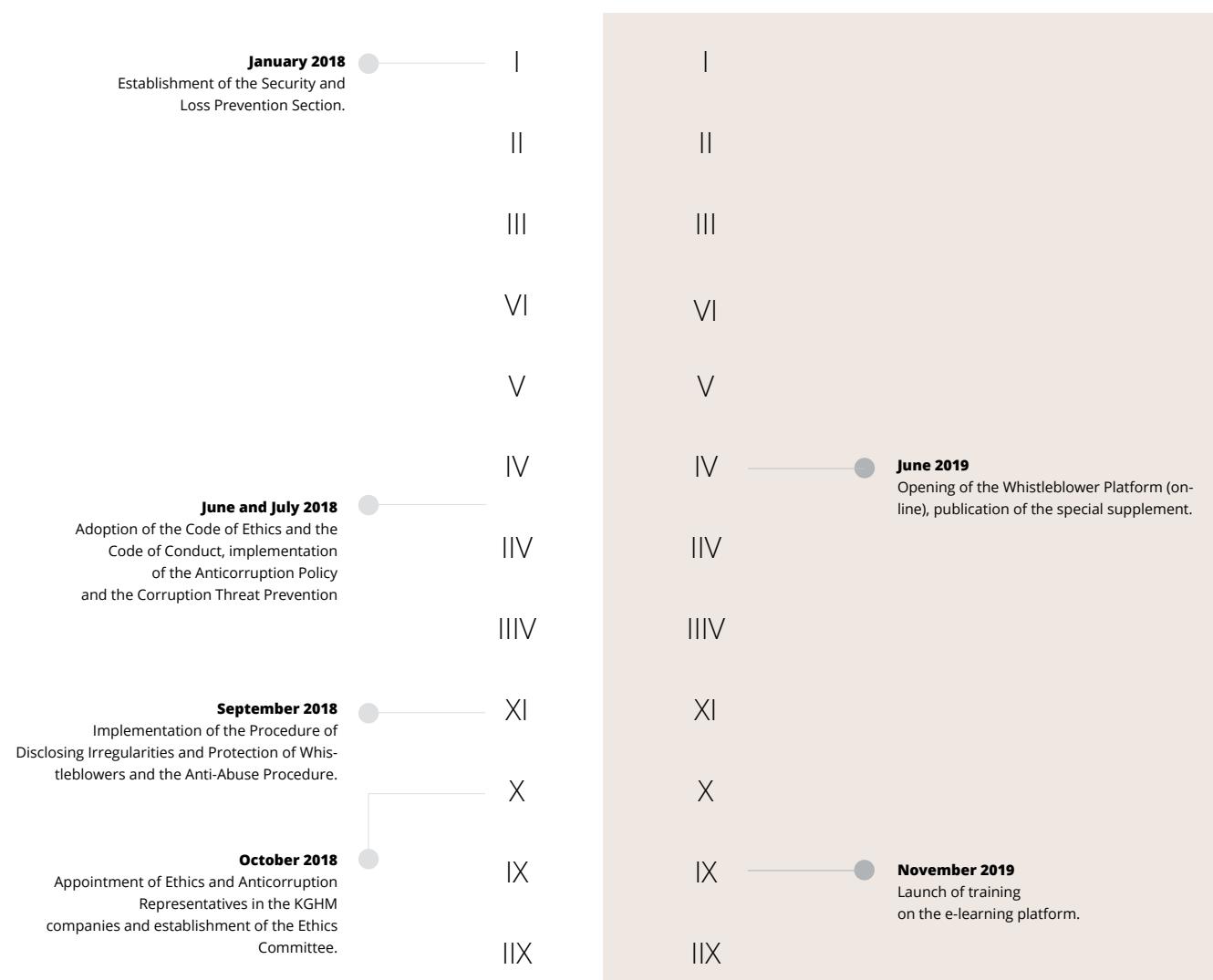
In order to enable effective detection of breaches, confidential channels for reporting of irregularities by so called Whistleblowers have been created, both within the company, as well as from outside of its organisation. Persons who report irregularities and who do so in good faith and non-anonymously (Whistleblowers) are protected under the KGHM Group Procedure of Disclosing Irregularities and Protection of Whistleblowers. Anonymous reports are also accepted and followed up. The channels allow reporting without disclosing one's personal details.

In 2019, the KGHM Group Procedure of Disclosing Irregularities and Protection of Whistleblowers was updated, account being taken of the requirements of the amended Act on public offering, conditions governing the introduction of financial instruments to organised trading, and 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 for 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.

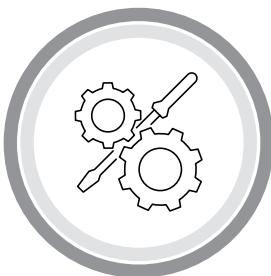
The chart below shows the growth of Whistleblower reports in the period 2018–2019, with events that affected the result marked on the timeline:

## Growth of Whistleblower reports in the period 2018–2019



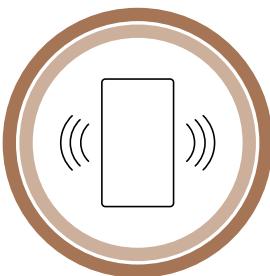
# Chart depicting the course of action in the event of a violation of ethical principles

1



Have you witnessed a violation of ethical principles in our company?

2



Report that fact to your superior or utilise a confidential communication channel.

3



Our employees will take the appropriate measures while observing complete discretion.

## Anticorruption Policy in the KGHM Polska Miedź S.A. Group

The Anticorruption Policy in effect in the KGHM Polska Miedź S.A. Group was adopted in July 2018, pursuant to the Resolution of the Management Board of KGHM Polska Miedź S.A. The Policy establishes detailed standards of conduct in corruption-prone situations and identifies the criminal liability in case of abuse. The KGHM Polska Miedź S.A. Group underscores its commitment to fighting corruption in business, by way of adoption and uncompromising observance of the "zero tolerance for corruption and bribery" rule. Employees are prohibited from offering or accepting any material benefits in relation to the performance of professional duties.

The only exception is giving and accepting business gifts in line with the local norms and cultural customs, provided that the giving and accepting of gifts cannot lead to a situation in which such behaviour could be considered as an attempt to exert pressure or persuade the recipient to act against their duties. Detailed rules pertaining to giving and acceptance of customary business gifts have been defined as an instruction under the Corruption Threat Prevention Procedure. Employees are required to avoid any actions or decisions in a situation of a conflict of interests. Particular control under the Policy is over business procurement transactions, including an option of a third party audit, in order to ensure that such transactions meet the highest standards of ethical and transparent business operations. The KGHM Polska Miedź S.A. Group Entities and their Employees may be held accountable for actions of persons or entities acting on their behalf or for them.

The Policy also states that the Group Entities and their representatives are obliged to observe all statutory provisions, guidelines of administration bodies and other state authorities, as well as domestic and international legal acts designed to fight corruption. The Policy also states that KGHM Polska Miedź S.A. and the Group Entities and cooperating entities are obliged to follow international legal acts designed to fight

corruption, e.g. the U.K. Bribery Act of 2010, the U.S. Foreign Corrupt Practices Act, Canadian Corruption of Foreign Public Officials Act of 1999 and guidelines contained in international agreements, e.g. the OECD Convention or the guidelines of UN Global Compact as regards responsible business and fight with corruption.

The document stipulates that Employees of the Group and external partners are obliged to report any suspicion of breaches to the Policy and the Corruption Threat Prevention Procedure, directly to the Security Department of KGHM Polska Miedź S.A. or via the dedicated channels of reporting irregularities. Every report is confidential and followed up with due diligence. The KGHM Polska Miedź S.A. Group uses a range of tools to effectively implement the Policy's objectives, including first of all procedures, instructions, remedies and control mechanisms, which specify in detail the standards of conduct in corruption-prone situations and situations in which accountability for abuse may be involved.

The Group's employees and its representatives are obliged to follow and apply both the Anticorruption Policy as well as the accompanying documents referred to above, in particular the Corruption Threat Prevention Procedure.

## Corruption Threat Prevention Procedure in the KGHM Polska Miedź S.A. Group

The Procedure was adopted in July 2018 in accordance with a Resolution of the Management Board of KGHM Polska Miedź S.A. The provisions of the Corruption Threat Prevention Procedure are applied in order to minimize the risk of corruption and limit any corruptive practices that may arise in connection with the operations of the KGHM Group. The Procedure further elaborates on the provisions of the KGHM Group Anticorruption Policy. The rules defined in the Procedure are addressed to all Employees, as well as Representatives, and are applicable in contacts with clients, counterparties and State authorities. The Procedure stipulates precisely the proper manner of conduct, remedies and control mechanisms, which together with other regulations of the Policy make up the Corruption Threat Prevention System. The KGHM Group's employees and its representatives are obliged to observe all statutory provisions, guidelines of government bodies and other State authorities, as well as legal acts of the relevant organisations, of which a given KGHM Group Entity is a member, related to anticorruption rules and actions. Employees are familiarised with the content of the Anticorruption Policy and the Corruption Threat Prevention Procedure at the time of hiring and periodically, as part of classroom and e-learning training courses.

The Security Department Director plays the role of the Ethics and Anticorruption Representative in the KGHM Group and is responsible for supervision of the implementation of and compliance with the Procedure. The Ethics and Anticorruption Representatives were appointed in the Polish and international subsidiaries, the KGHM Polska Miedź S.A. Head Office and the KGHM Polska Miedź S.A. Divisions in order to monitor the implementation of the anticorruption regulations.

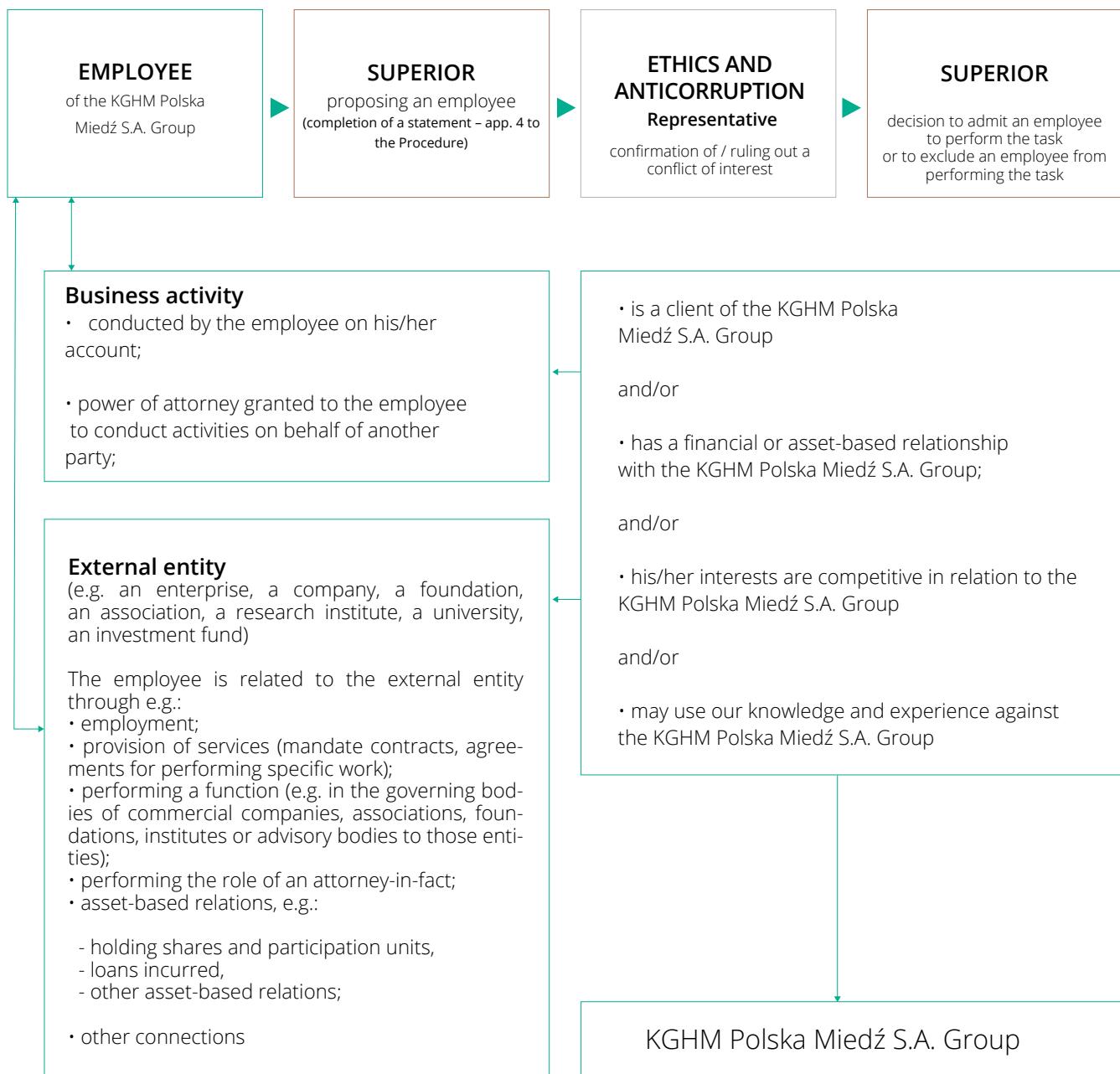
Undertaking, participating in, promoting, and inciting to any kind of corruptive actions is strictly forbidden.

In the KGHM Polska Miedź S.A. Group, corruptive action is in particular:

- ▶ bribery;
- ▶ influence peddling;
- ▶ unacceptable preferential treatment – an action leading to putting a counterparty, product or service
- ▶ in a privileged position, extended against the interests of the KGHM Group, in return for providing, or a promise to provide, material benefit;
- ▶ abuse of authority;
- ▶ negligence;
- ▶ receipt of benefits;
- ▶ receipt of a promise;
- ▶ making performance of a professional duty conditional;
- ▶ demand of benefits;
- ▶ conflict of interests;
- ▶ nepotism;
- ▶ cronyism;
- ▶ thwarting or impeding a public tender.



# The algorithm for reporting conflicts of interests, including a list of situations that may lead to a conflict of interests



\* other connections – family and social connections

## Procurement Policy of the KGHM Polska Miedź S.A. Group

KGHM Polska Miedź S.A. is guided by high ethical standards across the procurement process. The Code's main message is to guarantee the professionalism and honesty of the persons responsible for the procurement processes. The document also contemplates issues such as preventing conflicts of interest as well as equal treatment of suppliers to ensure compliance with the principles of fair competition.

The procurement procedures in effect in KGHM are precisely defined in the Procurement Policy and business partners are selected in accordance with the principle of equal treatment.

### Information on the procedure for counteracting money laundering and prevention of fraud and extortion in trading transactions regarding the sale of products and the procurement of ore and copper-bearing materials in KGHM Polska Miedź S.A.

KGHM uses a diverse range of external counterparty verification in the procurement, sales and investment processes, which are regulated by a number of consistent and uniform internal policies and procedures. This procedure covers verification methods used for the purposes of trading transactions.

To protect its image and the Company's security, KGHM takes measures to prevent the Company from being used by third parties for unlawful purposes, such as money laundering, financing of terrorism, or VAT extortion.

The security measures undertaken in this respect consist of:

- ▶ Client identification and verification of its identity based on the data provided by the Client, publicly available information and/or reports of credit bureaus;
- ▶ undertaking, with due diligence, actions to determine the Client's ownership and organizational structures

In tender documentation, the Company reserves the right to audit its suppliers and to assess their activities in terms of compliance with human rights and regulations governing the hiring of minors. External entities are also checked in order to secure the interests of KGHM, in the context of money laundering, breaches of fair competition rules, prevention of conflict of interests, etc.

## **Procurement Process Control Instruction of the Supply Chain Security Department of the KGHM Polska Miedź S.A. Group**

The Instruction has been issued as an Appendix to the Internal Control Procedure of the Security and Loss Prevention Section of the KGHM Polska Miedź S.A. Group. Pursuant to the Organisational Regulations of KGHM Polska Miedź S.A., tasks of the Supply Chain Security Department include: control of the transparency of procurement processes, monitoring of procurement processes with increased risk of abuse and control of completed procurement processes – if abuse is suspected – to verify the correctness of those processes and detect corruption threats.

The document regulates a detailed scope of activities of the Supply Chain Security Department, resulting from the afore-

listed tasks, and incorporating the stipulations of the KGHM Polska Miedź S.A. Procurement Policy. The Instruction also applies to procurement excluded from the Procurement Policy which has not been regulated in other internal Company acts – to the extent allowed by the unique specificity of individual procurement processes. For procurement excluded from the Procurement Policy which is regulated by other internal Company acts, the control activities proceed in accordance with those acts.

## **Anti-Abuse Procedure of the KGHM Polska Miedź S.A. Group**

The Procedure was adopted in accordance with the Resolution of the Management Board of KGHM Polska Miedź S.A. in September 2018. The objective of the Procedure is to prevent abuse at work, by way of implementation of a prevention system and definition of a procedure to be followed if abuse does occur. The procedure is designed to build and enhance an organisational culture based on good interpersonal relations between and among employees.

The procedure describes a catalogue of actions designed to prevent abuse, actions to be taken if abuse does occur, and defines obligations of the employer and employees in this respect. The Procedure applies to all employees of the KGHM Polska Miedź S.A. Group, regardless of the type of contract or position held. Every employee who believes they have experienced abuse or have witnessed behaviour displaying features of abuse, has the right to lodge an Abuse Report. An Abuse Report is lodged in a process defined in the Procedure of Disclosing Irregularities and Protection of Whistleblowers, using dedicated channels, subject to the stipulation that in this case the personal details of the reporting employee, the employee/employees who may have been subjected to abuse and the employee/employees who have committed actions or behaviour displaying the features of abuse, must be disclosed. The case is examined by the Ethics Committee of the relevant entity of the KGHM Group.

Employees are familiarised with the content of the procedure at the time of hiring and periodically, as part of classroom and e-learning training courses.

Compliance with the Procedure is supervised by the work place manager, who is also responsible for the appointment of the Ethics Committee members. The Committee carries out the proceedings related to abuse initiated on the basis of an Abuse Report. The Ethics and Anticorruption Representative plays an important role in counteracting abuse. The Ethics and Anticorruption Representative conducts preventive actions, including organisation of training for Employees, participates in investigation of the abuse reports, is responsible for receiving the reports and initiating further proceedings in accordance with the Procedure of Disclosing Irregularities and Protection of Whistleblowers. A number of abuse reports that have been examined by the Ethics Committee pertained mostly to conflicts at the work place. Early detection of such cases, possible thanks to the solutions implemented by KGHM, has helped to avoid escalation and prevented occurrence of abuse.

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## Personal Data Protection Policy in KGHM Polska Miedź S.A.

In 2018, the Management Board of KGHM Polska Miedź S.A. adopted a Personal Data Protection Policy. The Policy lays down the rules of processing and securing personal data in KGHM Polska Miedź S.A., pursuant to Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation, hereinafter: GDPR). The Policy has been adopted to ensure that data processing in KGHM proceeds in compliance with the GDPR and other personal data protection regulations, and to be able to demonstrate this compliance. The Policy is subject to reviews and updates, in keeping with the rules laid down therein. Under the Policy, the object of protection is personal data, processed in IT systems, as well as recorded otherwise on media, including paper form and electronic media. The places where personal data is so processed must be secured in a manner defined by the Policy. The Policy applies to all the personal data processed in KGHM for the purposes of the Company's activities.

Employees are familiarised with the content of the procedure at the time of hiring and periodically, as part of classroom and e-learning training courses.

Compliance with the Procedure is supervised by the work place manager, who is also responsible for the appointment of the Ethics Committee members. The Committee carries out the proceedings related to abuse initiated on the basis of an Abuse Report. The Ethics and Anticorruption Representative plays an important role in counteracting abuse. The Ethics and Anticorruption Representative conducts preventive actions, including organisation of training for Employees, participates in investigation of the abuse reports, is responsible for receiving the reports and initiating further proceedings in accordance with the Procedure of Disclosing Irregularities and Protection of Whistleblowers. A number of abuse reports that have been examined by the Ethics Committee pertained mostly to conflicts at the work place. Early detection of such cases, possible thanks to the solutions implemented by KGHM, has helped to avoid escalation and prevented occurrence of abuse.

The duty to protect personal data processed by KGHM and to apply the Policy covers all persons with access to personal data, regardless of their position, place of work and type of employment relationship. Every person about to have access to personal data may process the data exclusively based on an authorisation (delegation). All persons having access to personal data are obliged to familiarise themselves with the Policy and other related documents, and to apply the provisions thereof.

The Policy is consistent with other internal regulations regarding security of information and IT systems applicable in KGHM. Updates to the Policy are supervised by the Data Protection Officer of KGHM Polska Miedź S.A.

## **Procedure for Verification of Compliance with the Ethical Principles of KGHM Polska Miedź S.A.**

As a socially responsible company, KGHM Polska Miedź S.A. applies due diligence procedures. In doing so, it attaches importance not only to respect for human rights, lawful terms of employment, environmental norms, freedom of establishing trade unions, compliance of operations with generally applicable laws, no child labour and no extraction of production raw materials from conflict sources (the so-called conflict minerals) but also wants to cooperate with business

partners who share these values. For this reason, KGHM's customers and suppliers are obligated to declare in writing their compliance with the aforementioned principles, by signing the so-called Customer Card and Supplier Card, which is an important factor of the business decisions on undertaking cooperation with the given partner.

## **Internal Audit Rules (for Ethics) in KGHM Polska Miedź S.A.**

The Internal Audit Department follows the international internal audit standards. The standards cover 14 areas, with ethics being one of them.

When performing internal audit tasks, the risks of potential fraud, conflict of interests or other activities which are not compliant with the Code of Ethics and other internal regula-

tions are analysed. Any areas with increased risk of unethical behaviour are consistently identified and taken into account in the development of the annual audit plan.

## **Internal Control Procedure of the Security and Loss Prevention Section of KGHM Polska Miedź S.A.**

The purpose of the Procedure is to define consistent and uniform rules for conducting Internal Control by the Security and Loss Prevention Section.

The Procedure defines how the Control Process is performed by the Section's units, defines and assigns roles in the Control Process, delineates the framework of cooperation of its participants, as well as lists the scope of activities to be per-

formed in the Process. The scope of control carried out by the Security and Loss Prevention Section includes identification and detection of fraud, irregularities, malpractice, corruption, abuse, breaches of the Code of Ethics in the Group, as well as threats related to IT and information security.

# People and the environment

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# Investments and their impact on local communities

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Our investments are a very important element of economic growth and their implementation contributes to the improvement of living and working conditions of local communities. We provide stable employment to more than 34 thousand people on four continents: in Europe, South America, North America and Asia.

The Management Board of KGHM has been pursuing the sustainable development policy for years, among others by cooperating with municipalities in the Copper Basin in their development strategies, supporting their growth through payment of taxes or hiring residents of local communities. It has also entered into several social agreements whose purpose is to increase the living standards of residents. The Company's representatives participate in meetings and sessions of City and Town Councils, and in events organized by local governments. Every year, mayors of municipalities, towns and cities participate in festivities organized to commemo-

rate the Miner's Day and the Metallurgy Worker's Day. The Parent Entity sponsors events organized by municipalities; it provides support from the KGHM Polska Miedź Foundation's budget to cover the costs of children's summer and winter day camps, school field trips and outings to a swimming pool. Our investments are a very important element of economic growth and their implementation contributes to the improvement of living and working conditions of local communities. We provide stable employment to more than 34 thousand people on four continents: in Europe, South America, North America and Asia.

In November 2019, KGHM and local officials talked about projects to support the Copper Basin. The meeting was attended by representatives of 21 local governments from the Copper Basin as well as KGHM representatives, Marcin Chludziński, President of the Management Board, and Adam Bugajczuk, Vice President (Development). They talked, among others, about the ramifications of the demographic crisis and its impact on specific programs to be implemented in the following year.

*– There is strong scientific evidence that a good family situation and positive family ties translate into harmonious development of all its members: children, youth, adults and seniors. This is why, feeling responsible for the Copper Basin, we are investing in pro-family programmes. They do not only benefit our company and employees, but also the entire community, which we are happy about – said Marcin Chludziński, President of the Management Board of KGHM Polska Miedź S.A.*

The social trends and their development are incorporated in the strategy pursued by the copper giant as one of the key aspects that has significant influence on the company's surroundings.

*– We believe it is very important, in the period of such dynamic changes in the society, to adjust the activities targeting beneficiaries of social programs. We support hundreds of projects, both financially and through volunteerism. We do not want to be seen solely as a financial partner, but as a good neighbour for our local governments, we want to be able to affect the form of our aid – said Lidia Marcinkowska-Bartkowiak, Executive Director for Communication at KGHM.*

*– Local governments are important partners in social dialogue. During the meetings, we are able to work on solutions together and plan social actions that will suit the needs of the residents of our region*

*– said Adam Bugajczuk, Vice President (Development) of KGHM Polska Miedź S.A.*

Only in October 2019, two municipalities, Legnica and Głogów, received donations from KGHM in the total amount of PLN 600 thousand. In both cities, the money was allocated to the support for health and social programmes.

KGHM also pursues the "Good neighbour" policy abroad, in the communities surrounding its facilities in Chile, the USA and Canada.



It has successfully conducted a dialogue with municipalities of the Sierra Gorda Copper Basin in Chile in connection with the extension of the company's mining concessions and mitigation of the impact of the investments on life and health of the local community.

KGHM has been consistently developing cooperation with local business. We are a stable partner caring for the highest standards in relations with business partners. We are fully aware of the significant influence of our activities on the local economy and community. This is why we conduct an ongoing analysis of the regional market, which produces regularly updated lists of eligible suppliers and manufacturers that meet our requirements. We also regularly monitor customer satisfaction levels. This allows us to improve the existing procedures and increase the transparency of our cooperation

with businesses, also with respect to ethical values important for our company. The numerous measures we take to ensure safety and professional growth of our employees and collaborators go far beyond the existing legal requirements. Through transparency of all processes, we are not only a friendly neighbour to the community that gives us a "license to operate" but also a trustworthy partner for investors.

### Business breakfasts of the KGHM Management Board with local government representatives from the Copper Basin



KGHM Polska Miedź S.A. cooperated with the Association of Employers Polish Copper to organize two business breakfasts in 2019, attended by the Management Board of KGHM and representatives of local government authorities from the Copper Basin. The first breakfast was devoted to the "Social Strategy of Local Government" and was held on October 2nd and the other one, "Social Programs for the Copper Basin in 2020" on November 7th.

In a period of dynamic changes in society, businesses and local governments adjust their activities targeting beneficiaries of social programs. KGHM supports hundreds of projects, both financially and through volunteerism. As a financial partner and a good neighbour of local governments, KGHM wants to influence the form such assistance, so it initiates discussion on the joint actions.

During both meetings, the parties developed the solutions and social activities planned for 2020, which will match the needs of the residents of the Copper Basin region.

action within the framework of social dialogue

## Cooperating with local communities in the KGHM Polska Miedź S.A. Group.

In terms of cooperation in the expansion of the Żelazny Most Tailings Storage Facility to include the Southern Quarter, KGHM continued cooperation under the Agreements with the Rudna and Grębocice Municipalities - calling for the transfer of funds in 2019 to perform co-funding tasks in the following areas: recreation for children, healthcare, spa treatment for adults, revitalization of parks and recreational areas, cleaning ditches, securing rivers, protecting soil and crops against the harmful impact exerted by industry and protecting cultural heritage. The agreement with the Polkowice Municipality was continued calling for cooperation in the following areas: organizing and co-funding summer and winter recreation for children and youth, healthcare, protecting soil and crops, identifying alternative heating solutions, wider Internet access and improving mobile telephone coverage, supporting the preparation of recruitment processes conducted by KGHM and safeguarding the community directly adjacent to the Żelazny Most Tailings Storage Facility.

The agreement with the Żukowice Municipality on the construction of the GG-2 shaft was also continued. In October 2018, a Memorandum of Agreement was signed in which, in addition to financial resources for the development of the municipality, KGHM provides health care and recreational cards to residents.

In 2019, numerous meetings with Mayors of cities, towns and municipalities and councillors from the Copper Basin were held, also in the form of business breakfasts between the KGHM Management Board and local government authorities, where the role of cooperation between KGHM and local governments for building a strong brand of the region, the Company's actions on behalf of environmental protection, electromobility, power engineering, and sponsorship initiatives were presented. In May 2019, KGHM organized a conference with local governments with the aim to explain the budget creation mechanisms and the budgeting rules at the local government level. The issue of electromobility was taken up at the conference for local governments held in November.

The Electromobility Development Program is one of the key areas defined in the Responsible Development Strategy. From the viewpoint of local government units, the effect is improved quality of residents' life as a result of, among others, air pollution and noise reduction as well as better availability and comfort of transport. A Letter of Intent, where KGHM and local government units expressed their

wish to commence cooperation for the development of electromobility in the Copper Basin region, was signed at the conference.

Bearing in mind the successful cooperation between KGHM Polska Miedź S.A. and the local governments of the Copper Basin to date, actions for health, ecology and healthy lifestyle promotion for residents of the region were continued.

In 2019, funds were provided to the towns of Głogów and Legnica for health and social programs serving the local communities.

The Głogów Urban Municipality was provided with funding for the following actions: outpatient clinics, including the opening of a nephrology outpatient clinic, sessions in a salt grotto for primary school pupils, promotion of a healthy diet, sporting activities for children and youth with the use of the "Fit resident of Głogów" municipal sports facilities, planting of trees and shrubs.

The Legnica Urban Municipality received a donation for the following actions: the "Healthy Legnica" program aimed at propagating a healthy lifestyle and education as well as to increase the availability of medical care to residents of Legnica.

In the Głogów county, KGHM supported the following actions in the form of cash donations: preventive examinations for lung, thyroid diseases, diagnostics of prostate cancer, USG breast exams, promotion of a healthy diet, sporting and cultural activities for children, youth, adults, and the elderly, provision of additional equipment for the hospital, schools, and volunteer fire units.

KGHM also sponsored swimming lessons for over 700 children from the Copper Basin region. Conferences and meetings as part of the Copper Basin social strategy, co-funded by KGHM and local governments, focused on the family foster care and initiation of the social campaign "The Family is Mine" and on building effective ways of assisting youth with problems in the Copper Basin. A research, prevention and training project in this area covered 17 schools and 10 local governments, and the findings were summarized at the conference: "Integrated prevention as a response to the developmental needs and problems of teenagers in the Copper Basin". The conference was preceded by a series of 12 workshops for local governments.

In 2019, work continued on securing existing infrastructure and terrain of the Victoria project, 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 of 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.



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 only necessary work related to securing the existing infrastructure and the required monitoring of the terrain was carried out. 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.



# Environmental actions

KGHM Polska Miedź S.A., as one of the largest socially responsible companies, acts to reduce its impact on the environment as far as possible.

The sustainable development concept, including in particular conservation of the natural environment is one of the most significant values driving the Company's activities

In pursuing the slogans and values presented above, we are also guided also by an awareness of our responsibility not only at present but also in the future. Therefore, as regards sustainable development actions, KGHM Polska Miedź SA endeavours to find the best solutions serving the purpose of satisfying the demand for copper and other metals in connection with the growing human population.

The above indications make us look for solutions serving the purpose of providing products but also protecting the environment for both the present and future generations.

The KGHM Group joins in actions within the European Green Deal concept announced on 13 December 2019 and Implementing the Recommendations of the Task Force on the Climate-related Financial Disclosures (TCFD) of June 2017 as well as the Communication from the European Commission 2019/C 209/01 of 19 June 2019 Guidelines on non-financial reporting: Supplement on reporting climate-related information. KGHM Polska Miedź SA states that it has been implementing many of the recommendations indicated in the abovementioned documents for a much longer time, following the path of sustainable, environmentally responsible development.



**It is estimated that the global population will exceed 9 billion in 2040 with the simultaneous awareness of the Earth Overshoot Day indicator increasing year by year.**



**We care for the natural environment  
minimizing our adverse impact.**

## Natural capital

The identification, planning, and performance of actions would not be possible without the awareness and identification of natural capital by the KGHM Group. Using the definition and methodology of the Natural Capital Coalition, it was determined that the natural capital of the KGHM Group included those natural resources serving as the source of economic and social benefits: mineral resources (ferrous and non-ferrous metal ores, sodium and potassium-magnesium salts, organic or mineral aggregates, and petroleum products), trees (wood), water and air.

Building on the idea of sustainable development as regards using the natural capital, the actions taken in the KGHM Group were arranged into three thematic areas:



- **water and sewage management,**
- **tailings management and implementation of the circular economy idea**
- **protection of climate and air.**

## Protection of Climate and Air

The KGHM Group notices the occurrence of significant changes in Earth's climate as a result of the increase in the average temperature on our planet, which has been observable since the beginning of the industrial era. It is also aware of the fact that the main cause of this process is the growing emission and excessive accumulation of greenhouse gases (GHG) in Earth's atmosphere (as was ascertained based on the CarbonBrief analysis). This disturbed the natural circulation of these gases, consisting in their emission being balanced by the level of assimilation, which was observed earlier in the human era and analysed for the preceding periods. This has resulted, in particular in recent years, in increased dynamics of the so-called greenhouse effect generated by the gases. It is illustrated, for instance, by the considerable increase in temperatures over a year and the resulting occurrence of dynamic weather events (thunderstorms, rainstorms, hurricanes, droughts) and climate changes (increase in the

average annual temperature, decrease in the average precipitation, and further lowering of water tables as well as the progressing steppe formation) at the latitudes where KGHM pursues its business activities.

The KGHM Group is commencing work on slowing down the pace of the negative climate changes. Thus, it has joined the global actions of countries (decisions of successive World Climate Summits), the European Union (European Green Deal, one of the assumptions of which is to be the world leader in reducing GHG emissions until full climate neutrality is achieved), Poland (change of the energy mix of the country, creating a low-carbon economy), and individual enterprises pursuing the UN's sustainable development goals provided for in the 2030 Agenda for Sustainable Development arising from its sense of responsibility and the sustainable manner of performing its business activities

These actions will ultimately be performed by the KGHM Group in a fully systematic manner, as recommended in the Communication of the European Commission being Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019/C 209/01), including an Annex being Task Force on Climate-related Financial Disclosures (TCFD) (in the section concerning Metals and Mining). Despite the current non-compulsory nature of the documents listed above, the Group commenced work for the introduction of the resulting systematic actions and reporting method.

Their starting point was to determine the significance of the information related to climate for the KGHM Group. Based on the guidelines set by the experts from the AGH University of Science and Technology, using a reporting factor significance examination tool, the level of significance of the information related to climate for the KGHM Group was determined to be high in the short, medium, and long term as well as in the entire value chain of the KGHM Group.

- ▶ The short term would be understood as the timeframe of the current business strategy of the KGHM Group,
- ▶ the medium term would be understood as the timeframe until 2030, i.e. the year of meeting the emission targets set by the European Union (-30% compared to 2005 according to etCO<sub>2</sub> from the non-ETS sectors) and Poland (-7% compared to 2005 according to etCO<sub>2</sub> from the non-ETS sectors), which arise from the Paris Agreement (COP21),

It was established that the KGHM Group does not and will not have a very high direct impact on climate in the reported and future periods. In spite of the above, the indirect impact might be adverse and noticeable. It was determined in terms of social and environmental significance. The main products of the Group, as raw materials, go to the sectors exerting a major impact on the climate (construction, automotive output, power engineering). Thus, amendments, if any, to the regulations and additional burdens imposed on these sectors in connection with greenhouse gas emissions might have an adverse effect on the Group's expenses.

Looking at climate changes from a broader perspective, the KGHM Group also recognises the financial significance and the related physical risks both in terms of acuteness and duration. This is because the observed intensification of weather anomalies might influence the Group's production process. In terms of a long-term physical risk, this aspect is associated primarily with the lowering water tables in rivers (mainly the Oder). The lowering of the water level in rivers will affect the discharge of excess salinated over-sediment water from the Żelazny Most Tailings Storage Facility, as the discharge volume is strictly linked to the flow of water in the Oder river.

It was also determined that the risk of electricity and other energy carrier supply interruptions due to rainstorms and hurricane winds was a significant issue and they were pointed as the major components of acute physical risk.

In spite of the above, it must be stated that the KGHM Group has the sufficient resources, knowledge, skills, and attitude to join in the application of low- and zero-emission energy sources, emission reduction, and energy efficiency improvement.

These statements are made by the KGHM Group based on the following facts:

► The Company's participation in the European emissions trading system (ETS), through the obligation to monitor and report carbon emissions and the purchase of emission allowances, builds the awareness of the system's influence on the Company's financial standing and predisposes it to seeking and implementing low-emission solutions. Therefore, as regards metallurgical processes, KGHM has reduced CO<sub>2</sub> emissions by changing the shaft furnace technology into the flash furnace one and, as regards energy-releasing fuel combustion, it utilizes low-emission natural gas-fired CCGT units, thus partly

► replacing the fine coal-fired units.

In accordance with the best available techniques "BAT" conclusions for the non-ferrous metals industries published in the EC Implementing Decision 2016/1032, KGHM initiated investment processes in order to adapt the installations to the requirements of the conclusions and thus a further reduction of emissions and the adverse environmental impact.

► The KGHM Group is preparing a climate policy which will be a systemic solution for implementing the Communication of the European Commission being Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019/C 209/01), including an Annex on the Task Force on Climate-related Financial Disclosures (TCFD) (in the section concerning Metals and Mining). It covers also medium-term (2030) and long-term (2050) quantitative goals regarding:

- reduction of direct GHG emissions (scope 1), but also indirect emissions (scope 2 and 3),
- energy efficiency improvement,
- increase in the use of energy from renewable sources,
- minimization of actions in regions exposed to a long-term or acute physical risk,
- increase in the percentage of products related to activities satisfying the criteria of a significant contribution to mitigating the effects of climate changes or adjustment to mitigating the effects of such changes,
- engagement in the green finance system resulting from the new Green Bonds taxonomy announced on 19 June 2019.



The KGHM Group has taken and will continue to take its own actions for climate and ambient air protection without any regulatory enforcement.

## Water and sewage management

The KGHM Group considers water one of the most important components of its natural capital. It also assures that it strives to consume water and close its circulation in a manner as efficiently as possible in technical, economic and environmental terms. For that purpose:

1. The conditions set forth in any water-law permits obtained for the purposes of operations permitting the use of the environment with regard to water and sewage management are complied with. The conditions set forth in the permits are consistent with the EU and domestic law.
2. The equipment is operated in accordance with the requirements and ensures that the adverse impact on the environment is minimized.

3. In addition to the above, the KGHM Group has for many years conducted and will conduct a series of its own activities, non-forced by legal regulations, aimed at the optimization of water and sewage management. This serves mainly to limit water consumption in the production process, especially in the Concentrators (i.e. Ore Enrichment Plants). In view of this KGHM Polska Miedź S.A. has introduced the circular economy at the Concentrators. Surplus water is discharged to the Oder, constituting an important element of regulation of the level of this river, so vital for Poland's inland sailing.

4. A detailed picture of the above activities conducted by the KGHM Group in 2019 is presented below in this section.

## Water management and pursuit of the circular economy idea

Aiming at a circular economy is one of the priorities of the KGHM Polska Miedź Group. This indication is related to the Earth Overshoot Day indicator presented above. The Group welcomed the roadmap published on 24 September 2019 for the development of a circular economy in Poland, as well as the publication on 13 December 2019 of the European Green Deal, including the sustainable industry package.

KGHM has for many years been pursuing the approach resulting from the circular economy (CE) and wants to join its development. The Group bases this assertion on the following facts:

- ▶ 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. The minimization of this impact is possible due to the implementation of circular economy, which contributes to environmental protection, improvement and development of KGHM's industrial installations. In order to quantify the above, the KGHM Group constantly monitors data related to the environmental impact of its operations. The Group complies with all requirements resulting from regulations and best practice standards with regard to environment protection, and to a large extent takes proactive steps in this respect. In order to quantify the above, the KGHM Group constantly monitors data related to the environmental impact of its operations. The Group complies with all requirements resulting from regulations and best practice standards with regard to environment protection, and to a large extent takes proactive steps in this respect.
  - ▶ KGHM Polska Miedź S.A. fully understands and implements the definition of circular economy, understanding it as the value of products, materials and resources in economy sustained as long as possible and waste production reduced to a minimum, aiming at the development of sustainable, low-emission, resource-saving and competitive economy. It also accepts and wants to pursue the European Union goals thanks to circular economy: savings in the amount of EUR 600 billion for firms from the EU, which accounts for 8% of their annual turnover, creation of 580,000 jobs, reduction of CO<sub>2</sub> emissions by 450 million tons by 2030.
  - ▶ KGHM Polska Miedź S.A. wants to participate in the implementation of the Polish roadmap to achieve a circular economy. Therefore, it wants to identify all possible activities in the Company aimed at increasing the efficiency of resource utilization and reducing waste production. Key elements of building circular economy in
- KGHM Polska Miedź S.A. include:
- innovation, strengthening of cooperation between the Company and science sector, and consequently implementation of innovative solutions related to circular economy,
  - participating in the growth of the market for secondary metallic raw materials and increasing the share of such materials in production,
  - minimizing the volume of post-production waste to residual waste levels,
  - seeking and implementing solutions that allow utilization of waste storage sites as secondary deposits.
- ▶ The idea of creating circular a economy is put into practice in the KGHM Group in the following groups of actions:
- economic utilization of rock forming minerals, as sealing material for the Żelazny Most Tailings Storage Facility, as filling in post-mining goafs, and material for applications in construction, road building and agriculture,
  - full reclamation of post-production areas,
  - development and implementation of environmentally-friendly flotation reagents and improvement of metal recovery from afine-grained feed,
  - utilisation of heat energy contained in the mined deposit,
  - development of the Company's own research and development activity towards a circular economy,
  - development of the CuBR Joint Venture towards a circular economy,
  - research and development within the Horizon Europe program towards a circular economy,
  - development of the Company's own investments towards a circular economy.
- ▶ KGHM Polska Miedź S.A. implements the requirements introduced by the amended waste act, which include: launching a National Waste Database (BDO), surveillance system for waste storage and disposal sites and measures to secure claims to cover costs of removing negative environmental effects.

- KGHM Polska Miedź S.A. has for many years conducted and will conduct a series of its own activities, non-forced by legal regulations, aimed at the implementation of a circular economy. An overview of these activities for 2019 is presented below in this section.

The aforementioned activities in three thematic groups related to natural environment protection and minimization of inconvenience related to operations are implemented in KGHM Polska Miedź S.A. thanks to the KGHM environmental policy and KGHM energy policy, which set the highest ecological and environmental standards for the Company.

## Environmental policy at KGHM Polska Miedź S.A.

GRI 102-11, GRI 102-12, GRI 103-3

Care for the natural environment is combined with the business model, in which throughout all its constitutive segments – from exploration to restoration – standards are applied to ensure safe and environmentally friendly business operations. KGHM Polska Miedź S.A.'s Environmental Policy includes:



Satisfaction of Polish and EU law requirements regarding the use of the environment



Maintenance of fully operational equipment protecting the environment.



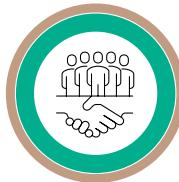
Monitoring technical developments to reduce the industry's environmental impact and applying new solutions as required and possible.



Development of waste management techniques and a steady increase in the share of managed waste in the total waste amount.



Ongoing cooperation with the local community and authorities for the benefit of the environment.



Cooperation at the Ministry level in the implementation of the state's environmental policy.



Cooperation with the European mining and non-ferrous metal industries through trade organizations while devising EU documents regarding environmental protection.

As a socially responsible company KGHM Polska Miedź S.A. cannot and does not want to avoid its responsibility for the environment. The extraction of copper and its subsequent processing at all production levels is inextricably associated with affecting particular components of the natural environment. Compliance with stringent legal standards is possible due to the systematic modernization of existing installations and the construction of new ones which reduce and minimize the impact on the environment.

KGHM's production plants have implemented an environmental management system according to ISO 14001, which means that their operations are safe to the employees and the environment. In 2018 the system was recertified in connection with the coming into force of a new edition of the standard, therefore all Divisions of KGHM Polska Miedź S.A. are compliant with the standard of 2015.

## Formal status and environmental fees

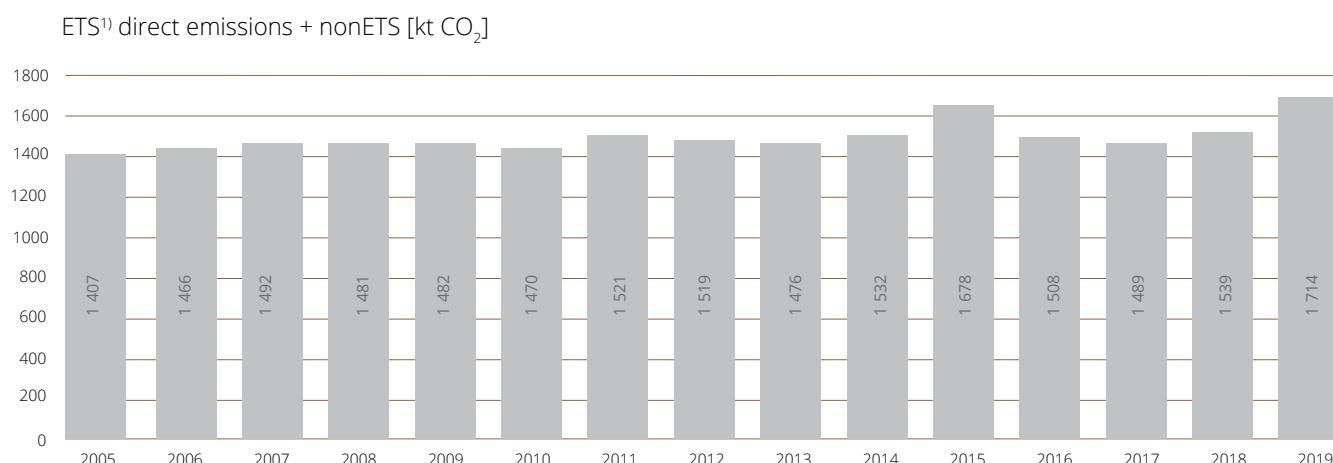
KGHM Polska Miedź S.A. operates ten installations whose functioning, in accordance with the Act on Environmental Protection, requires integrated permits.

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).

## CO<sub>2</sub> emissions in KGHM Polska Miedź S.A.



1) ETS – European Union Emission Trading Scheme

In 2019, emissions in the previous year (2018) 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.

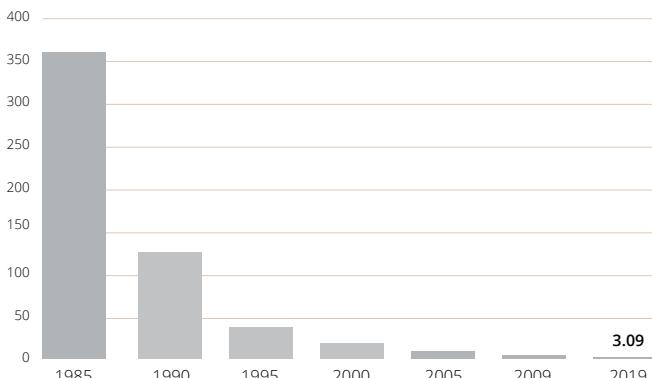
Environmental fees paid by the Divisions of KGHM Polska Miedź S.A. in 2019 amounted to PLN 18 million. In 2019, in

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.

Amongst the Polish companies of the Group, the largest environmental impact comes from the activities of "Energetyka" Sp. z o.o. In 2019, this company incurred the highest environmental fees. They amounted to PLN 3.3 million and 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.

# Emissions from KGHM Polska Miedź S.A. plants

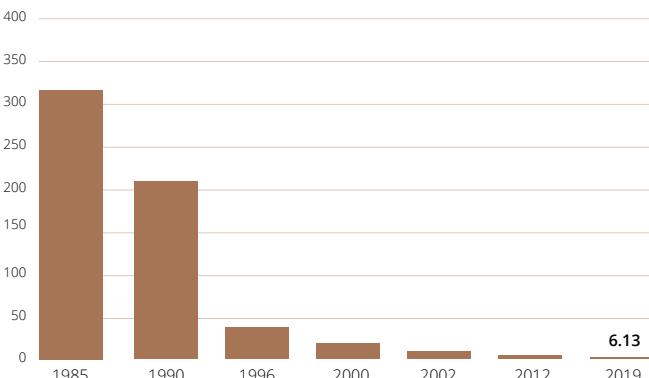
Lead emissions  
by KGHM Polska Miedź S.A.  
[tonnes]



-78%

Reduction of lead emissions  
over the last 20 years

Copper emissions  
by KGHM Polska Miedź S.A.  
[tonnes]



-71%

Reduction of copper emissions  
over the last 20 years

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 amounts 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 the re-use of concentrated acids in the production process. The company Cuprum Development Sp. z o.o., which owns land in the centre of Wrocław, in Febru-

ary 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. 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.

## Measures reducing environmental footprint of KGHM Polska Miedź S.A. GRI 103-1, GRI 103-2

In addition to the fees described above related to its environmental impact, in 2019 the KGHM Group advanced numerous projects and activities aimed at reducing its environmental footprint. Their presentation is arranged by the areas presented above.

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

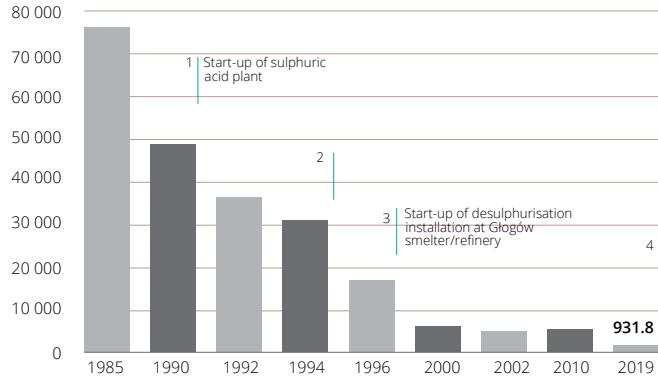
- ▶ the advancement of investments involving the need to adapt the metallurgical installations to BAT conclusions. Advancement of these investments is also related to further reductions in dust and gas emissions, including arsenic emissions,
- ▶ updating the integrated permits for the operated installations,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

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.

Apart from the adjustment and fulfilment of the BAT conclusions, as well as a further reduction of greenhouse gas emissions and striving to achieve emissions neutrality, KGHM Polska Miedź S.A. conducted in 2019 activities to improve energy efficiency by increasing the share of energy obtained from renewable sources and, what is more, ones owned by the Company. To that end, the Lubin Mine (the mine that consumes the greatest amount of heat in the entire heat stream consumed by KGHM Polska Miedź S.A.) began in 2019 a program of heat recovery from mining waters by using heat pumps. Other energy-related climate and air protection activities, namely energy savings and reduction of energy consumption, were incorporated in the Energy Management System of KGHM Polska Miedź S.A. and are linked to the energy policy.

# Emissions from KGHM Polska Miedź S.A. plants

SO<sub>2</sub> emissions  
by KGHM Polska Miedź S.A.  
[tonnes]



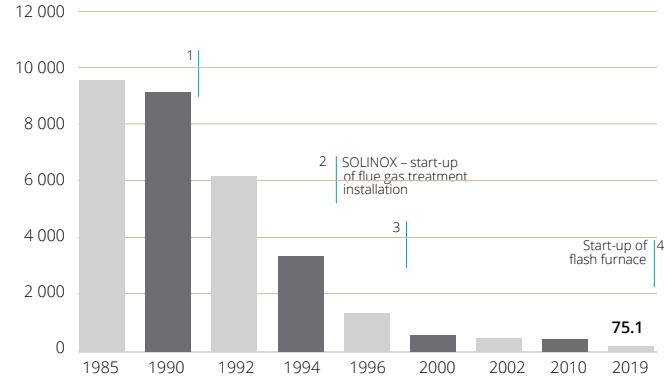
1) Other dust (without metals) from the production of non-ferrous metals, including PM 2.5 and PM 10

-81%

Reduction of emissions  
over the last 10 years

Dust emissions<sup>1)</sup>

by KGHM Polska Miedź S.A.  
[tonnes]



-83%

Reduction of emissions  
over the last 10 years

Projects and activities conducted in the KGHM Group in 2019 with respect to water and waste management activities included mainly water rights permits. They were obtained by all domestic companies of the Group, except for one. The company Uzdrowiska Kłodzkie S.A. – Grupa PGU does not hold a water rights permit for the discharge of post-bathing water for Zakład Przyrodoleczniczy in Polanica-Zdrój. Because of this the fee paid by the company for the discharge of such waste water is 500% higher. 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 Przyrodoleczniczy 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.

Apart from the fact that the vast majority of companies in the Group hold water-law permits and besides the closing of water circulation in the Ore Enrichment Plant and discharging of surplus water to the Oder, in 2019 the KGHM Group conducted in the CuBR Joint Venture the project called "Innovative technologies of limiting the migration of salt-containing underground waters to surface waters in the vicinity of the Żelazny Most Tailings Storage Facility."

Waste management and the implementation of the idea of circular economy constituted in 2019 one of the major directions of pro-environment activities for the KGHM Group. They can be divided into implementation/investment works and research and development works.

The Polish companies of the Group operate in compliance with environmental laws. Companies which are required to do so hold valid environmental permits, with a single exception related to the water and waste management area, which is presented in the relevant section.

The largest investment project of KGHM Polska Miedź S.A. completed in 2019 and aimed at implementing the circular economy concept was the start-up of the RCR (Revolving Casting-Refining) furnace for recycling smelting of copper in the Legnica Copper Smelter and Refinery. The furnace meets the highest environmental protection standards and is equipped with the latest process gas treatment installation. The investment optimizes utilization of the existing infrastructure; it will reduce per-unit cost of production and at the same time will considerable increase the use of recycled copper in KGHM Polska Miedź S.A. The operation of the furnace was officially opened on 28 June 2019 by the Polish prime minister, Mateusz Morawiecki.

*-As a leader of the Polish economy, we are responding to the challenges of a turbulent world. Copper production based mainly on scrap metal is an example of a circular economy, which is an inseparable element of the Company's sustainable development. It is the largest investment in the history of the Legnicka Copper Smelter and Refinery, not only in terms of capital outlays, but mainly because of the huge technological leap for this Division. It will be transformed into a hybrid smelter with growth prospects for the coming years. It is a step towards sourcing raw materials from recycling processes.*

- said Marcin Chludziński, President of the Management Board of KGHM Polska Miedź S.A.



## Construction of the RCR furnace in numbers / Interesting facts about the project:



- ▶ The excavation under the furnace was 13 meters deep in some places
- ▶ 11 thousand m<sup>3</sup> of soil was removed from the site
- ▶ Nearly 50 entities from Poland and abroad were involved
- ▶ Up to 250 people worked at the construction site

### **Materials used:**

- ▶ 5.5 thousand m<sup>3</sup> of concrete,
- ▶ 350 tonnes of reinforcing steel,
- ▶ 550 tonnes of steel structures, including 300 tonnes to build the furnace structure,
- ▶ 55,000 m of cables and wires (power, control, signal),
- ▶ 5000 m of pipelines,
- ▶ 600 tonnes of dry lining – to build the furnace interior
- ▶ The furnace is operated by a highly-specialized Dango manipulator equipped with a 5-meter long arm used to feed scrap metal to the furnace chamber.



An important investment project conducted as a pro-environmental initiative and an element in the development of a circular economy is the manner of conducting the extension of the Żelazny Most Tailings Storage Facility. This model facility was extended in 2019 (the investment continues in 2020) to increase dam height without acquiring additional land. It will serve as a tailings storage facility as well as a future circular economy reservoir. In 2019, the Tailings Segregation and Thickening Station became an investment supporting environmental efficiency of the flotation waste storage process. The investment assumes implementation of the compaction technology for the tailings remaining after the completed ore enrichment process. This solution will result in a reduction of the water circulating between the Ore Enrichment Plants and the smelting plants, and consequently will lead to increased safety at the Żelazny Most facility. Direct benefits from the completion of this task will also include the possibility to deposit the entire stream of waste within a smaller area, improved stability of the Żelazny Most facility due to the smaller quantity of water, and the possibility to eliminate a considerable part of the water circulating between the divisions of KGHM Polska Miedź S.A.

With respect to metal recovery, partial sampling was conducted on the "Wartowice" and "Gilów" storage sites in 2019.

With respect to the economic use of rock-forming minerals, flotation tailings were broadly utilized in 2019 at the Żelazny Most Tailings Storage Facility: coarse-grained processing tailings were and are used to build the dams of the facility, and fine-grained waste is used as sealing material for the water tank in the facility. About 18 million tonnes of processing tailings were used in this way in 2019.

In 2019, implementation research was also conducted on using thermally-processed flotation tailings as:

- a component of hydraulic ash and lime binder – waste from the 750°C to 850°C roasting process shows it has properties comparable to those of hydraulic lime,
- aggregate and binder for road construction – it has been demonstrated that aggregate may be produced from waste using the agglomeration method after silica and clay sludge are added,
- some concrete and mortar – sandstone waste can be used to produce cellular concrete and carbonate waste to produce foam concrete; the resulting products met the required standards,
- a binder to solidify filling mixes for mining purposes; flotation tailings mixed with furnace ashes can be used for this purpose; strength parameters similar to those of natural materials have been obtained,
- for production of mining concrete – tests were conducted using waste as a mineral powder for bituminous mass, to increase the granulation of cement-stabilized soil layer, as an additive to frost-resistant layers, to construct embankments, to build into the road underlying base – research showed the potential for this waste to be used as an asphalt filler as well as the possibility of using relatively small additions of waste in other applications.



Because of the available quantities, the potential use of flotation waste as goaf filling material and in road construction are considered to be the most interesting directions for the recycling of waste. For this reason, it was determined that approx. 0.5 million m<sup>3</sup> of waste could be managed annually and ultimately approximately 15 million m<sup>3</sup> of waste by 2055.

With regard to scientific research activities, the KGHM Group conducted in 2019 research and development activities related to circular economy, pursued the CuBR Joint Venture, participated in research done by the KiC Raw Materials platform, and participated in European Research Programs Europe 2020 and Horizon Europe.

Own research and development projects included mainly actions focused on the preparation for and depositing of flotation tailings. Work was also carried out to develop technologies for the recovery of metals from copper ore smelting slag and to use them in the production of microelement-enriched fertilisers.

As part of the KiC Raw Materials studies, research work was conducted in 2019 on the Batterflai program in the KAVA6 project, in order to develop environmentally-friendly flotation reagents.

Within the CuBR Joint Venture, the following four themes were studied in 2019 in connection with the implementation

of circular economy:

- Comprehensive technology for using the carbonite part of flotation tailings from KGHM's current production and production of innovative materials for the construction industry,
- Innovative technologies of limiting the migration of salt-containing underground waters to surface waters in the vicinity of the Żelazny Most Tailings Storage Facility,
- Design work on an installation to prepare and deposit mine tailings in KGHM's underground mines,
- Multi-technologies for recovery of useful components.

The Horizon 2020 Programme, which is the largest research programme carried out by the European Union, allowed KGHM Polska Miedź S.A. in 2019 to carry out a project entitled "Integrated innovative metallurgical system to benefit efficiently polymetallic, complex and low grade ores and concentrates (INTMET)". In turn, within the Horizon Europe program, which is a EU program for 2021-2027, KGHM Polska Miedź S.A participated in the Bohemian Study, one of whose pillars is the implementation of a circular economy.

## Measures reducing the environmental impact of KGHM INTERNATIONAL LTD.

In 2019, entities of the KGHM INTERNATIONAL LTD. Group also conducted activities related to protection of the environment. In the case of the Robinson mine (USA) these activities focused on monitoring air and water quality, waste management and reclamation of mining areas – approx. PLN 28 million was spent on these activities, including PLN 3 million under the permits to use the environment. 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 purchase government environmental bonds in the amount of the estimated provision 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).

Moreover, as on 31 December 2019 KGHM Polska Miedź S.A. issued letters of credit for the amount of PLN 397 million (as on 31 December 2018 – PLN 345 million) to secure liabilities under liquidation and reclamation of mining areas. The letters of credit issued by KGHM INTERNATIONAL LTD. as on 31 December 2019 amounted to PLN 202 million (as on 31 December 2018 – PLN 85.0 million).

Apart from operating activities, it should also be noted that KGHM Polska Miedź S.A. strives to seek new, future-oriented solutions regarding reclamation of post-industrial areas. For this reason, in 2019 it participated in the RevRis program executed as part of KiC Raw Materials KAVA 6.

## 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 require-

ments 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.

## Energy Policy of KGHM Polska Miedź S.A.

The primary objective of KGHM Polska Miedź S.A. as regards energy management and pro-climate activities is to implement a rational energy management programme while ensuring the security of energy supply to the facilities and installations of the Company's core production line. The process of implementing the international standard of energy utility management in accordance with the ISO 50001 standard began with the adoption of an Energy Policy by the President of the Management Board of KGHM Polska Miedź S.A. (28 November 2016). At present, the second edition of the policy approved on 28 February 2019 is in effect.

The Energy Policy contains the most important assumptions of KGHM Polska Miedź S.A.'s activity for the Energy Management System. In performance of its guidelines, the Company is committed to:

- provide the resources necessary to achieve the planned energy objectives and outcomes, conduct activities in compliance with legal regulations as well as other requirements related to the consumption of energy,
- create desirable attitudes, build awareness and constantly improve the skills of the Company's employees and collaborators performing tasks for KGHM Polska Miedź S.A.,
- prevent waste in the area of energy consumption, cooperate with partners and suppliers in procurement of material goods and services, including energy efficiency as an important selection criterion.

The assumptions adopted in the Energy Policy of KGHM Polska Miedź S.A. are implemented by all employees of the Company, as well as other persons and entities performing tasks for its needs.

The implementation of the ISO 50001-compliant Energy Management System in KGHM Polska Miedź S.A., including the application of the accepted Energy policy, has resulted in introducing a number of regulations and taking actions to ensure that energy management is rational, legal and includes, among others:

- rules of conduct in the investment and procurement process,
- energy overhauls in KGHM Divisions and the Head Office performed in accordance with the approved methodology,
- approved objectives and tasks approved,
- implementation of the regulations: Legal and other requirements in the field of power generation and evaluation of their conformity for purposes of the Energy Management System at KGHM Polska Miedź S.A.

## Energy Management System (EMS) in KGHM Polska Miedź S.A.

In 2017 the Parent Entity and Energetyka Sp. z o.o. implemented an Energy Management System (SZE), in conformity with PN-EN ISO 50001:2012. As a result of the implementation of EMS and application of the Energy Policy, the costs of energy audits are avoided, which must be performed pursuant to the Energy Efficiency Act if no certified Energy Management System is in place as imposed by the Energy Efficiency Act and further improvement of the energy consumption optimization process.

The second supervision audit carried out in KGHM Polska Miedź S.A. in June 2019 by an external certifying entity, UDT Cert, confirmed that KGHM Polska Miedź S.A. had in place an ISO 50001-compliant EMS and upheld the Certificate

granted in September 2017. At present, the work is under way in KGHM Polska Miedź S.A. in connection with the switch to the new edition of the PN-EN ISO 50001:2018 standard. As a result of the conducted energy reviews, 46 energy efficiency improvement targets have been set. 61 energy tasks have been defined and the key energy performance measures have been specified. The implementation of the EMS also reduces the costs related to the purchase and consumption of power utilities. In 2018, related savings amounted to approx. 104 GWh of energy. The Company plans to achieve further savings by 2020. At the same time, the Company reduces greenhouse gas emissions, thereby reducing the cost of buying CO<sub>2</sub> emissions rights. Most importantly, the implementation of standards and improvement of procedures improve occupational safety and increase employees' skills.

## KGHM Polska Miedź S.A. Health Promotion and Environmental Hazards Prevention Program

The purpose of the Program is to provide preventive care for the inhabitants of the Copper Basin with a special focus on children and young people through the implementation of tasks such as:

- prevention and health trips to mountain or seaside spas as part of the "Green School" program,
- year-long rehabilitation and sports activities at a swimming pool,

- tests monitoring the presence of lead in blood,
  - tests monitoring the presence of arsenic in the bodies of the region's inhabitants,
  - environmental education combined with promotion of health.
- The "Health Promotion and Environmental Hazards Prevention Program" has been implemented for two years

## Social engagement

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The KGHM Polska Miedź S.A. Group is a global company open to new directions of development, which has a significant influence on the well-being of communities, regions and even countries – because of that, our activities related to social issues is particularly important. KGHM works continuously to improve its relations with the environment, striving towards harmonious cooperation. Cooperation with social partners is the key success factor in development projects undertaken by the company. It also contributes to reducing social risk in the activities of KGHM. Social dialogue mechanisms are a natural extension of the business activity which, due to its large scale and character, impacts the quality and standards of life of the residents. The pillars of the KGHM's corporate social responsibility include CSR programs, activities of the KGHM Foundation and sponsorship.

In its relations with clients, employees, external partners and local communities, the KGHM Polska Miedź S.A. Group complies with the laws which are in effect in the countries where it operates.

The Group also complies with voluntary obligations resulting from ISO and ASTM standards as well as from membership in international organisations such as International Copper Association, European Precious Metals Federation, Eurometaux, Euromines, the London Bullion Market Association, the European Technology Platform on Sustainable Mineral Resources, the European Innovation Partnership, and domestic organisations, including: the Polish Association of Listed Companies, Stowarzyszenie Inżynierów i Techników Metali Nieżelaznych [Association of Non-Ferrous Metals Engineers and Technicians], the Economic Chamber of Non-Ferrous Metals and Recycling, the Polish Committee of the World Mining Congress, Polish-Canadian Chamber of Commerce, the Polish Chamber of Commerce for High Technology, and the Employers' Organization of Polish Copper.

### **The rules:**

- Compliance with the regulations of the commonly binding law as well as the internal regulations in effect in KGHM Polska Miedź S.A.
- Compliance with both the obligations contemplated in the agreements, and verbal promises made to our clients, suppliers and social partners.
- Reliable performance of assigned duties.
- No offering or acceptance of bribes or other material or personal benefits; and no entering into cooperation with companies of doubtful reputation.
- The KGHM Polska Miedź S.A. Group assumes responsibility for the quality of its products and services.

Pursuant to its Code of Ethics, KGHM complies with the principles of ethical conduct in the relationships with its partners. The KGHM Polska Miedź S.A. Group requires compliance with high ethical standards not only by its own employees, but also by its business partners who are provided with and obliged to abide by the Code of Ethics, the Anticorruption Policy and the principles of accepting/giving gifts, gratuities and business invitations. The KGHM Polska Miedź S.A. Group requires observance of the "zero tolerance for corruption" principles in mutual relationships. It puts special focus on transparency of transactions. It monitors the supply chain and product life. Business partners of the KGHM Polska Miedź S.A. Group are evaluated with regard to corruption risk. Business is conducted only with entities of proven reputation. Thanks to appropriate procedural arrangements, the KGHM Polska Miedź S.A. Group prevents money laundering and the financing of criminal activities, including terrorism. It specifically protects the personal data of partners as well as commercial, technical or organizational information entrusted to it. The KGHM Polska



**The KGHM Polska Miedź S.A. Group does not participate in undertakings which involve breaking the law and pose a threat to its reputation.**

## Competition Law Policy in the KGHM Polska Miedź S.A. Group

There is a Competition Law Policy in the KGHM Polska Miedź S.A. Group. Its purpose is to establish the operational framework for the system to ensure compliance with the competition laws prevailing in all the countries of its operations, including:

- ▶ rules of conduct in the investment and procurement process,

- ▶ energy overhauls in KGHM Divisions and the Head Office performed in accordance with the approved methodology,
- ▶ approved objectives and tasks approved,
- ▶ implementation of the regulations: Legal and other requirements in the field of power generation and evaluation of their conformity for purposes of the Energy Management System at KGHM Polska Miedź S.A.

## Responsible Supply Chain Policy in the KGHM Polska Miedź S.A. Group

The KGHM Polska Miedź S.A. Group complies with the highest standards of production and business ethics. We are guided by those principles across our value creation chain, which is reflected in the Code of Ethics of the KGHM Polska Miedź S.A. Group. The awareness that the selection of responsible suppliers, especially as regards the sourcing of conflict minerals (such as gold, tin, tungsten and tantalum) and silver, is of key importance for conducting activity oriented on sustainable development. The foregoing issues are regulated in the Responsible Supply Chain Policy. Its purpose is not only to guarantee the selection of only responsible suppliers, especially with respect to the conflict minerals listed above, but also to ensure that the goods and services procured do not contribute to financing terrorism and are manufactured or provided in compliance with basic human rights, labour standards, standards of environmental protection and preventing corruption.

The Parent Entity KGHM Polska Miedź S.A. has fully implemented an internal responsible gold and silver supply chain management system which is comprised of the Responsible Supply Chain Policy in the KGHM Polska Miedź S.A. Group and the Responsible Bullion Supply Chain Audit Procedure in KGHM Polska Miedź S.A. 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 is subject to independent external audit to ensure its compli-

ance with LBMA Responsible Gold Guidance and the LBMA (The London Bullion Market Association) certification.

In order to ensure compliance with the due diligence principles, the KGHM Polska Miedź S.A. Group has implemented an internal system of responsible supply chain management which is comprised of the scope of the system's application, the system's organization, the participants of the process, the criteria for acknowledging a business relationship as being a high risk relationship, the supply chain audit process (taking into account the procedure of business partner reliability assessment), transaction monitoring, documentation storage and employee training. The management of the process has been entrusted to the Head of the Corporate Risk and Compliance Management Department, reporting directly to the Company's Management Board. An e-mail address conflict.minerals@kghm.com was also set up to which any comments and observations related to the gold supply chain may be sent by employees, business partners and other stakeholders.

In 2019, all suppliers passed the Responsible Metals Supply Chain Audit Procedure with a positive result. The description of the policy for the KGHM Polska Miedź S.A. Group's business partners may be found at <https://kghm.com/en/our-business/products/responsible-supply-chain>

## Foundations, sponsorship and CSR activities in the KGHM Polska Miedź S.A. Group

KGHM is a good neighbour and trustworthy investor. It supports local communities, social organizations and institutions related to science, culture and sports. It promotes an active lifestyle and helps people in need.

One of the pillars of our efforts in the area of corporate social responsibility is the KGHM Polska Miedź Foundation which is engaged in pro publico bono and charitable activities. It helps in performance of socially useful projects, and it supports the people who are experiencing hardships.

FUNDACJA  
**KGHM**  
POLSKA MIEDŹ



## KGHM Polska Miedź S.A. Foundation

The KGHM Polska Miedź Foundation has continued the multi annual social activity of the Founder, KGHM Polska Miedź S.A., since 2003. A signpost for the Foundation's day-to-day activities are the values held by the Founder, which include zero harm, teamwork, results driven, accountability and courage. The Foundation engages in actions to increase the safety and health, intellectual, professional, and cultural development of residents and their activation to perform actions for the common good in the region.

The basis for the operation of the KGHM Polska Miedź Foundation are financial and material donations granted to:

- individuals in the field of health protection and victims of natural catastrophes and disasters,
- institutions for project execution.

In 2019, the Foundation supported many valuable activities, and yet it was not able to meet the growing needs of the environment and stakeholders. The level of aid granted to the institutions accounted for 17% of all applications registered, and in the case of support for individuals, it was 24%.

The projects planned for 2020 are a natural continuation of the Foundation's activities to date. The assumptions are based on an analysis taking into account the needs

of the inhabitants of the Copper Basin, Lower Silesia and all of Poland as regards health and safety, sports and recreation, culture and tradition as well as science and education.

The activities of the KGHM Polska Miedź Foundation in 2020 will continue to focus on granting donations and controlling their spending as well as on running dedicated programs. The commitments undertaken by the Foundation will be carried out with the utmost care, thorough analysis of the needs described in the requests and their compliance with the Foundation Statutes and the Founder's objectives, with a consideration of the capacity to help. As in previous years, applications for donations will be accepted and formally reviewed by the Foundation Office staff, and they will be examined and evaluated at meetings of the Foundation Management Board.

In 2019, the KGHM Polska Miedź Foundation made every effort to identify various social needs, in line with the assumptions of its articles of association and within its capabilities. Support was granted in the form of cash donations in a total amount of PLN 20,243,989.96, including:

- PLN 17,763,651.78 for the implementation of 313 projects;
- PLN 1,194,825.18 for 169 individuals;
- PLN 1,285,513.00 for the implementation of the "Health Promotion and Environmental Hazards Prevention Program".

AREA	Donations	
	Amount awarded PLN	Number of projects/ number of individuals
Donations for institutions	17,763,651.78	<b>313</b>
Health and safety	3,453,005.00	<b>45</b>
Science and education	2,422,608.56	<b>56</b>
Sports and recreation	3,266,227.33	<b>88</b>
Culture and tradition	8,621,810.89	<b>124</b>
Donations for individuals	1,194,825.18	<b>169</b>
Health care	1,187,691.18	<b>168</b>
Social assistance	7,134.00	<b>1</b>
"Health Promotion and Environmental Hazards Prevention Program"	1,285,513.00	<b>616 (children)</b>
TOTAL DONATION AMOUNT	<b>20,243,989.96</b>	

## Health and safety

Health and safety are a strategic area of operation for the KGHM Polska Miedź Foundation. In 2019 alone, 45 projects were co-funded for a total of PLN 3,453,005 and 169 individuals received donations totalling PLN 1,194,825.18.

These funds were used for purchasing e.g.:

- specialized medical apparatus and equipment for hospitals, rehabilitation centres, and other healthcare facilities,
- modern rescue and fire-fighting equipment and special vehicles for local emergency rescue facilities, e.g. fire and police stations.
- 

In 2019, in the "Health and safety" area, the Foundation also co-funded preventive examinations for residents as well

as initiated and supported projects promoting blood donation and hemotherapy, and co-funded scientific conferences in the field of medicine. Moreover, the Foundation supported projects aimed to prevent exclusion of the disabled. Cash donations were made, among others, for projects related to organization of rehabilitation stays or Christmas actions for those in need, e.g. Christmas Eve for the homeless or gifts for children.

In 2019, individuals received financial aid from the KGHM Polska Miedź Foundation for health care, including in particular: rehabilitation stays, inpatient rehabilitation, purchase of hearing aids and wheelchairs, surgical treatment, including treatment abroad, and removal of architectural barriers.

## Science and education

Science and education is the area of comprehensive actions of the KGHM Polska Miedź Foundation to support the development of education, science, and economy based on knowledge, innovation, social capital, and learning society. As part of a broad range of initiatives, the amount of PLN 2,422,608.56 was spent to run 56 projects in 2019.

The scientific projects supported by the Foundation included publications, scientific conferences, competitions, education and integration activities for children and youth, academic scholarships and awards. Funds were also spent for teaching aids and classroom equipment in education establishments, which contributed to improved level of education.

In 2019, the Foundation funded the National Science Centre

Award in the amount of PLN 50,000.00 for the winner of the competition in humanities, social sciences and arts, which was a distinction for a young scholar for significant scientific accomplishments as part of fundamental research conducted in a Polish academic centre, evidenced by publications affiliated in a Polish academic centre.

In 2020, the Foundation intends to continue its comprehensive activities supporting the development of education, science and the industry and higher education. It will promote innovation in education and the need for education in line with trends observed in the labour market. In the "Science and Education" area, the KGHM Polska Miedź Foundation will focus on propagating science and education.

## Sports and recreation

Sports and recreation is the area of operation for the KGHM Polska Miedź Foundation which supports all sports initiatives and popularizes social attitudes and behaviours based on values propagated by physical culture and sport. In 2019, this area was one of the most popular among the Foundation's beneficiaries. The amount of PLN 3,266,227.33 was spent to implement 88 projects in this area.

The following were among the initiatives co-funded in the "Sports and recreation" area:

- leisure for children and youth,
- training activity of sports clubs,
- organization of sports events.

The cash donations provided by the Foundation enabled the purchase of sports equipment and delivery of numerous sport training courses, various tournaments and competitions, and establishment of new recreational and sports

facilities, such as playgrounds for children. Moreover, some of the funds were dedicated to co-funding the organization of summer holidays in the form of camps, day camps for children and youth by local divisions of the Society of the Friends of Children (TPD), the Polish Scouting and Guiding Association (ZHP), community day centres, associations, orphanages, and parishes. The participants were mainly children and youth from underprivileged, dysfunctional, and poor families, who, thanks to the Foundation's support, had the opportunity to go to the seaside or the mountains for the first time in their lives and learn about another culture.

The Foundation considers popularization of physical culture and sport as well as education in preventive health care an important field of social life and therefore intends to continue activities promulgating an active and healthy lifestyle. In the area "Sports and Recreation", the KGHM Polska Miedź Foundation will support all actions for the development of young people's physical activity taken by local institutions, associations, and sports clubs in 2020.

## Culture and tradition

The Foundation respects the cultural heritage of previous generations, which underlies identity building, and referring to community traditions and ones cultivated by various social and cultural groups becomes the most important value.

**In 2019 alone, 124 projects in the area of culture and tradition were supported with the total amount of PLN 8,621,810.89**

In 2020, the Foundation intends to continue its support for projects consisting of commemorating and promoting Polish cultural or historical heritage as well as strengthening local cultural identity and participation in culture at the local, regional, national and global level. The aided projects will be related to rescuing cultural heritage and tradition and will contribute to a considerable improvement of the condition of many heritage structures, and some will even save the heritage structures from a structural collapse. As regards supporting culture and art, the KGHM Polska Miedź Foundation will also provide financial aid to diverse artistic and cultural events organized by various associations, cultural societies, cultural centres, and museums.

## Programs financed by the Foundation in 2019

The "Health Promotion and Environmental Hazards Prevention Program" has been implemented for three years in cooperation with an external enterprise.

In 2019 alone, the amount of PLN 1,285,513.00 was allocated for its implementation and 616 children from the municipalities of Jerzmanowa, Głogów (urban), Głogów (rural), Kotla, Pęcław, Polkowice, and Żukowice were covered by it.

It is intended to counteract the potential impact of indus-

try on people, in particular children living in the counties of: Głogów, Legnica, Lubin and Polkowice. It provides financing for preventive and health trips for children and adolescents aged 6-16 to mountain or coastal health resorts. Given the great interest of both the participants and the local community, the Foundation intends to continue and increase the funds for the implementation of the "Health Promotion and Environmental Hazards Prevention Program" in 2020. More information on the activity and projects of the KGHM Polska Miedź Foundation may be found at <http://www.fundacjakghm.pl/>

## REVIMINE Innovation and Cultural Heritage Foundation

The Revimine Foundation was established in 2014 by KGHM Polska Miedź S.A. to engage in activities related to protection of cultural heritage as well as the mining and metallurgical traditions of the Copper Basin. The Foundation supports the undertakings and initiatives aimed at technological, environmental and social revitalization of post-industrial areas that

are no longer used for industrial purposes, and other areas that are significant from that standpoint, and restoration of the environment.

[See more information on the Revimine Foundation at http://www.revimore.com/](http://www.revimore.com/)

## Sponsorship

KGHM's sponsorship strategy is closely associated with the activity pursued in the area of Corporate Social Responsibility (CSR) and assumes that most funds will be allocated to the performance of the planned actions for promoting the Company and the region on the one hand and for supporting

valuable cultural, sports, scientific, and social initiatives and undertakings contributing to Lower Silesia marking its presence on the map of Poland and Europe on the other hand. The areas falling within the scope of the sponsorship activity are culture, science, and sport.

### SPORTS



The Company considers sport an important area of social life and therefore it supports both top-class professional sport and amateur sport. As the largest employer in the region, it appreciates the significance of sport in forming the culture of leisure for adults and its educational role for youth. The Parent Entity is the major sponsor and at the same time the owner of Zagłębie Lubin S.A., a football team playing in the top Polish football league. For years, KGHM Polska Miedź S.A. has been one of the sponsors of "Bieg Piastów", a cross-country skiing marathon, in Jakuszyce. KGHM also supports other running events – "Cross Straceńców" (Cross-Country Race of Desperados), the New Year Running and Walking Event in Głogów, the Wolf's Trail Run to commemorate Polish "Disowned Soldiers", as well as local sports organizations whose members include Employees of the KGHM Group.

### CULTURE



The Company is perceived as a patron of culture and art. KGHM participates in organizing and sponsoring significant projects addressed to the society in the region and the whole country. In 2019, KGHM took patronage over the Royal Castle in Warsaw, which was inaugurated by the exhibition "To rule and to dazzle. Jewels and jewellery in Poland in the 16th and 17th centuries".

### SCIENCE



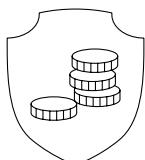
As regards science, KGHM supports higher education institutions and scientific institutes, thus tightening cooperation and building a bridge between the industry and the academia. The Company provides financial and subject-matter aid to projects thematically related to the problems solved to meet the needs of KGHM and the region. To ensure transparent rules of taking decisions to support a given project, offers are analysed by the Sponsorship Committee. Decisions issued by the Committee are recorded in a report, which is approved each time by the President of the Management Board of KGHM Polska Miedź S.A. The sponsorship activity of the KGHM Group is subject to regulations given in the Sponsorship Policy of KGHM Polska Miedź S.A. and the procedure of obtaining an opinion from the Sponsorship Committee.

A list of amounts granted by KGHM Polska Miedź S.A. in 2019 within Sponsorship broken down by areas:

Area	Amount awarded PLN
Sports	22,972,478
Culture	8,496,622
Science	1,805,725
Total	33,274,825

The amount spent by the KGHM Group companies (excluding the Parent Entity) as part of its Sponsorship activity in 2019 was:

**PLN 5,815,900**



## CSR Programs performed by KGHM Polska Miedź S.A.

### EKO Zdrowie [ECO Health]

Social responsibility and sustainable development are important elements of business operations today. A company that cares for the development of its own organization must take into account activities aimed at achieving a balance between its profitability and the broadly understood social interest.

CSR is particularly important in the mining industry. Due to the specificity of their operations, Companies like KGHM have a special responsibility for the implemented projects.

By planning and pursuing CSR activities the addressees and direct recipients of which are social beneficiaries of its environment, the Company upholds the "license for operation", which is important for the group and which is manifested in

the social acceptance of KGHM's business activity in the mining sector.

The ECO-Health program was launched in 2014 as part of corporate social responsibility. The priorities of the ECO-Health program are in particular promotion of preventive health care and active lifestyle among residents of the Copper Basin. The assumption of the program is to take up the projects and initiatives for the promotion of preventive health care, active lifestyle, physical activity, and recreation, thus taking care of children's, adults' and the elderly's health, among residents of the region.

The program's efforts to advance include regular activities: Nordic Walking for adults, recreational gymnastics for elderly citizens, and swimming lessons for children.

## Projects

### The Nordic Walking project is addressed to people over 35 years of age.

It assumes cyclic activities with the participation of qualified and experienced instructors in various cities and towns of the Copper Basin. The participants acquire or improve the basic skills of walking with the poles and take part in lectures on Nordic Walking techniques and principles of healthy nutrition.

Nordic walking is an activity for everyone, regardless of age or fitness. Its impact on the body is similar to that of jogging without putting excessive strain on joints and the spine. It relieves hip and knee joints, the lumbar spine, and releases shoulder, neck, and back muscle tension. Additionally, it does not require specialized equipment and engages up to 90 per cent of muscles safely (with a low risk of injury).

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So far, 10 editions of the activities have been held in which more than 1,500 people participated.

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### The swimming teaching program

assumes cyclic basic swimming classes for children aged 5–10. The classes are held in indoor swimming pools in several towns of the Copper Basin: Chojnów, Legnica, Lubin, Polkowice, Głogów, and Rudna, and children develop their basic swimming skills under the supervision of qualified instructors from swimming clubs in the region. Swimming is a sport strongly recommended to children. It helps ensure

the correct posture and reverse scoliosis. This discipline makes a child develop healthily, be physically fit, have a good stamina and motor coordination. Water exercises have a highly positive influence on the respiratory and circulatory systems, too.

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So far, 10 editions of the swimming learning activities have been held in which approx. 3,000 children participated.

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### Recreational gymnastics with specialized hammocks, a project dedicated to the elderly, is implemented in a few towns in the region: Lubin, Legnica, Polkowice, Głogów, Chojnów, Ścinawa, and Złotoryja.

Fitness instructors and physiotherapists participate in the classes.

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Over 250 people aged 55–80 have taken part in three editions of the project so far.

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In 2019, a screening project was launched for KGHM employees: computed tomography for early detection of lung cancer, diagnosis of emphysema, and assessment of coronary artery calcification. There were more than 800 KGHM Polska Miedź S.A. employees participating in the first edition of the examinations.

## "Copper Heart" Employee Volunteerism

The "Copper Heart" employee volunteerism program has been operating in KGHM POLSKA MIEDŹ S.A. since 2014. It is a form of support provided by the employer to employees for their personal development and pursuit of their passions, and joint engagement in socially significant actions enhances integration and job satisfaction. The voluntary activities implement and reinforce the values guiding KGHM employ-

ees on an everyday basis: responsibility, safety, performance orientation, courage, and collaboration. Employees engaging in organizing and participating in charity actions become ambassadors of the KGHM Polska Miedź S.A. brand and they are the best evidence of the effectiveness and appropriate implementation of the corporate social responsibility policy. Volunteers, Company employees, with the support from KGHM Polska Miedź S.A., organized 20 charity actions in 2019.

## "Copper Competition"

On 27 March 2019, KGHM Polska Miedź S.A. inaugurated the "Copper Competition" scholarship program. The new program is addressed to talented Polish athletes. Each beneficiary receives individual financial aid.

The aim of the program is to grant scholarships to the athletes selected in cooperation with the Ministry of Sports and Tourism. The scholarships allow them to focus on training and the best possible performance. 20 athletes from all over Poland benefited from the program in 2019. Every year,

the President of the Management Board, in cooperation with the Ministry of Sports and Tourism, will allocate a certain amount to the development of Polish athletes. The basis for granting the scholarship by the President of the Management Board of KGHM Polska Miedź S.A. is exemplary sporting achievements and orientation towards increasingly better results.

In 2019, 15 athletes selected by the Ministry of Sports and Tourism, 5 athletes selected in the Copper Basin Region were granted scholarships for exceptional sporting achievements.

## "Two Hours for the Family"

The "Two Hours for the Family" campaign associated with the International Day of Families of 15 May conducted by the Humanities Institute has already had 8 editions. In 2019 more than 800 companies from 15 countries with personnel exceeding 1 million people participated in the celebrations. In 2019, two KGHM Polska Miedź S.A. divisions spanning

9 Group companies joined the undertaking for the first time. The campaign is a good fit with KGHM's policy of supporting employees and their families; its goal was to inspire employees to strengthen their family relations, promote family values and the feeling of responsibility for others.



# Employees

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Human capital is our crucial and most important resource and as such people are subject to special protection and are at the centre of attention of the Company's corporate bodies. KGHM Polska Miedź S.A. aspires to create an organizational culture whose cornerstone is cultivating relations predicated on absolute respect for employees' dignity and personal rights regardless of their place of work and professional status.

KGHM Polska Miedź S.A. recognizes, respects and observes human rights - including employee rights. The Company has undertaken to operate in accordance with the UN Universal Declaration of Human Rights. The KGHM Declaration on Human Rights Protection defines our approach to human rights protection. Employee dignity and personal rights are subject to absolute protection, and any mutual relations are based on respect thereof. As a global company operating across the world's markets, KGHM applies standards

of work and employee relations as stipulated by the local law, as well as by international institutions, such as the International Labour Organization (ILO) or UN Global Compact. Regulations and policies take account of the interests of employees and mutual relationships, based on the best practices, irrespectively of the jurisdiction of the Company's place of operation.

KGHM Polska Miedź S.A. applies impartial and fair criteria of employee assessment, being guided by knowledge, professional skills, social skills and the quality of work. The Company's culture has created a work environment and venue free from discrimination. No form of discrimination is tolerated, in particular due to gender, race, age, origin, religion, handicap, world view, sexual orientation, social status, marital status, disability, political party and trade union membership and the form of employment.

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## In the KGHM Group, people – employees - are the most valuable asset

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### **The rules:**



Compliance with the labour laws of the jurisdictions in which the KGHM Polska Miedź S.A. Group operates, as well as with the standards of our internal labour regulations.



Compliance with the regulations concerning working time and minimum wage.



Respect for employees' rights to associate in employee organizations and trade unions, and to engage in collective bargaining.



To foster employee development and support them in improving their skills through a variety of training forms and possibility to participate in new projects.



Respect for human rights and impermissibility of any forms of illegal or forced labour, including child labour.

## Employment: KGHM POLSKA MIEDŹ S.A. GRI 102-8

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.

### Average employment in KGHM Polska Miedź S.A.

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

increasing 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, as well as development of the circular economy concept in the Company.



## Group

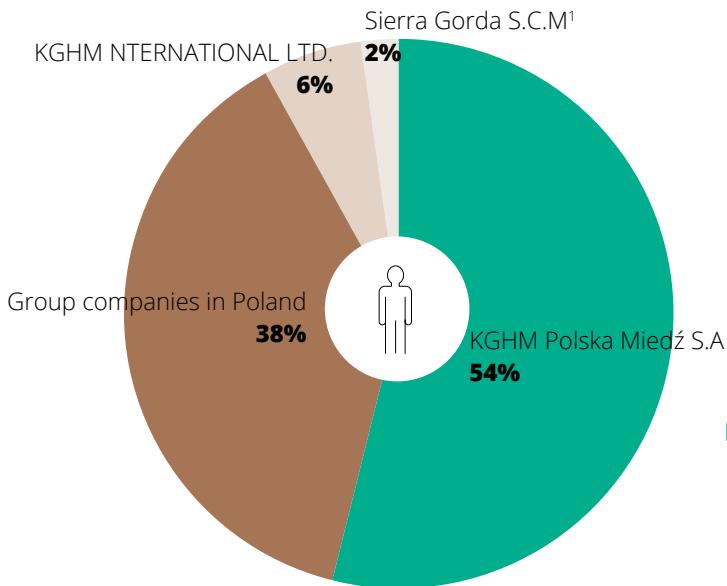
In 2019, the companies of the Group employed 34,329 people, or a decrease by 0.2% as compared to the prior year. The employment structure is presented below:

Average employment in the Group

	<b>2019</b>	<b>2018</b>	<b>Change (%)</b>
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
Group companies in Poland	13,137	13,228	(0.7)
Other Group companies	9	10	(10.0)
<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%)

## Structure of employment in the Group in 2019



### ► 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 74 positions (or by 0.6%).

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.

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

## International mobility policy in the KGHM Polska Miedź S.A. Group

As a result of the acquisition of assets outside Poland, since 2015 KGHM Polska Miedź S.A. has conducted an employee mobility program. In view of the international operations of the KGHM Polska Miedź S.A. Group, a policy of international mobility has been adopted as the basis for action in conformity with the due diligence procedure. Being delegated to companies in Chile, Canada and the US represents an investment of major significance for the KGHM Polska Miedź S.A. Group. The policy not only satisfies the local requirement

for personnel, but also develops the employee's professional potential. In 2019, 19 employees in total were delegated, of which 6 returned, 8 continued the delegation started before 2019, and 5 started their delegation. The skills and knowledge of employees delegated to work in international entities of KGHM in 2019 were directly related to the metal production process.

## Work Regulations in KGHM Polska Miedź S.A.

KKGHM Polska Miedź S.A. has Work Regulations in place which define the organization and management of the labour process as well as the related rights and obligations of the employer and employees. The regulations define the manner and rules of accounting for working time and the grant-

ing of holidays, as well as the time and manner of remuneration. They define the rules of occupational health and safety. Moreover, the work regulations describe procedures for managing rewards and distinctions, as well as penalties for breaches of work order and discipline.

## HR Policy in KGHM Polska Miedź S.A.

GRI 103-1, GRI 103-2, GRI 103-3

An HR Policy has been defined for the Parent Entity, which underscores that the [Employees of KGHM are its most valuable capital – it is they who create the unique corporate culture and build the Company's market position](#).

In order to secure the achievement of its strategic objectives, the Company has for many years consistently invested in the labour market and actively influenced the process of young people's education. The company acts with due diligence towards its employees, since it is people that play a key role in the development of all areas of the business model, build the global standing of the Company and make us an integrated organization open to the future. KGHM recruits the best experts and specialists. As a result, the Company employs people with the greatest potential, who can truly respond to the Company's needs. The work of each of these persons is equally important to the success of the entire organization.

The uniqueness of the pursued HR policy is attested to by the fact that KGHM Employees are people who not only are

talented and highly qualified, but also act in conformity with KGHM values, are open to changes, seek innovative solutions, and are willing to share their knowledge and experience. Most importantly, however, KGHM Employees, regardless of their job titles, see their personal development as a challenge which contributes to the benefits achieved by the entire organization.

The development of KGHM has also driven changes in human capital management inside the company. Recently, the implementation of the HR policy has been modified. A consistent set of key processes and tools have been implemented to support long-term development of skills, new solutions have been prepared for employee performance and assessment management, internal communication has been improved, and focus has been made on modern project, program and portfolio systems. In view of the Company's swift development, it has become a priority to identify the best employees efficiently, and then systematically prepare them to assume key roles and functions in all business operations.

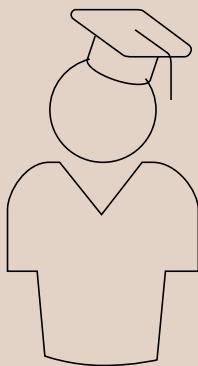
## Lecture of Ken Canfield in the KGHM Head Office



KGHM Polska Miedź S.A. organized a lecture for its employees delivered by Ken Canfield PhD, entitled "Between a Despot and a Hen-Pecked Husband – what it means to be an effective dad" in the Company's headquarters in Lubin. The goal of the meeting was to discover the importance of the role of fathers in lives of children and to inspire fathers to be effective dads and mothers to provide the optimum support to their partners in building good relations with children. Ken Canfield from the US answered a question what it meant to be a father in the modern world.

The seminar was used to exchange knowledge on the subject of fatherhood, learn about the role of a father for children, the family and the society and a platform to share thoughts and ask questions to an expert.

# In 2019, the employees of KGHM Polska Miedź S.A. were assured of:



- ▶ the possibility to pursue educational programs to develop professional, managerial and specialist skills,
- ▶ the possibility to improve their qualifications thanks to co-financing of studies, including: co-financing of MBA studies - 21 people,
- ▶ organization of two post-graduate programs dedicated to the needs of KGHM Polska Miedź S.A.:
  - "Processing of Mineral Resources - Processing of Solid Minerals" in cooperation with AGH University of Science and Technology in Kraków (26 persons),
  - post-graduate studies entitled "Company financial security" in cooperation with the Warsaw School of Economics (62 persons),
  - co-financing of individually chosen post-graduate studies (36 persons),
  - co-financing of higher education (16 people).
  - improvement of language skills of all Company employees (provided to 18,000 employees) thanks to access to online e-learning tools,

KGHM as a global company gives a unique opportunity to persons who want to gain access to state-of-the art technologies and equipment. They can do so by participating in the work of specialist project teams. Working in such a team is also a perfect opportunity to share knowledge and experience within the Company.

## HR projects in KGHM Polska Miedź S.A.

GRI 404-2

### **Competent in the mining-metallurgical sector. KGHM – a key partner in professional education**

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 powiat (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. 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.

### **Dual education**

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 Division 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.

## **La Serena**

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.

## **eKariera (e-Career)**

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 (Staż) and graduate theses work (prace dyplomowe). 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.

## **4E Skills Academy**

The program Developing strategically - 4E Skills Academy trains leaders in KGHM Polska Miedź S.A.

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.

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 marketplace, key directions for our organisation.

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.



# Group

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## 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. To address problems associated with acquiring employees, cooperation was launched with external institutions: vocational schools, schools of higher learning and employment offices.

## KGHM INTERNATIONAL LTD.

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

### **in Canada and the USA**

annual assessment and review of findings, including an analysis of wages, STIP and LTIP concerning Canada and the United States, support of the HR function in the process of reorganisation in the Sudbury mines as a result of suspending mining from the Morrison deposit, 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), replacement of the entity providing tax advisory services in employment-related matters.

### **in Chile**

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), an application program for student internships in 2019, aimed at assisting the children or relatives of employees, who complete their academic education (15 students), 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).

## Human capital and risk on the international market

The global nature of the KGHM Group also translates into risk related to human capital. The Company wants to recruit and retain the best employees necessary among other things for the execution of development projects. The effectiveness of recruitment processes is also undergoing constant improvement. Since 2015 an employee mobility program has also been in place. It defines in detail the rules of dele-

gating employees abroad. The program guarantees the consistency of human resources management policy with best market practices and ensures continuity of risk management (including legal, tax, immigration risks) in the process of delegating personnel to work abroad. In employee international mobility there is an opportunity to transfer knowledge, experience and best practices among the KGHM Polska Miedź S.A. Group's companies.

### Career and recruitment management in KGHM Polska Miedź S.A.

KGHM Polska Miedź S.A. secures highly qualified personnel through the process of internal and external recruitment. It protects the KGHM brand as an employer of first choice for current and prospective employees.

The company acts in accordance with due diligence rules and it keeps an electronic register of job candidates based on the announcements published at <https://www.rekrutacja.kghm.pl>. The electronic registration of candidates comprises job vacancies announced by all Divisions of KGHM Polska Miedź S.A. In order to submit an application the candidate should complete the electronic template containing the necessary personal data and the requirements for the job for which the candidate is applying. Online registration is considered as valid if the application was completed within the set term, after entering by the candidate of all necessary data, confirmed in accordance with the information sent to the candidate by the system. KGHM Polska Miedź S.A. is not liable for any inability to register the application due to Internet failures, server overload, server failures and other cases of this type. Candidates are obligated to express consent to the processing of their personal data contained in the online application for the purposes of recruitment by KGHM Polska Miedź S.A., in conformity with the Act of 10 May 2018 on Personal Data Protection (Journal of Laws of 2018, item 1000) and the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons in connection with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (GDPR).

The Company ensures full discretion to candidates who submit applications and reserves the right to contact only selected persons. No information within the term set in the job announcement means that the application was not accepted. Candidates whose applications have been accepted are notified separately of the date of their job interview. Candidates who successfully pass their job interview may be, upon the candidate's consent, entered in the Central Base of Candidates. The application is stored in the Central Base of Candidates for a period of 12 months. Changes and updates of the stored application are made on the candidate's request. Personal data collected during electronic recruitment of candidates are used only for these processes and are not made available to third parties. The Candidate's Communication via the <https://rekrutacja.kghm.pl> portal is encrypted with SSL protocol with the use of a certificate issued by a trusted certification centre. The electronic recruitment system in KGHM provides for the safety of the candidates' stored data and for compliance with the requirements of the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation, hereinafter: GDPR). The candidate's attempts to obtain access to the server, attacks blocking its functioning, breaking through the security mechanisms, interception, theft or destruction of the data of registered candidates are prohibited. Any such action results in disqualification from the recruitment process.

The KGHM Polska Miedź S.A. Group does not have in place a shared Training Policy. In view of the international scope of activities, cultural differences and specific characteristics of the industries in which the Group operates, each Company conducts a series of activities related to employee training. The purpose of employee development activities in KGHM in 2019 was to retain and improve human capital and to manage the Company's intellectual capital taking into account the Company's new strategic directions in this process: 4E (Elasticity (flexibility), Efficiency, Ecology - safety and sustainable development, E-industry) as well as its long-term development plans through:

- Securing fulfilment of the requirements defined in regulations by the employees' participation in periodic training courses on occupational health and safety, courses and examinations entitling to take up jobs in underground mines which require specialist actions as well as other jobs in the company.
- improving employee skills by the organization of training courses and other development activities, with particular focus on linguistic, managerial and interpersonal skills, as well as training on business process orientation in management.
- Improving the qualifications of the Company's employees and changing their education structure by continuing to co-fund graduate and post-graduate studies.

The Company's employees may improve their qualifications in the context of expected organizational and technological changes by participating in training courses, conferences, studies and post-graduate studies. The employer ensures high level of training among others by aligning the contents of the training courses with the business goals. When planning activities, the Company focuses on ensuring that they fit in the best possible way to the execution of the adopted strategic priorities. Systemic competence development activities are performed by a centralized unit specialized in this area. Development needs are established regularly and constitute the basis for building a training plan and calculation of the resources needed for its performance. These actions are performed on the basis of the procedures existing in the Company and are registered for purposes of internal and external accounting. Both the competence development activity and the utilization of the allocated budget are regularly monitored and the results are reported.

In 2019, 1,038 employees took part in industry symposia and conferences in Poland and abroad in order to become acquainted with new technological and organizational solutions, as well as exchange experiences with regard to performance, improvement of production efficiency, human capital management and innovativeness. The Company's employees participated in cyclically organized conferences such as: "Winter School of Rock Mass Mechanics" and "School of Underground Mining" or the "Economic Forum" in Krynica Zdrój. Employees were afforded the opportunity to develop their skills through co-funding of the courses of higher study, post-graduate studies and MBA studies. 157 persons benefited from co-funding of their studies in 2019.

The development of skills through the co-funding of higher courses of study spanned the following:

MBA studies ▶ 21 people

organization of two post-graduate study programs dedicated to the needs of KGHM Polska Miedź S.A. administered in collaboration with Poland's largest universities:

post-graduate studies entitled "Processing of Mineral Resources - Processing of Solid Minerals" in cooperation with AGH University of Science and Technology in Kraków ▶ 26 persons,

post-graduate studies entitled "Company financial security" in cooperation with the Warsaw School of Economics ▶ 62 persons,

post-graduate studies ▶ 36 persons,

higher courses of study ▶ 16 persons.

Enhancing language skills is an important element of implementation of the cooperation and exchange plan for the Polish and foreign companies within the Group. 338 Company employees benefited from on-site language courses in 2019. To facilitate language skills development, all Company employees were given access to online e-learning tools dedicated to 18 thousand employees.



In 2019 the number of employees participating in a single training event was 31,066, of which 20,994 in blue-collar jobs and 10,047 in white-collar jobs.

To reach the largest group of employees we are launching e-learning training courses. The e-learning training courses we propose to our employees are one of the forms of instruction focused on expanding their knowledge. One of the greatest advantages of e-learning is that we can participate in training at a time that is convenient to us. In addition, the training contains interactive elements to facilitate comprehension and committing to memory the needed information.

In 2019 KGHM Polska Miedź S.A.'s employees obtained access to e-learning training courses:

► Training on ethics:

- Training for employees in managerial jobs (people who manage other people) on ethics, prevention of irregularities in the company (in particular, corruption, abuse and discrimination) and receiving whistleblower reports,

- Training for employees in white-collar and blue-collar positions (people with computer access) on ethics, prevention of irregularities in the company (in particular, corruption, abuse and discrimination) and submitting whistleblower reports concerning irregularities utilizing the channels in place in the company.

Training courses were devoted to material issues such as: abuse and discrimination, protection of whistleblowers and reporting irregularities in the company, corruption and conflict of interests, security of information and cybersecurity.

Training on Information Security Policy (Information Security Policy based on the ISO 27000 standard). This interactive training course is earmarked for all employees of KGHM Polska Miedź S.A who use computers in their daily work. This course aims to inculcate safe behaviours on the web. E-learning training courses provide for an interactive form of learning and contain numerous additional materials, short video clips, case studies and exercises.

## Safety Policy in the KGHM Polska Miedź S.A. Group GRI 403-2

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.

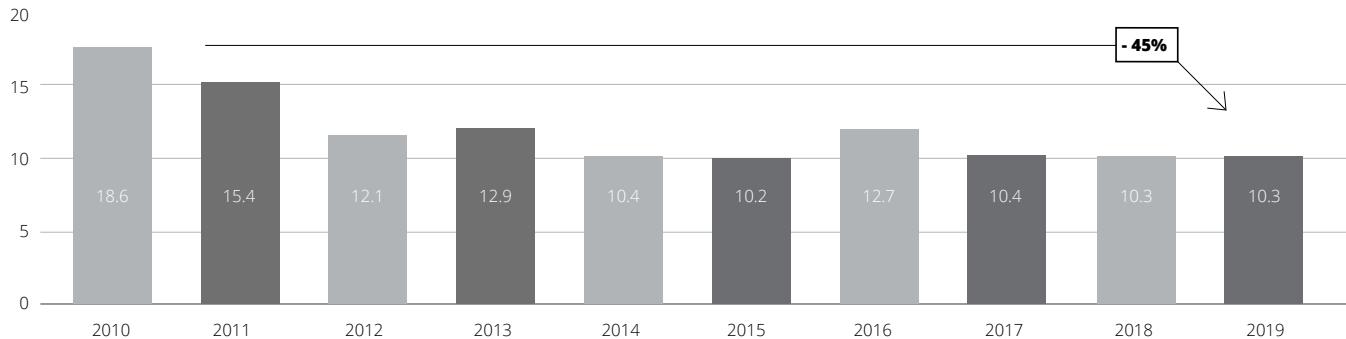
The Company applies high OHS standards, both towards its own employees as well as towards those providing services on the grounds of KGHM Polska Miedź S.A. Each of the Company's Divisions has implemented a safety management system which is compliant with standards in force to date, and in 2019 preparations commenced to implement in KGHM Polska Miedź S.A. 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\*, 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 (rock bursts, destressings, tremors, rock falls) was lower by 31 (a drop from 279 to 248). The vast majority of workplace accidents (98%) qualified as light injuries, caused mainly by rock falls followed by loss of balance by employees, as well as con-

tact (striking) with or by moveable/ immovable 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 rock bursts and roof 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 minor 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 LTIFRGHM 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 – 10.30 – and at the same time was lower by 45% than the amount recorded in 2010:

## LTIFR<sub>KGHM</sub> ratio in the Parent Entity in 2010-2019



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.

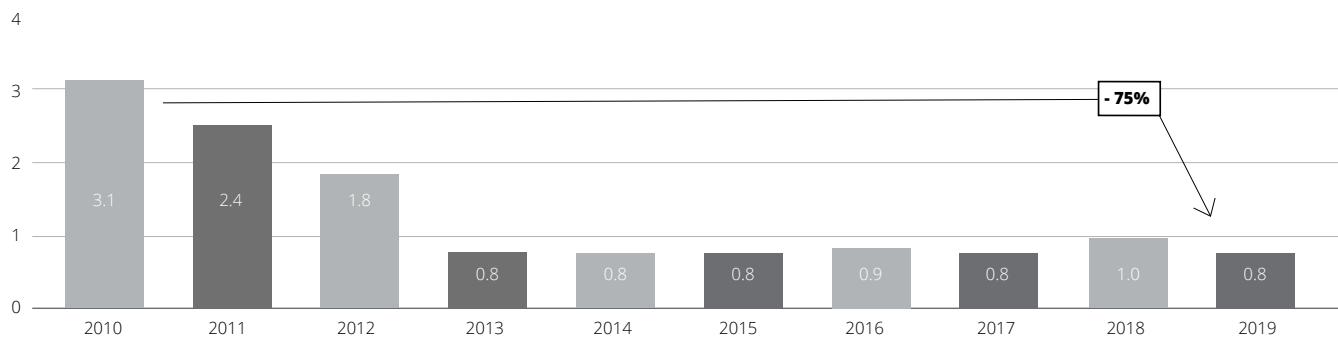
In 2019, a total of 31 incidents at work were registered in the mines supervised by KGHM INTERNATIONAL LTD. in Canada and the United, while the TRIR ratio amounted to 2.8. In 100% of the cases these were incidents of a minor nature without serious consequences for the employees.

In Chile, KGHM Polska Miedź S.A. conducts mining operations in two entities, which have separate systems of OHS management adapted to the legal requirements and mining con-

ditions 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 KGHM Polska Miedź S.A. 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 75% lower than the level

## TRIR<sup>1</sup> ratio in KGHM INTERNATIONAL LTD. in 2010-2019



<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.

The KGHM Polska Miedź S.A. Group has defined significant risks and their mitigation in the area of safety. Information about key risks and their mitigation are described in this Report in the section "Comprehensive Risk Management System in the KGHM Group".

## OHS Golden Rules

The KGHM Polska Miedź S.A. Group has prepared and applied OHS Golden Rules.



## Occupational Safety Council of KGHM Polska Miedź S.A.

GRI 103-1, GRI 103-2, GRI 103-3

The Parent Entity's employees are represented in the Occupational Safety Council whose functioning is based on the principles of mutual trust and cooperation. The Council is the opinion-making and advisory authority with respect to matters of occupational safety and health. It consists of 40 persons, including representatives of the employers (Divisions), representatives of the trade unions operating in the Company and the Company Voluntary Labour Inspectors in KGHM Polska Miedź S.A.'s Divisions. The responsibilities of the Occupational Safety Council include among others periodic assessment of occupational safety and health in the Company, submitting opinions on preventive actions and formulating conclusions with respect to improvement of the working conditions. At each facility of KGHM Polska Miedź S.A., the representa-

tives of the employer, employees and medical services who are members of the Company Committees for Occupational Safety and Health perform periodic reviews of the working conditions, assess occupational safety and health and draw conclusions with respect to improvement of the Divisional working conditions. Since 2016, current occupational safety issues have been discussed at each meeting of the Supervisory Board of KGHM Polska Miedź S.A. In 2019 and previous years the OHS area was analysed many times using a variety of procedures. An ongoing assessment of occupational safety in the Company is made at weekly meetings of the Vice President of the Management Board (Production) and at monthly meetings of the Management Board with the management of all the Divisions.

## **Zero Harm Policy of KGHM Polska Miedź S.A.**

Risk management, including the principle of prudence, is an essential element of our business. KGHM strives for minimization of any threats to its employees, local communities and the environment (Zero Harm Policy). The best facilities are those with the highest level of safety. Employees in the copper ore mines of KGHM Polska Miedź S.A. work in difficult conditions and are exposed to a great number of various hazards. Natural hazards connected with underground mining of copper ore deposits are among the most important threats to the life and health of employees of KGHM Polska Miedź S.A. Specifically, the threats connected with rock mass tremors and their potential impact in the form of rock bursts and roof collapses are considered to be very important in terms of safety as they may lead to serious or fatal accidents, damage to machinery, equipment, and underground infrastructure, as well as mining downtimes. Since employee safety is our priority, the KGHM Polska Miedź S.A. Group has been taking a number of preventive and protective measures. Regular seismic observations are conducted in the mines based on a well-developed network of underground and surface-based

seismic monitoring stations, encompassing all the regions and mining areas. The Company has implemented an integrated model of occupational safety and health management. The following entities are involved in it:

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company Occupational Safety and Health service;

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the Mine-Smelter Emergency Rescue Unit of proven world-class excellence,

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Miedziowe Centrum Zdrowia S.A., an entity providing specialized medical services;

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research and development unit, KGHM Cuprum Sp. z o.o. CB-R; accredited laboratory of Centrum Badań Jakości Sp. z o.o.;

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An entity specialized in rescue services equipped with its own medical facilities.

## **Good cooperation practice within the KGHM Polska Miedź S.A. Group**

Our employee safety is the top priority of the value hierarchy of the KGHM Polska Miedź S.A. Group as well as one of the pillars of the Corporate Social Responsibility Strategy. Research and development initiatives are focused on the improvement of occupational safety. All standards and legal regulations in the area of occupational safety and health are complied with, and in the selected areas our own, even more rigorous rules, are applied. In view of our business profile, interference in the environment and care for our employees, we set our-

selves ambitious goals, the achievement of which translates into concrete effects in terms of improvement of work and occupational safety conditions. Our focus on respect for life and health improves efficiency and effectiveness and ensures continuity of production, which is essential in the mining and metallurgy industry. Moreover, the highest standards in the area of Occupational Safety and Health pertain not only to the Company staff, but to all entities providing services to the KGHM Polska Miedź S.A. Group.

## **Diversity Declaration of KGHM Polska Miedź S.A.**

The KGHM Polska Miedź S.A. Group does not have in place a shared Diversity Policy in written form. Taking into consideration the international nature of our activities, cultural differences and specific natures of the Group's industries, each company has been performing a number of actions in the area of respect for diversity. In view of the above, the independent Diversity Declaration has been defined at KGHM Polska Miedź S.A.

The Company complies with the prohibitions of discrimination and takes actions in order to ensure respect of diversity in the workplace. It creates an organizational culture based on mutual respect, equality, access to development opportunities and optimal use of employee talent regardless of ethnic origin, age, gender, nationality, citizenship, religious orientation, political convictions or trade union membership, among others. It aims at ensuring reasonable diversity both in the selection of personnel (including in the recruitment process), with special focus on knowledge, technical competence and social skills.

The Parent Entity guarantees the implementation of the diversity principle across the KGHM Polska Miedź S.A. Group, and promotes and popularizes these values among its stakeholders and business partners.

The management of diversity also pertains to members of the Supervisory Board and Management Board of KGHM Polska Miedź S.A. The management and supervisory teams are composed of persons of different gender, age and experience. More information on the approach to diversity in the supervisory bodies is presented in the Statement on Corporate Governance in 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.

<http://www.gpw.pl/dobre-praktyki>

<http://www.kghm.com/pl/inwestorzy/lad-korporacyjny/stosowanie-ladu-korporacyjnego>

## Declaration on human rights protection of KGHM Polska Miedź S.A.

The KGHM Polska Miedź S.A. Group does not have in place a shared Human Rights Protection Policy. Taking into consideration the international nature of our activities, cultural differences and specific natures of the Group's industries, each company engages in a number of actions to protect human rights. Consequently, an independent Declaration on Human Rights Protection has been defined at KGHM Polska Miedź S.A.

KGHM Polska Miedź S.A. declares that it recognizes, respects and promotes human rights wherever it conducts its business. It does not tolerate any violations of human rights. We undertake to operate in compliance with the United Nations' Universal Declaration of Human Rights and other norms and standards, including the statutory and executive regulations of the home countries of our business operations.

KGHM Polska Miedź S.A. is a global organization, aware of the importance of respect for human rights in the modern world. The Company accepts responsibility for protection and respect for fundamental human rights and implements such standards across the KGHM Polska Miedź S.A. Group. It also assumes that respect for human rights by other entities is a vital element of mutual relationships.

In compliance with the adopted principles, each employee and collaborator of the KGHM Polska Miedź S.A. Group is responsible for ensuring that in his/her closest environment human rights are respected, and any infringements are reported according to the agreed procedure. This Declaration is the basis of our approach to human rights. It supplements and consolidates the human rights issues contemplated in other policies and guidelines of the Company, such as the Code of Ethics, the Diversity Declaration, HR and the Responsible Supply Chain Policy.

## Company collective bargaining agreement (CCBA) of KGHM Polska Miedź S.A.

The CLA specifies the conditions to be met by the employment relationship, in particular: working hours, holiday and additional leave, remuneration rules, protection of working conditions, benefits associated with employment and rules of their assignment and provision, benefits for former employees, old-age and disability pensioners and members of their families, and mutual obligations of the parties to the Agreement.

The new Strategy of KGHM Polska Miedź S.A for the years 2019-2023 comprises 6 strategic areas. One of those areas is "People and the Environment", which relates to, inter alia, the Company's sustainable development. Its major objective

The Declaration is implemented in the following manner:

- ▶ each employee provided with access to a computer receives the adopted declaration electronically, via the Company Document Circulation System,
- ▶ employees with no access to a computer for work purposes are informed of the declaration implementation via extranet (accessible to all employees) and by their direct superior.

Infringements are reported as follows:

- ▶ Employees have the right and obligation to report an infringement of the Declaration on Human Rights Protection to their direct superiors,
- ▶ Employees may report infringement to the trade unions operating in the Company (in KGHM Polska Miedź S.A. there are 15 trade unions, which have established 48 company trade organizations; the trade union membership percentage ratio in the Company is 88.6%). KGHM Polska Miedź S.A. acts in compliance with the Collective Bargaining Agreement
- ▶ infringements may be reported to the Occupational Safety and Health Committee,
- ▶ Employee Council Institutions and whistleblowers are present in the Company, to the State Labour Inspection Service (PIP).

is to grow based on the idea of sustainable development and safety and to enhance the Group's image as a socially responsible organization. The effectiveness of the "People and the Environment" strategic area is measured by:

- ▶ a minimum level of annual improvements in LTIFR (for domestic assets) and TRIR (for overseas assets),
- ▶ maintaining a participation budget at the level of 20% of the amount of deduction for donations from the minerals extraction tax by 2020, the level of the KGHM Group's employees' dedication and satisfaction, based on pre-defined measures being implemented by 2023.

# Operating and financial results

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## Selected operating and financial data of the KGHM Polska Miedź S.A. Group



## Selected operating and financial data of KGHM Polska Miedź S.A.



Revenues of the KGHM Group in 2019 rose by PLN 2,197 million (+11%) and revenues of KGHM Polska Miedź S.A. increased by PLN 1,926 million compared to the same period of the previous year.

The increase was driven mainly by the increased volume of copper (+8%) and silver (+13%) sales, but also a more favourable exchange rate coupled with lower prices of copper. At the Group EBITDA level, contributions included higher operating results of KGHM Polska Miedź S.A. (+PLN 203 million,

+6%), Sierra Gorda (+PLN 27 million, +4%) and other Group companies in Poland (PLN 40 million, +20%). The Group posted a consolidated net result of PLN 1,421 million.

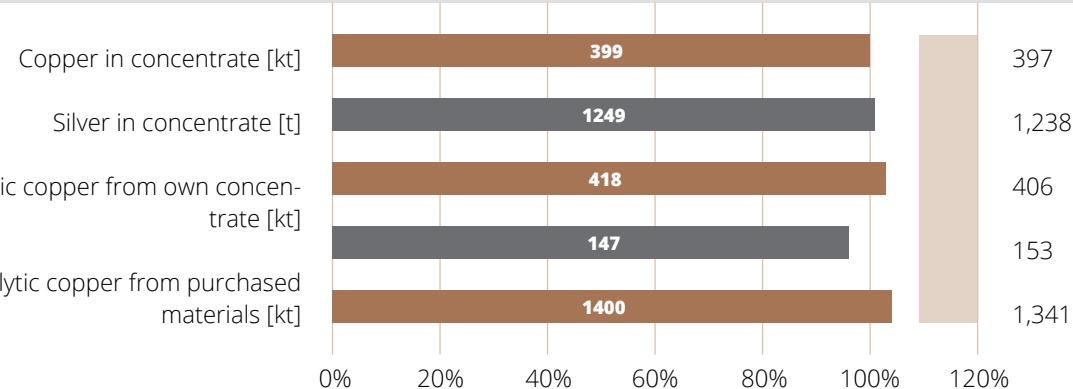
In 2019, the KGHM Group recorded an **increase in payable copper production compared to 2018 by 11% to 702 thousand tonnes**. The Group also achieved record high production of silver at 1,417 tonnes, up 18% from the production achieved in 2018 (1,205 tonnes).

# Production and sales performance in 2019

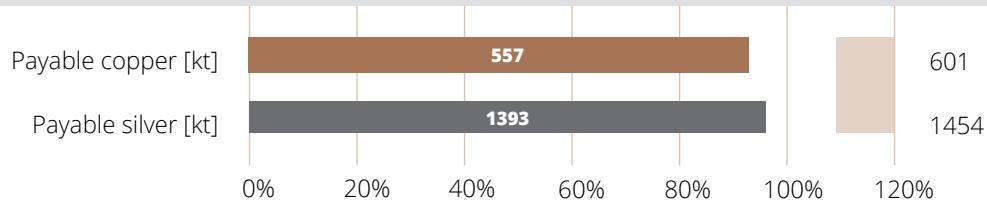
Compared to the assumed annual targets

**2019E**  
Budget

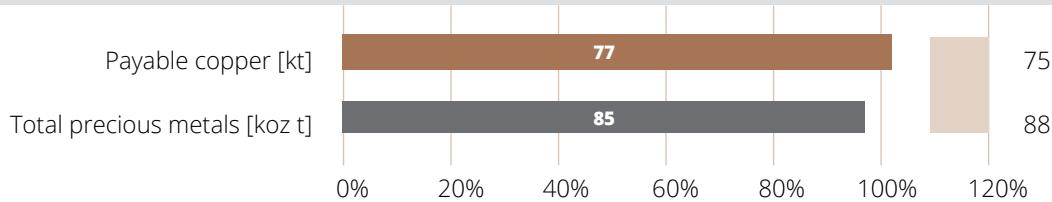
## Production KGHM Polska Miedź S.A.



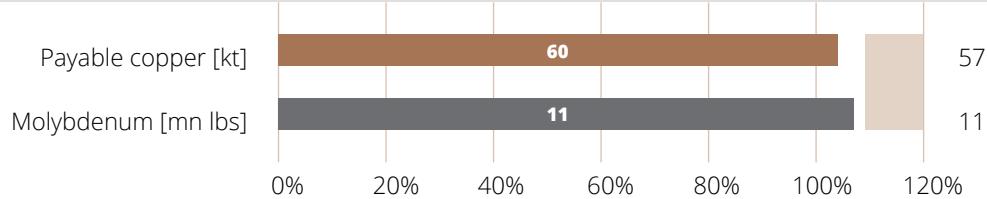
## Sales KGHM Polska Miedź S.A.



## Production KGHM INTERNATIONAL



## Production Sierra Gorda (for the 55% stake)



# Stable and safe financial standing of the KGHM Group

**2019E**  
Budget

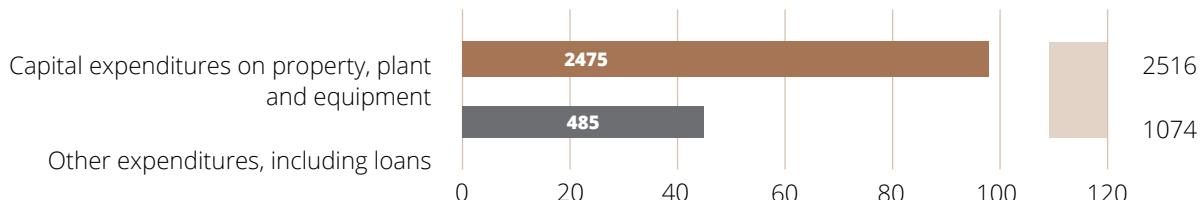
**Total unit cost** of electrolytic copper production from KGHM Polska Miedź S.A.'s own concentrate (PLN/t)<sup>1)</sup>

[k PLN/t]



**Capital expenditures on property, plant and equipment** in KGHM Polska Miedź S.A.<sup>2)</sup>

[in PLN]



**Solvency of the KGHM Group** [Net Debt / Adjusted EBITDA]<sup>3)</sup>



1) Sum of costs of extraction, flotation and metallurgical processing per cathode, including costs of the support function and cathode sales costs, adjusted by the value of inventories of semi-finished products and production in progress less the value of anode slimes, divided by the production volume of electrolytic copper from own concentrate

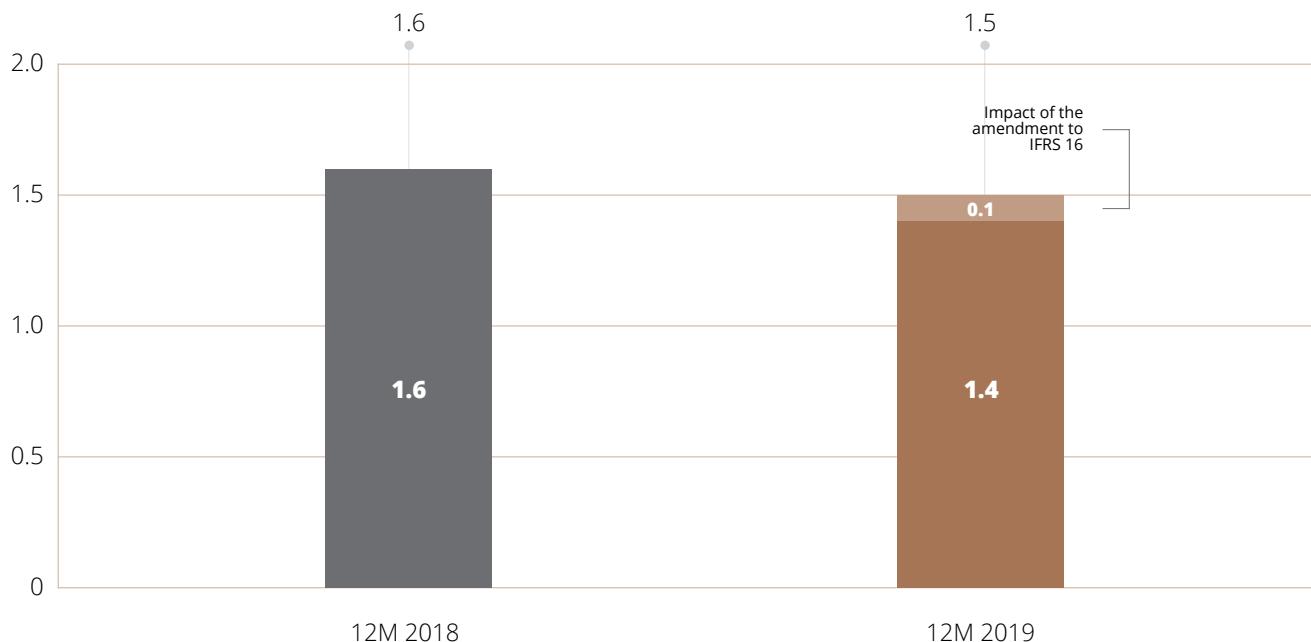
2) Capital expenditures on property, plant and equipment – excluding expenditures on development work - uncompleted; other expenditures, including loans – acquisition of shares and investment certificates of subsidiaries and loans granted, excluding the purchase of investment certificates related to restructuring of FIZAN funds in 2019

3) 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.

4) The Net Debt/EBITDA ≤ 2 level results from the Financial Liquidity Policy adopted by the Company and does not represent KGHM's budgetary assumption for 2019.

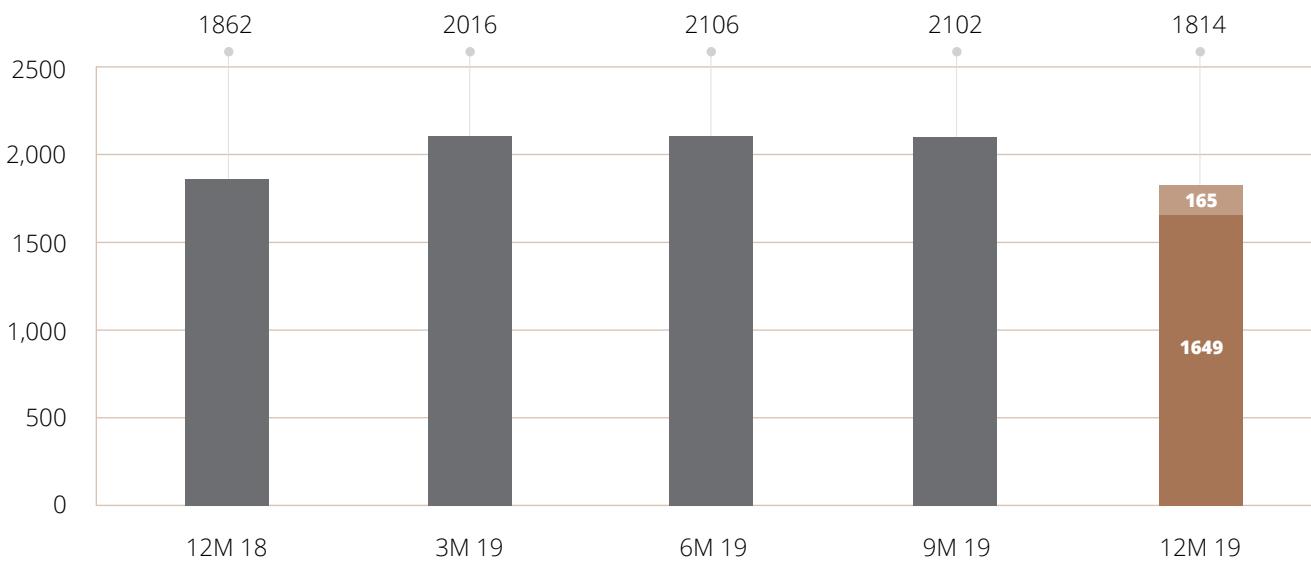
# Debt of the KGHM Group at the end of Q4 2019

## Net Debt/Adjusted EBITDA<sup>1)</sup>



## Net Debt of the Group

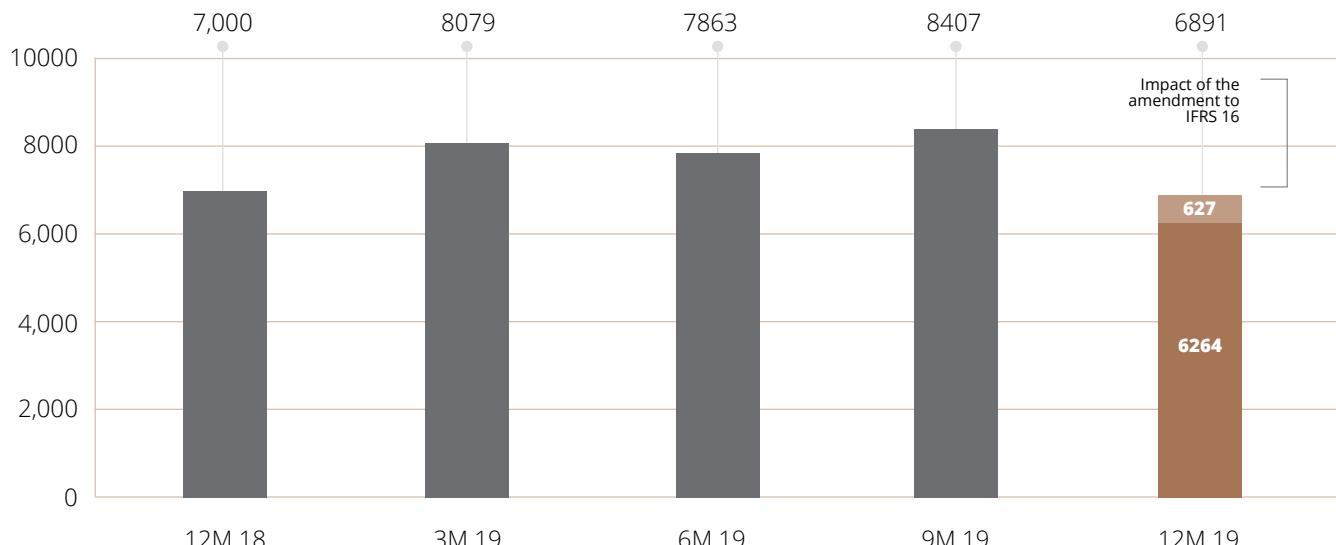
[USD million]



1) The data above present the amounts resulting from the amendment to IFRS 16 in respect to leases

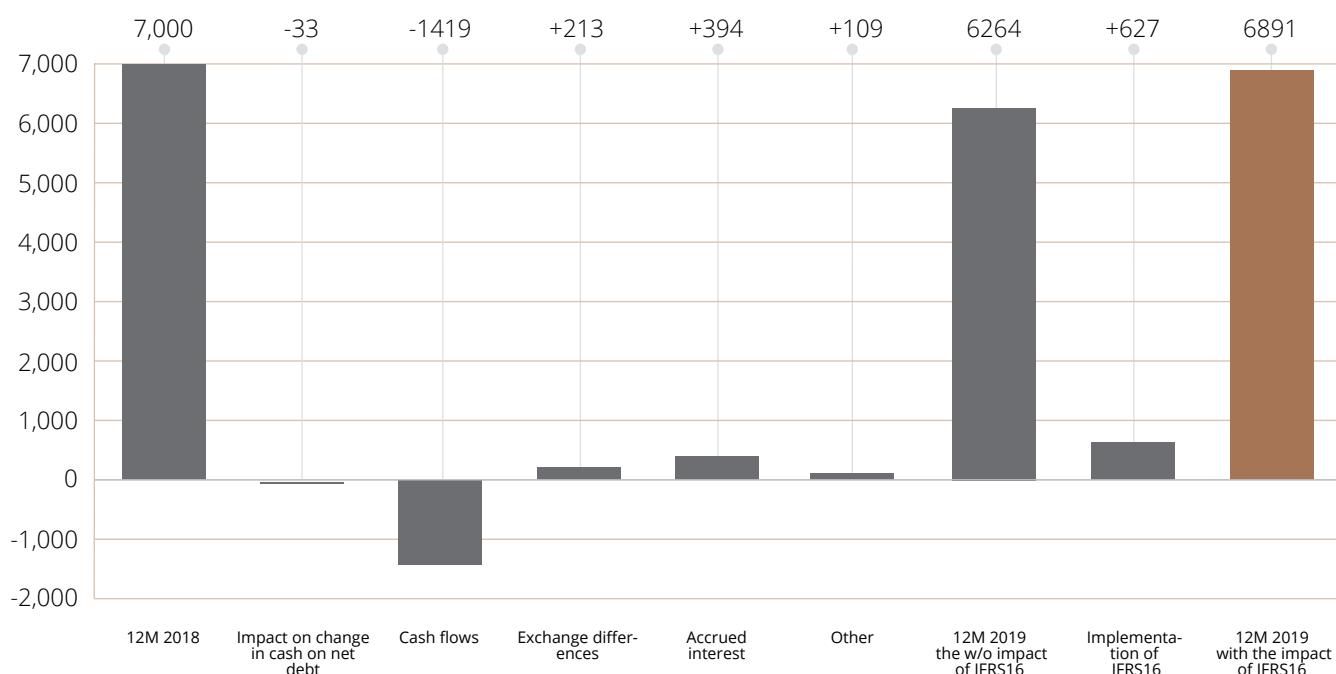
## Net Debt of the Group

[in PLN million]



## Change in Net Debt

[in PLN million]



## Main factors affecting interest-bearing debt in 12M 2019

### Increase in debt

- ▶ Capital expenditures on property, plant and equipment (PLN 3,233 million)
- ▶ Minerals extraction tax (PLN 1,520 million)
- ▶ Capital contribution to Sierra Gorda (USD 112.75 million)
- ▶ Financing costs (PLN 239 million)
- ▶ Negative exchange differences (debt increase by PLN 213 million)
- ▶ Increase in trade and other liabilities (by PLN 96 million)

### Decrease in debt

- ▶ Positive cash flows from operating activities, excluding the change in working capital and minerals extraction tax (PLN 5,628 million)
- ▶ Increase in trade and other liabilities, including trade liabilities assumed by the factor (up by PLN 737 million)
- ▶ Decrease in inventories (down by PLN 305 million)

# Investments

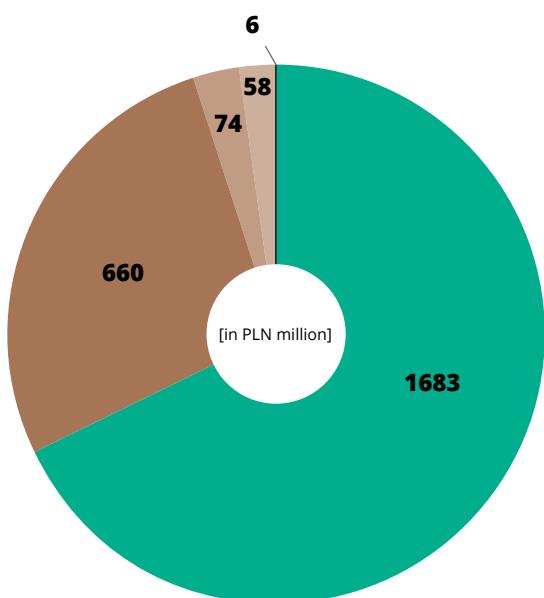
In 2019, capital expenditures on property, plant and equipment amounted to PLN 2,475 million and were 16% higher than in the previous year.

Together with expenditures incurred on uncompleted development work, capital expenditures amounted to PLN 2,481 million.

## Capital expenditures of KGHM Polska Miedź S.A. after 4 quarters of 2019

GRI 203-1

Consistent and rational  
investment program

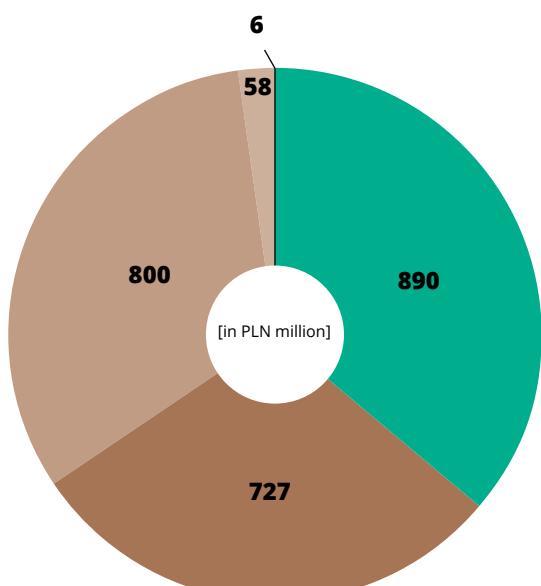


► PLN **2,516** million  
Budgetary assumptions for CAPEX 2019

PLN **2,670** million  
Budgetary assumptions for CAPEX 2018

2019, by area:

- Mining (68%)
- Metallurgy (27%)
- Other activities (3%)
- Leases per IFRS 16
- Development work - uncompleted



► PLN **2,481** million  
Fulfilment of CAPEX targets in 2019: **98.6%**

PLN **2,132** million  
Fulfilment of CAPEX targets in 2018

2019, by analytical category:

- Replacement (36%)
- Maintenance (29%)
- Development (32%)
- Leases per IFRS 16
- Development work - uncompleted

# Main projects financed after 4 quarters of 2019

## Deposit Access Program

- In the maintenance and development category, individual projects were systematically implemented in the group of mining projects (48.1 km of mining excavations were made), shaft projects (GG-1 shaft sinking has reached a depth of 1099.3 meters), air-conditioning and energy-mechanical projects.

## Copper concentrate roasting installation

- The installation has been successfully commissioned and incorporated in the core production line of the Głogów Copper Smelter and Refinery.  
Since the commencement of the installation's continuous operation (in January 2019), 79 thousand tonnes of roasted ore has been produced.

## RCR furnace in the Legnica Copper Smelter and Refinery

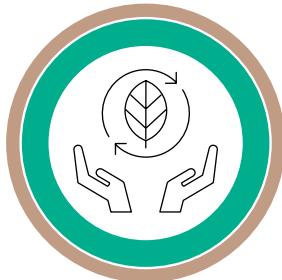
- The RCR furnace with associated installations has been built and brought on-line. The guarantee parameters have been achieved. The RCR furnace operates in the core production line of the Legnica Copper Smelter and Refinery. The copper scrap processing in the RCR furnace allowed the Legnica Copper Smelter and Refinery to achieve in 2019, for the first time in its history, the total processing of scrap and copper-bearing materials in anode and RCR furnaces at the level of 26 thousand tonnes.

## Development of the Żelazny Most Tailings Storage Facility

- The individual stages of the construction project of the southern quarters of the facility were executed on schedule (In December 2019, the overall material progress of the project was at 59%). The work was also under way on building the tailings segregation and compacting station (the overall material progress of the project was 49% in December 2019).

## Program to adapt the technological installations to the requirements of BAT Conclusions

- Projects under this program are implemented in the Głogów Copper Smelter and Refinery and in the Legnica Copper Smelter and Refinery. In 2019, hermetic sealing of the conveyor belt system in Głogów and modernization of the dedusting system in shaft furnaces in Legnica were completed. Gas desulphurisation installation for the Kaldo furnace was started up for testing in the Głogów Smelter and Refinery.



In 2019, KGHM 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.

## Selected environmental investments and environmental fees in 2019

### Energetyka Sp. z o.o.

Payments for water intake and waste discharge and emission of contaminants to the atmosphere ► **PLN 3.3 million**

► **-13% yoy**

### Selected environmental investments<sup>1)</sup>

- ▶ construction of a fumes treatment installation meeting emissions standards compliant with the Directives of the European Parliament.
- ▶ expansion of capacity based on gas-fired boilers

### Nitroerg S.A.

Charges related to the character of production – explosives, initiation systems, fuel additives ► **PLN 0.3 million**

► **-40% yoy**

### Selected environmental investments:

- ▶ modernisation of the sewage treatment plant
- ▶ continued construction of a new installation for the production of fuel additives, which will allow the re-use of concentrated acids in the production process

### BATAs Program

### Selected environmental investments:

- ▶ 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) and a decision was made to exclude six projects from the BATAs Program
- ▶ 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.
- ▶ Legnica Copper Smelter and Refinery: the modernised dedusting unit for three filters behind the shaft furnaces was brought on-line

1) Limiting emissions of pollutants to the atmosphere

# Capital expenditures

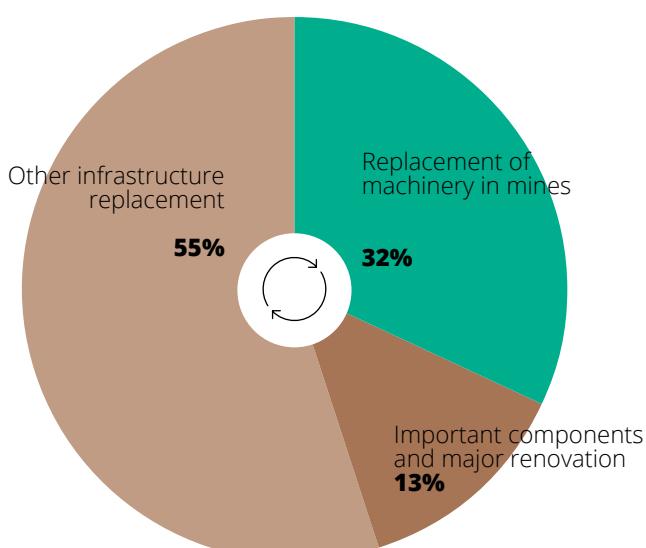
In 2019, capital expenditures on property, plant and equipment amounted to PLN 2,475 million and were 16% higher than in the previous year. Together with expenditures incurred on uncompleted development work, capital expenditures amounted to PLN 2,481 million.

<b>Structure of expenditures on property, plant and equipment and intangible assets of KGHM Polska Miedź S.A.</b> (in PLN million)							
	<b>2019</b>	<b>2018</b>	<b>Change (%)</b>	<b>4Q'19</b>	<b>3Q'19</b>	<b>2Q'19</b>	<b>1Q'19</b>
Mining	<b>1,683</b>	1,483	+13.5	480	423	412	368
Metallurgy	<b>660</b>	573	+15.2	328	138	111	83
Other activities	<b>74</b>	71	+4.2	53	10	7	4
Development work - uncompleted	<b>6</b>	5	+20.0	2	3	1	-
Leases per IFRS 16	<b>58</b>	-	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>
including costs of external financing	<b>135</b>	133	+0.8	-48	17	60	106

Investment activities comprised projects related to the replacement of equipment and maintaining mine

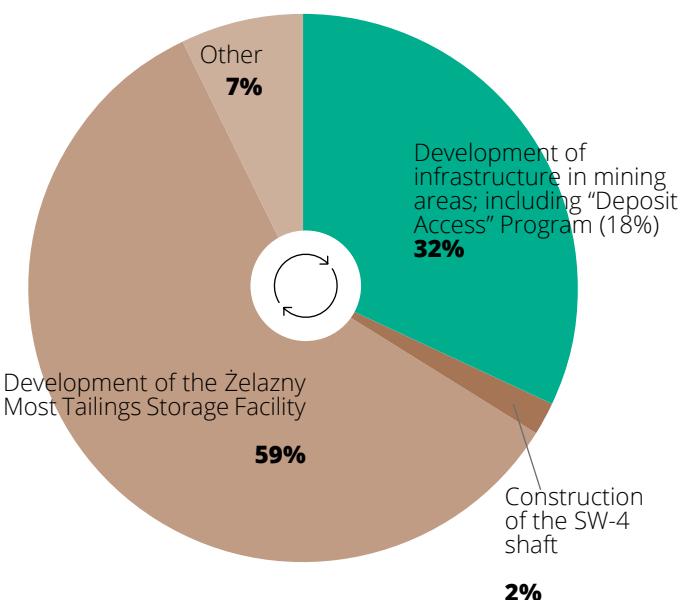
## Structure of expenditures on the replacement of equipment

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



## Structure of expenditures on maintenance

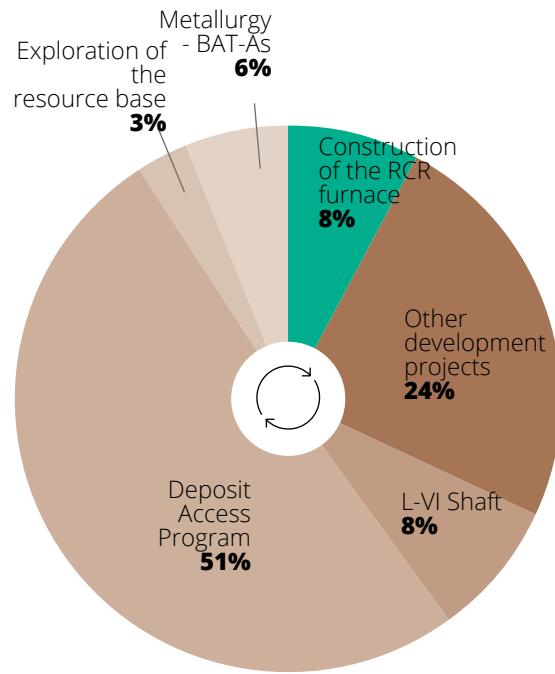
Projects related to maintaining mine production aimed at maintaining mine production on the level set in approved Production Plan (development of infrastructure to match mine advancement) represent 31% of total expenditures incurred.



## Structure of expenditures on development

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

- 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.



# Operating results

## Production results of the KGHM Polska Miedź S.A. Group

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 pro-

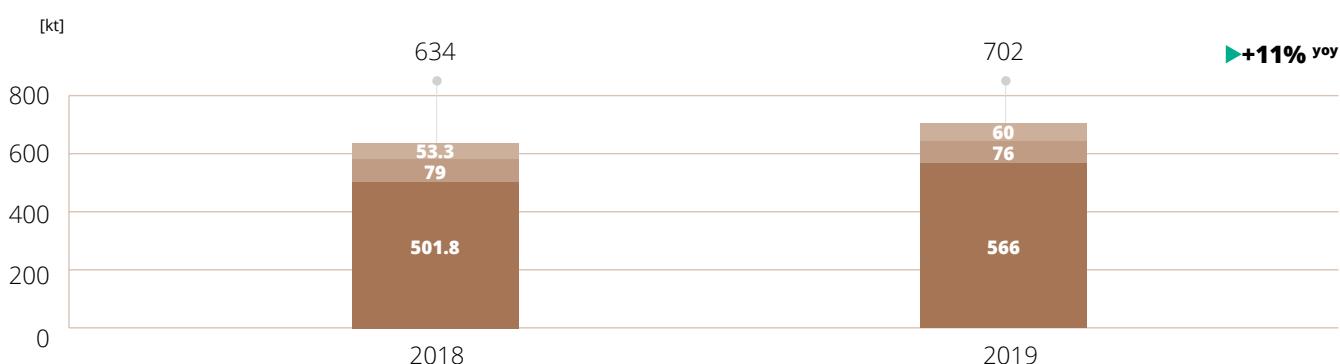
duction lines, including that of the concentrate roasting installation, and to Sierra Gorda S.C.M. as a result of higher extraction and processing of higher copper-grade ore. On the other hand, geological conditions (lower copper content in ore mined in the Sudbury Basin and in the Franke mine) were the main reasons for the decrease in production in the KGHM INTERNATIONAL LTD. segment.

## Metal production

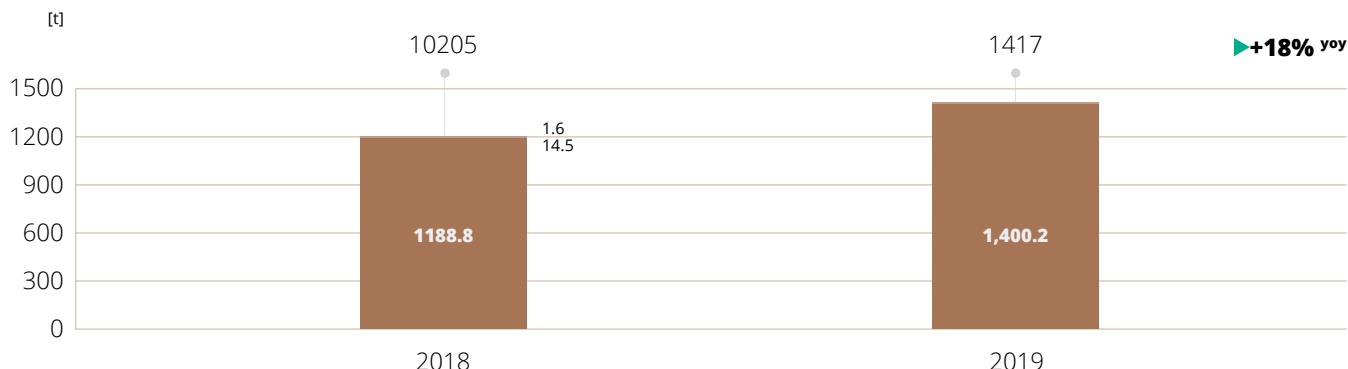
Group

- ▶ Overrun of the electrolytic copper production plan in KGHM Polska Miedź S.A. driven by increased availability of core production lines, including the correct operation of copper concentrate roasting plant.
- ▶ Higher-than-planned production of electrolytic copper by KGHM Polska Miedź S.A. driven by increased availability of core production lines, including proper operation of the copper concentrate roasting plant.
- ▶ Increase in the production of payable copper by the Sierra Gorda mine as a result of higher extraction and processing of ore and higher copper content in ore

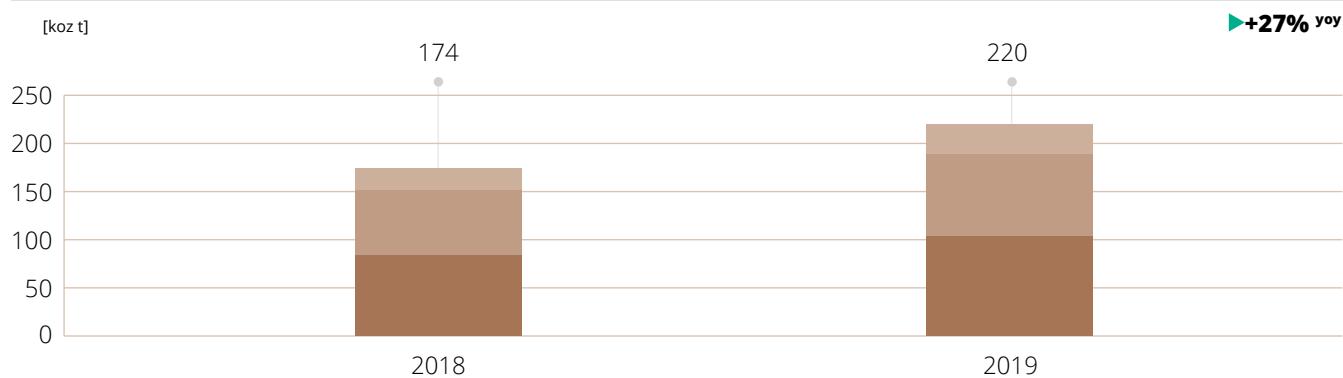
### Payable copper production



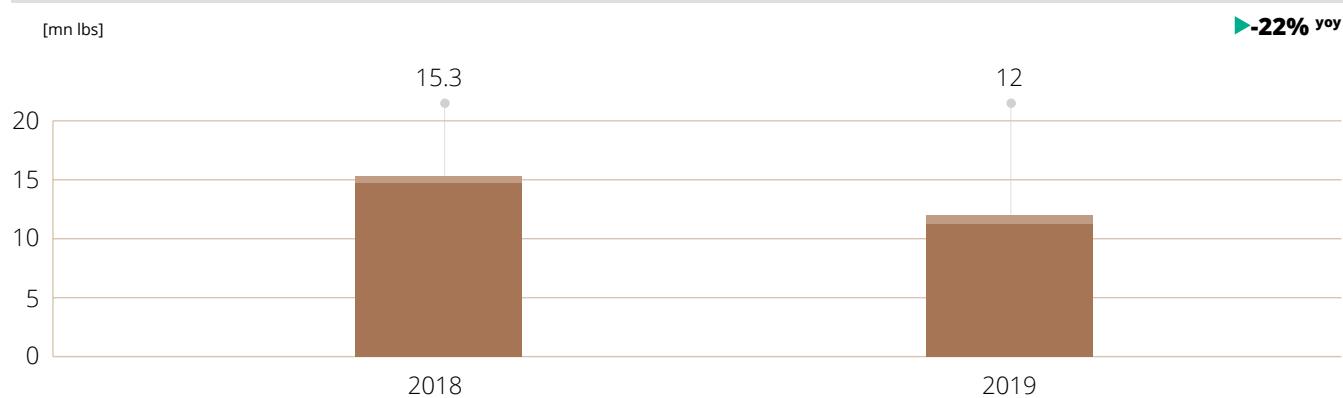
### Silver production



### TPM production



### Molybdenum production



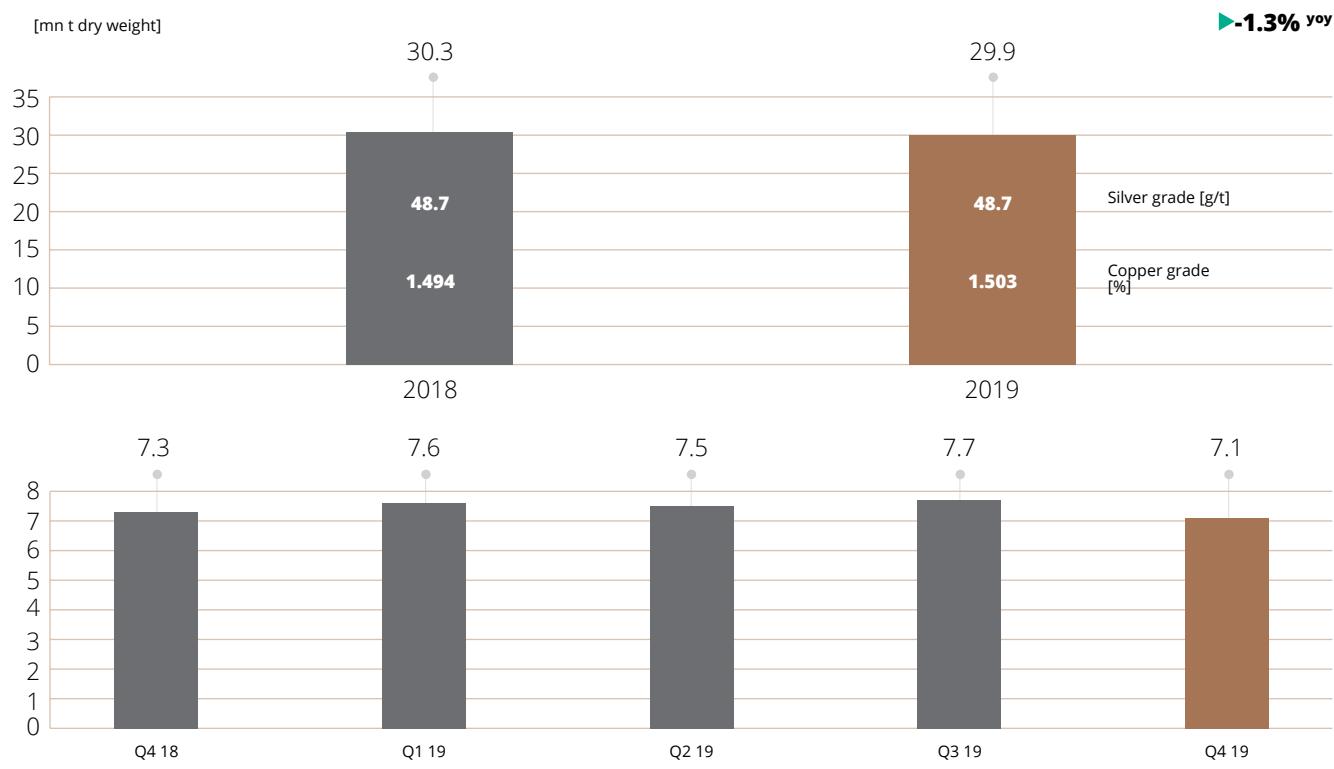
■ Sierra Gorda (55%) ■ KGHM INTERNATIONAL ■ KGHM Polska Miedź S.A.



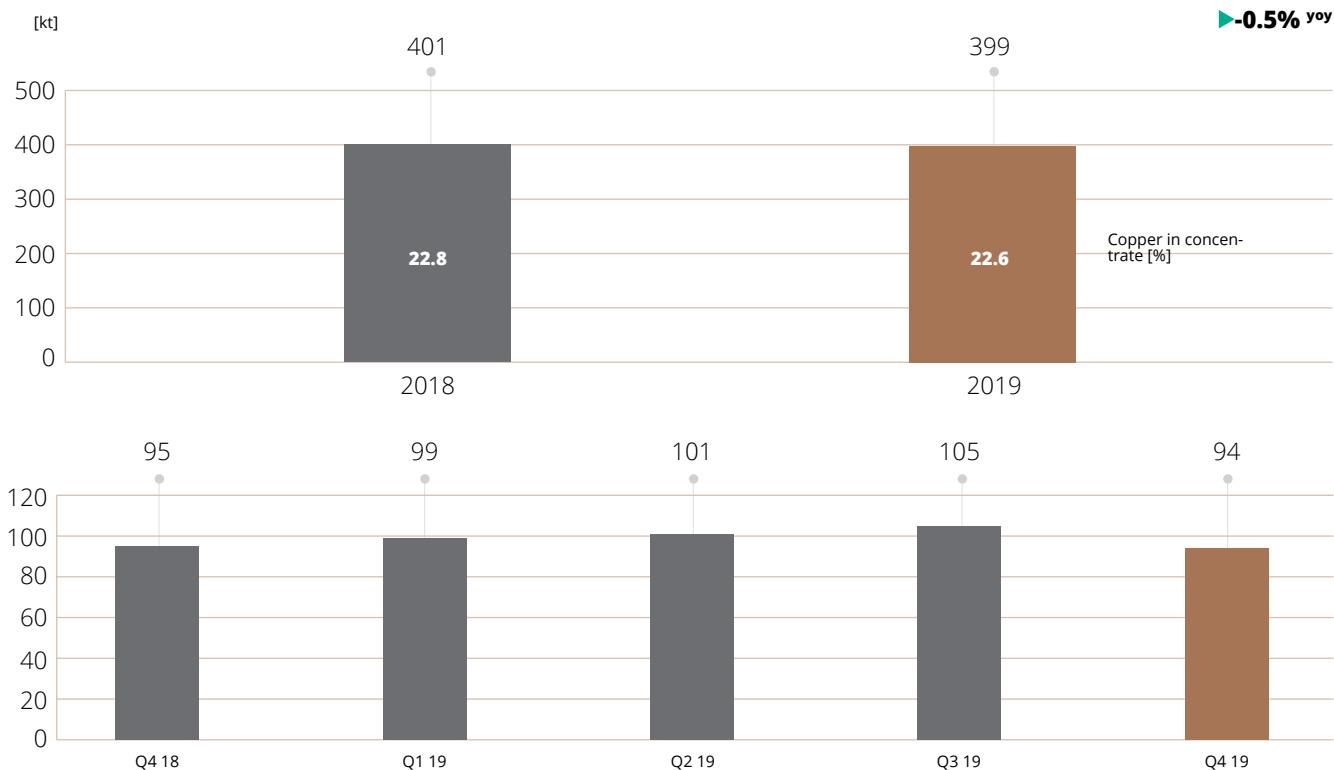
# Production results

KGHM Polska Miedź S.A.

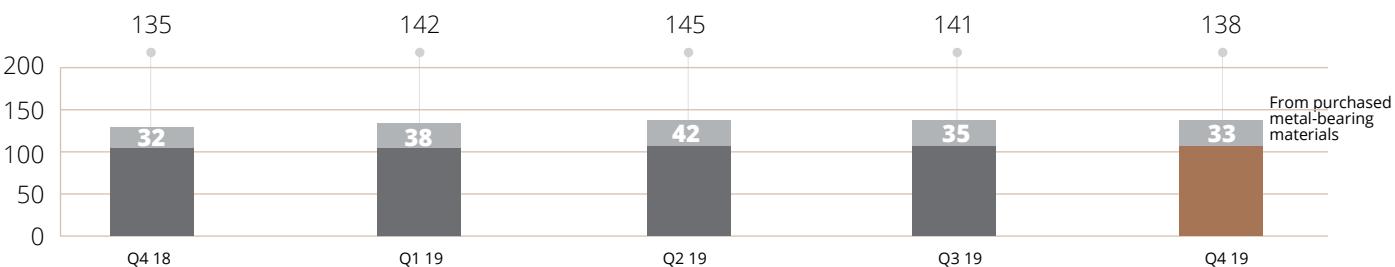
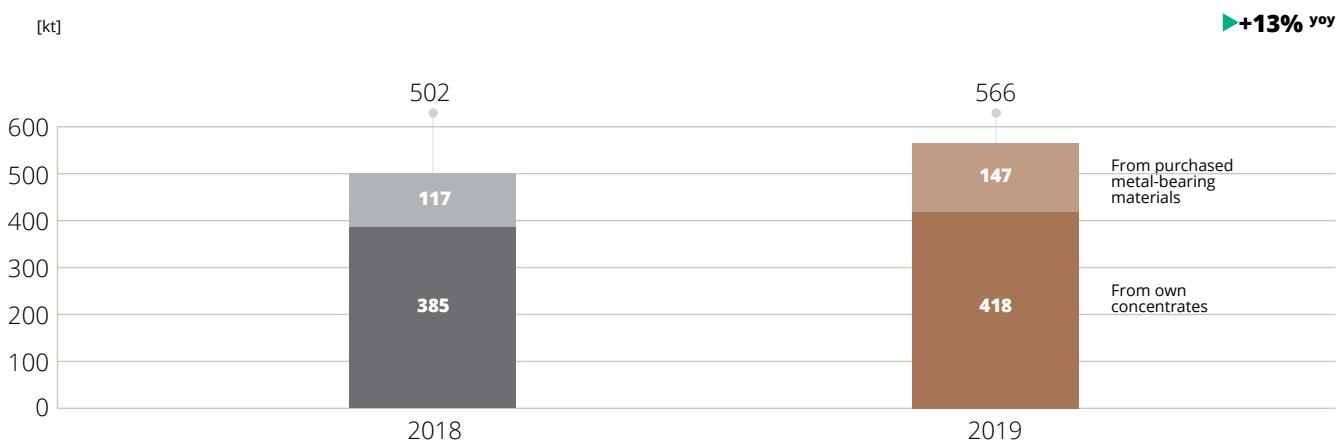
## Mined ore



## Production of copper in concentrate

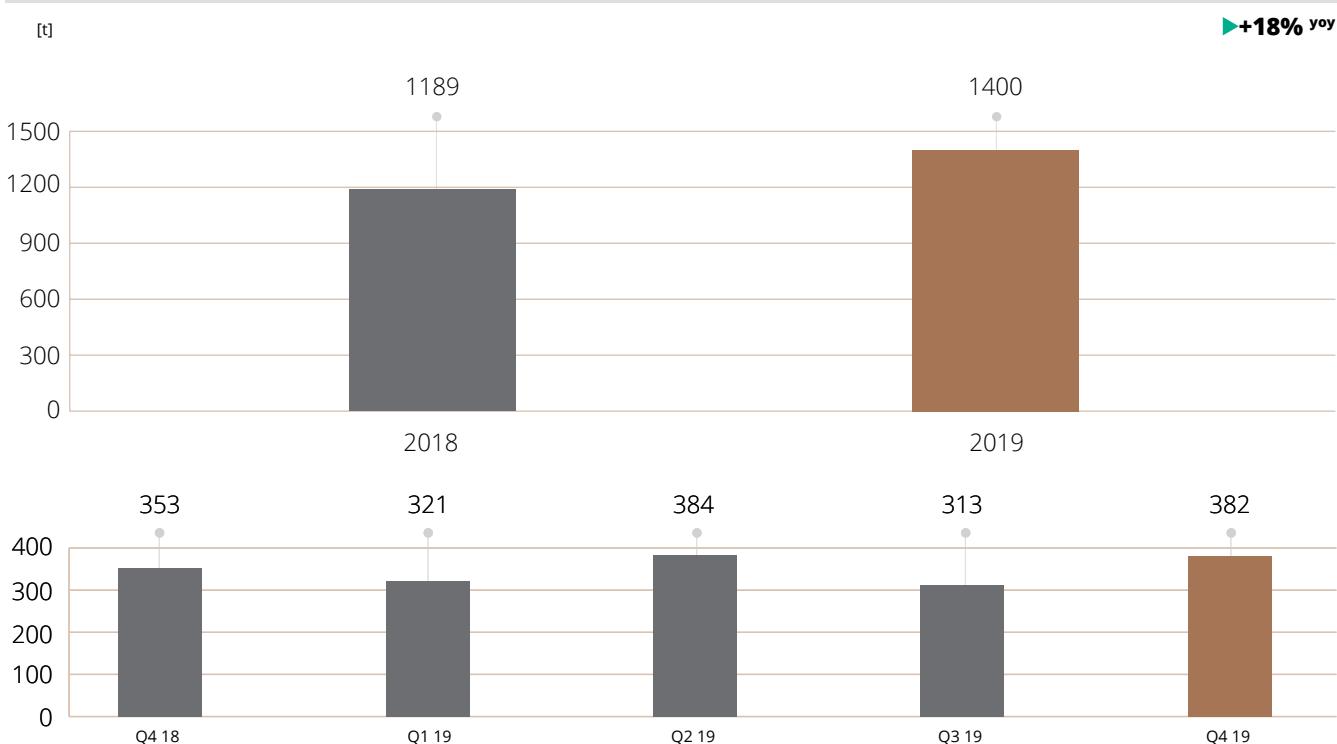


## Electrolytic copper production



Increase in production yoy due to higher concentrate processing thanks to the copper concentrate roasting installation

## Metallic silver production

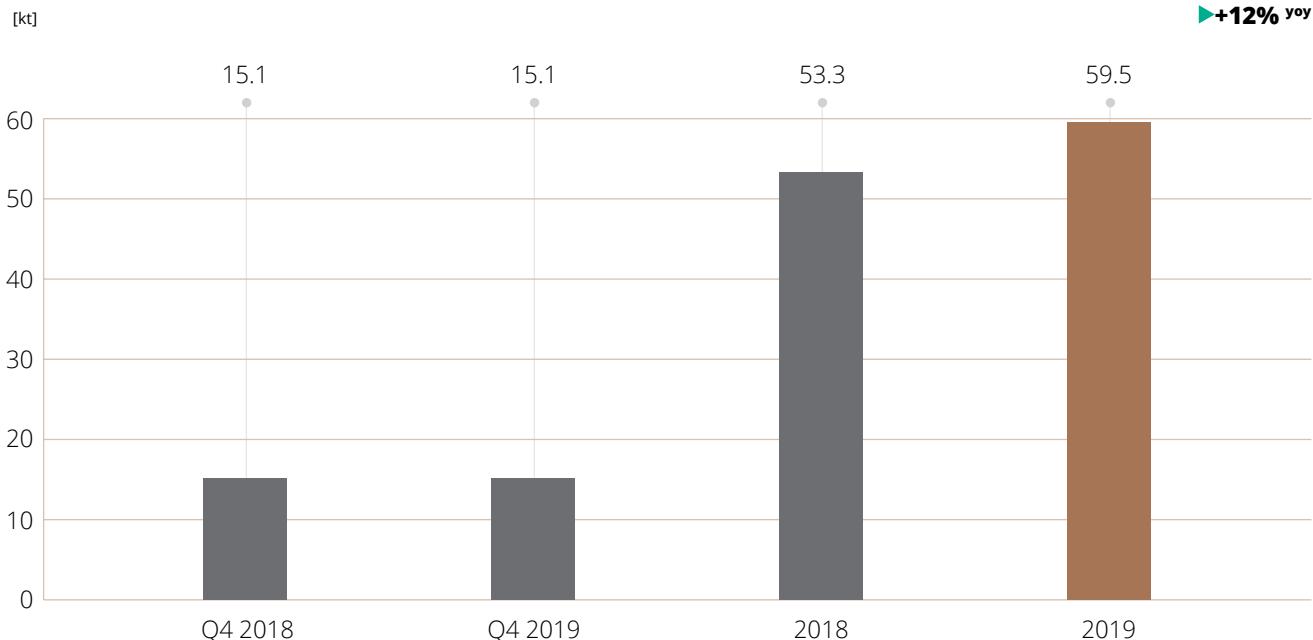


Higher production due to greater availability of input materials driven by higher concentrate processing

# Production results

Sierra Gorda<sup>1)</sup>

## Payable copper production

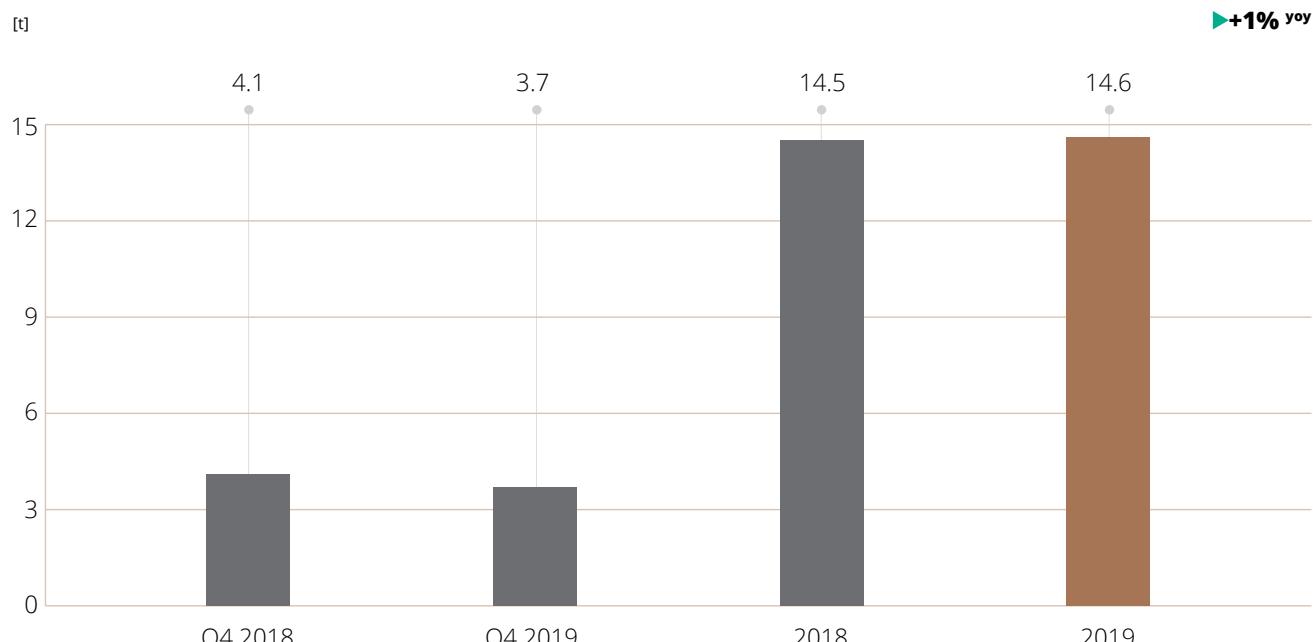


Copper production after 4 quarters of 2019 was higher than assumed in the budget

Higher production of payable copper due to higher extraction and processing of ore

In 2019, processed ore had higher copper content than in 2018

## Silver production

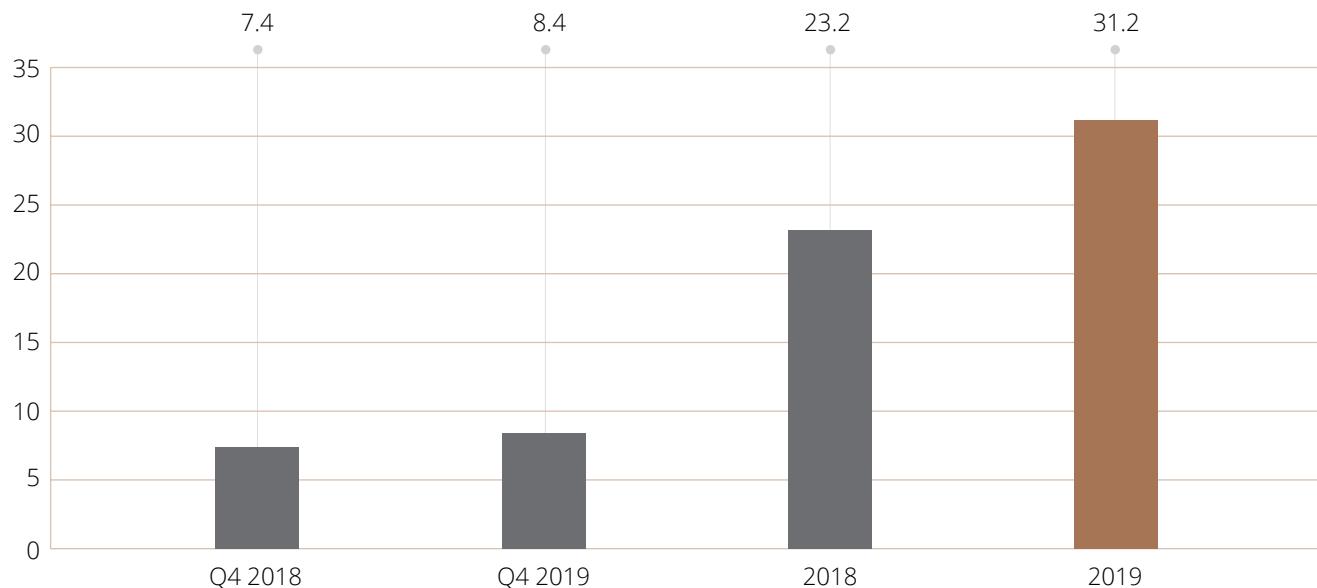


1) on a 55% basis

## TPM production

[koz t]

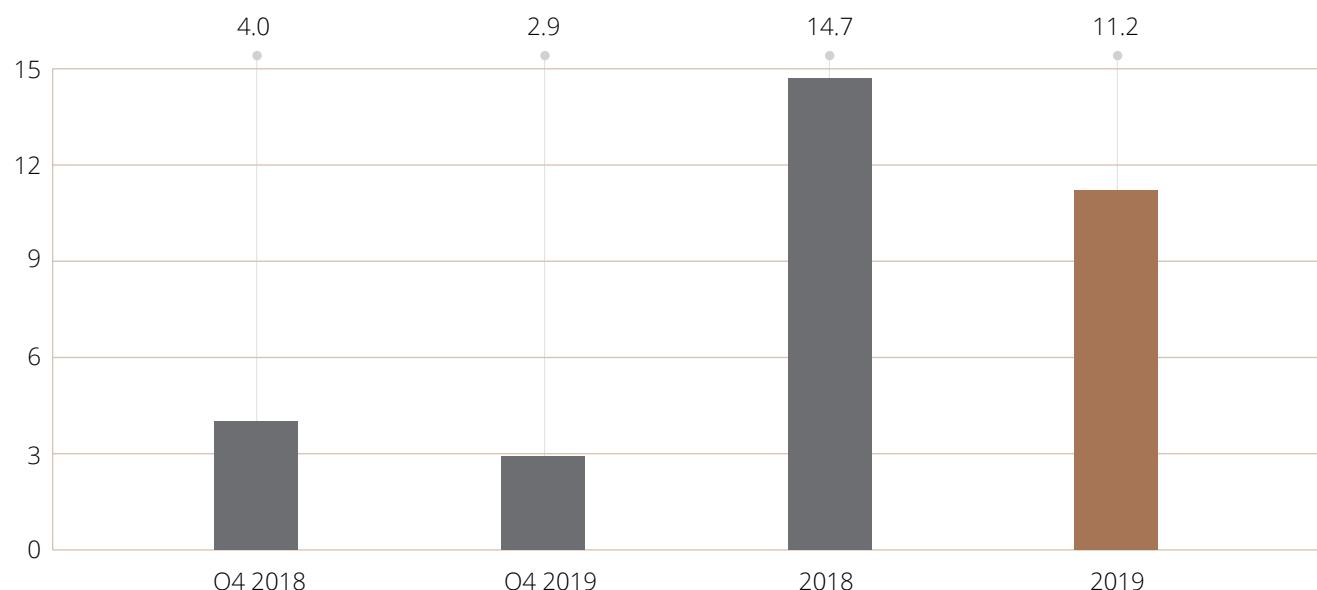
►+34% yoy



## Molybdenum production

[mn lbs]

►-24% yoy



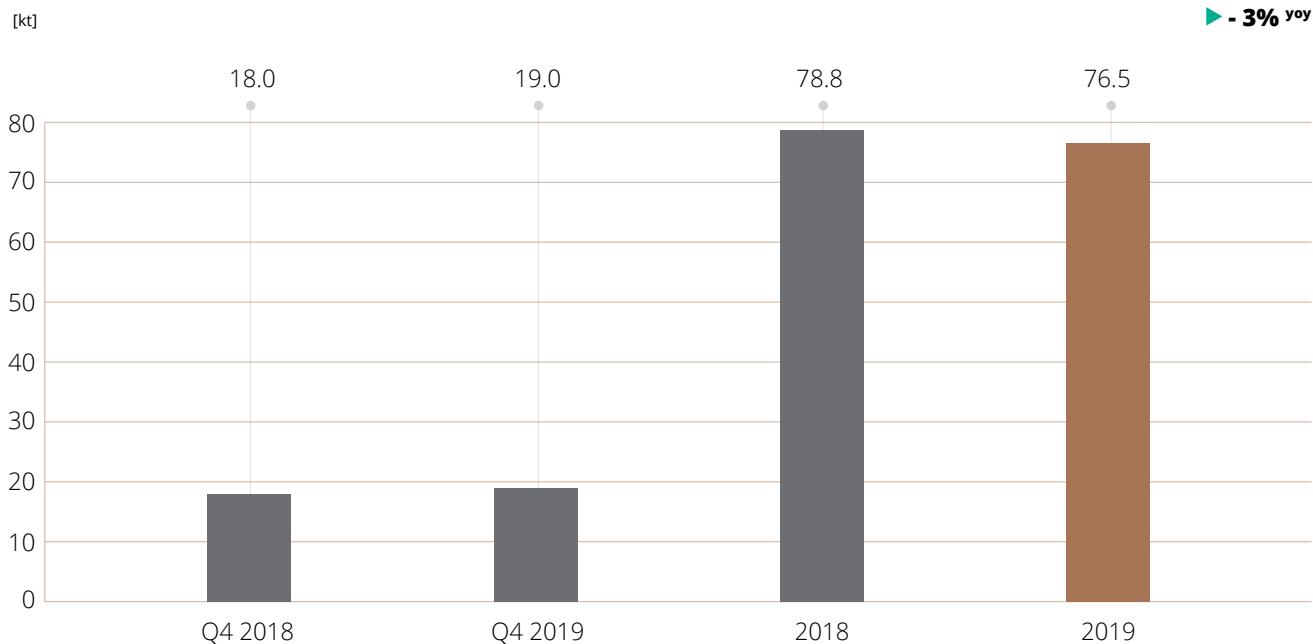
Increased production of copper, silver and gold due to higher extraction by the Sierra Gorda mine;

Lower molybdenum production resulting from extraction from areas with lower Mo content than the ores mined in previous years

# Production results

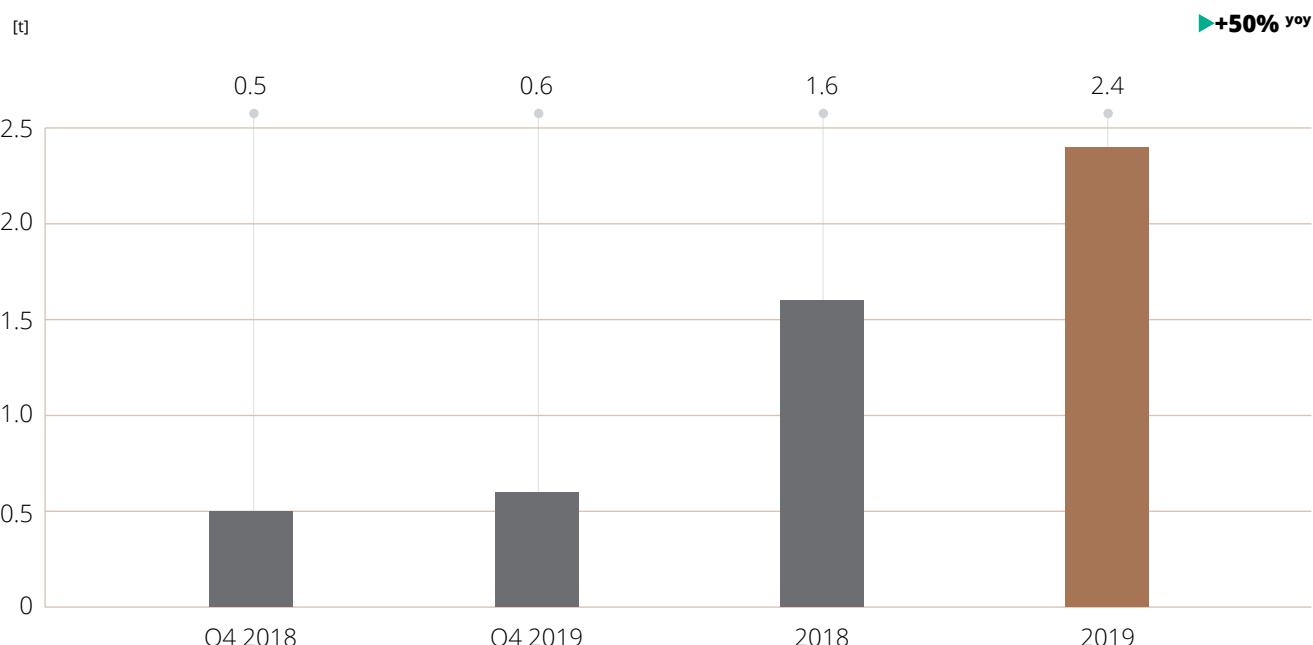
KGHM INTERNATIONAL

## Payable copper production



Lower production due to lower copper content of ores in the Sudbury Basin (a change of the mining area) and in the Franke mine (due to the characteristics of deposits)

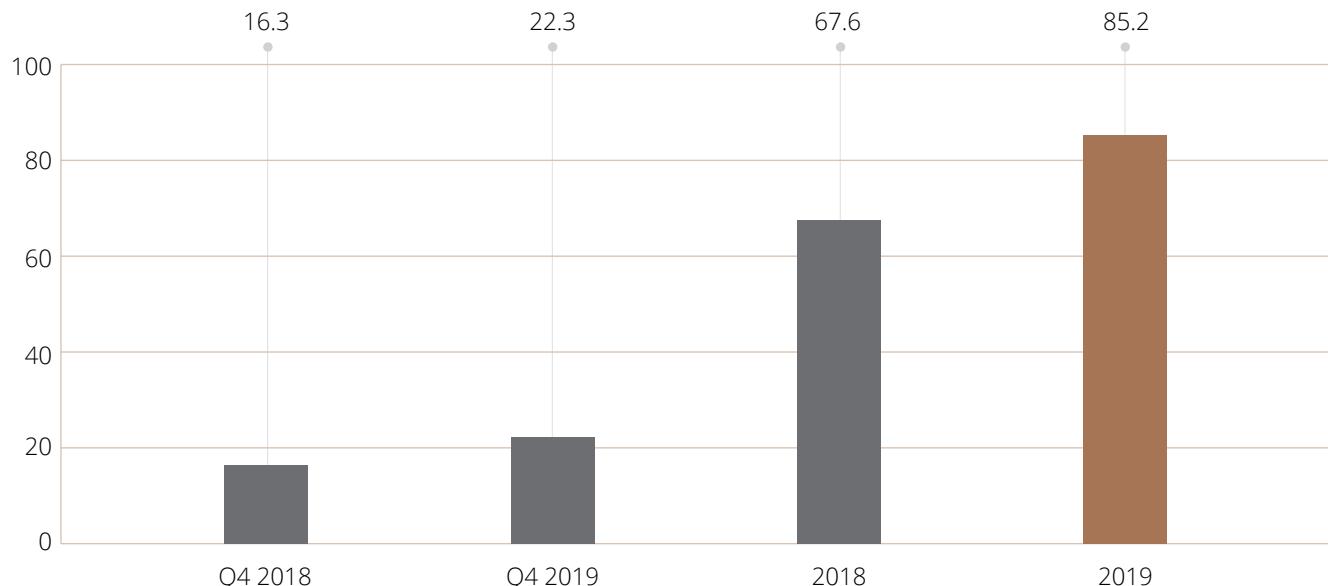
## Silver production



## TPM production

[koz t]

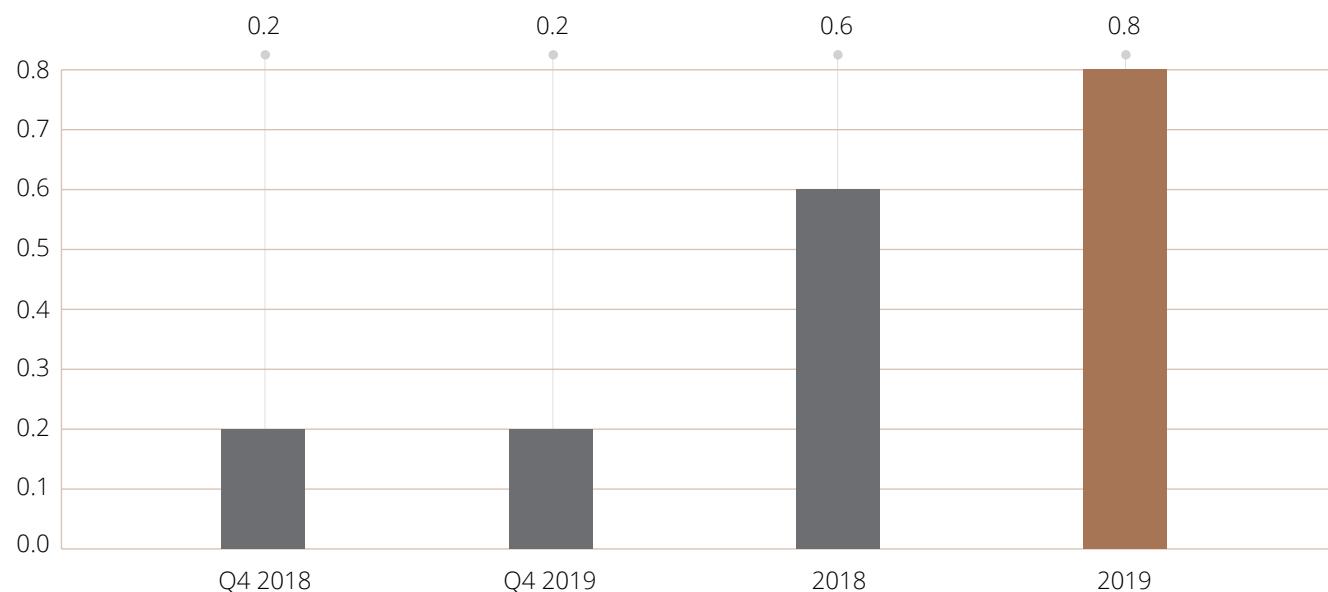
 +26% **yoY**



## Molybdenum production

[mn lbs]

 +33% **yoY**



The silver production target was exceeded in the Sudbury Basin due to a change in the region being mined (a change in the nature of the McCreedy mine deposit)

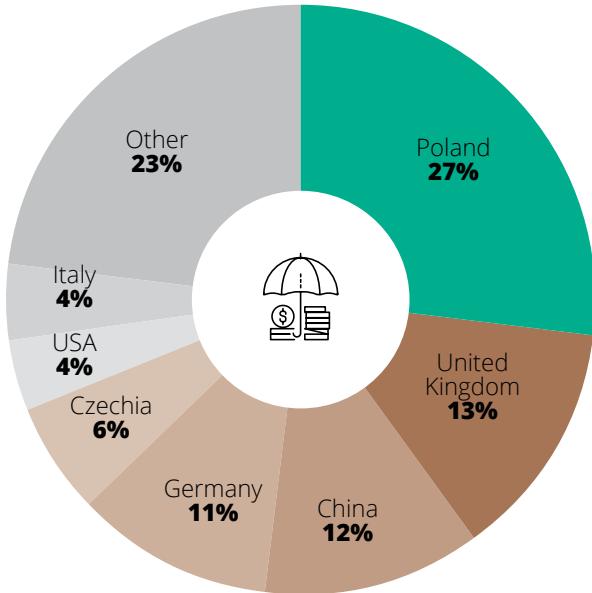
Higher TPM production both in the Sudbury Basin and the Robinson mine

Higher molybdenum production by the Robinson mine due to an increase in the recovery of this metal thanks to an improvement in the production process

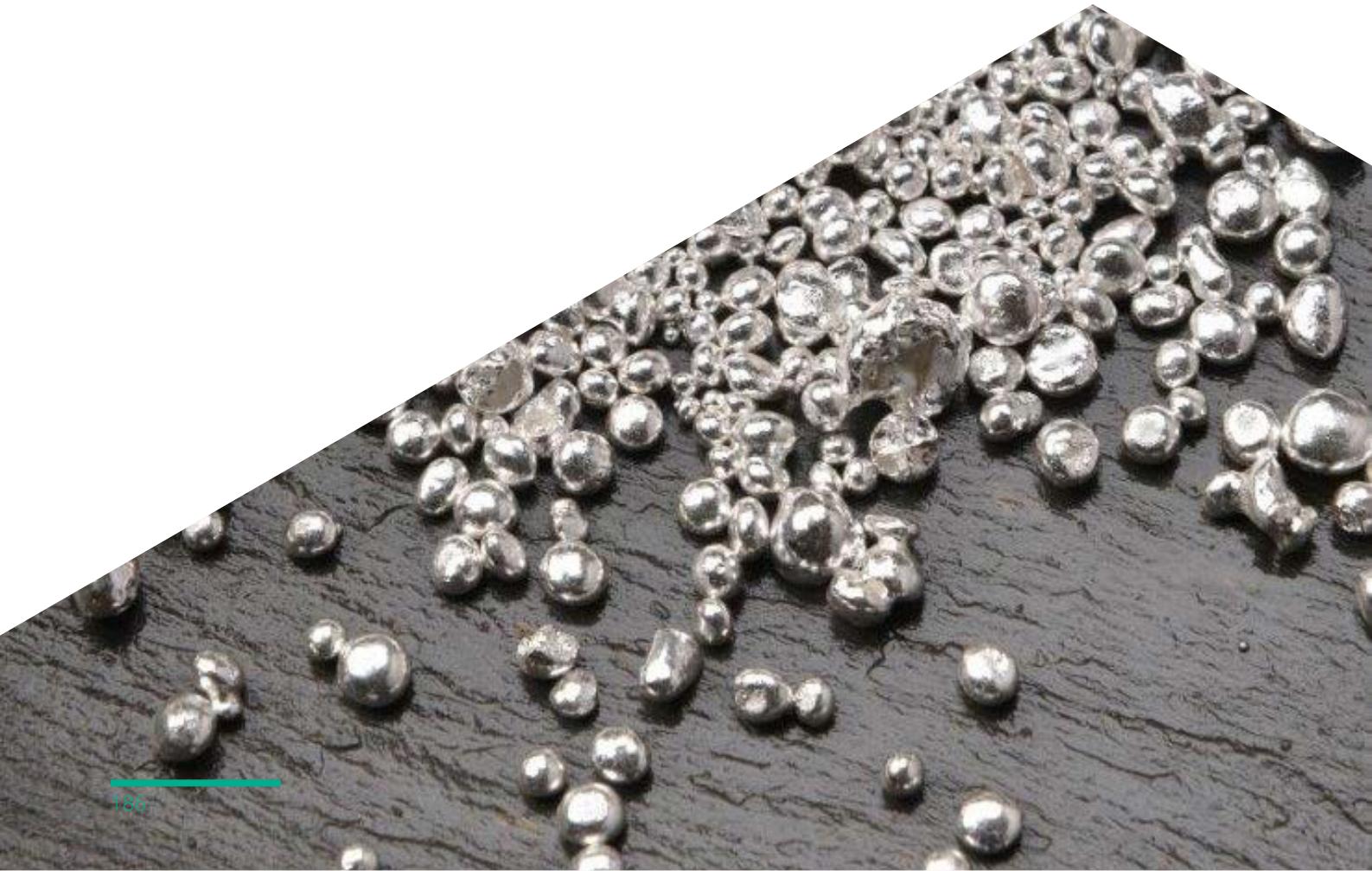
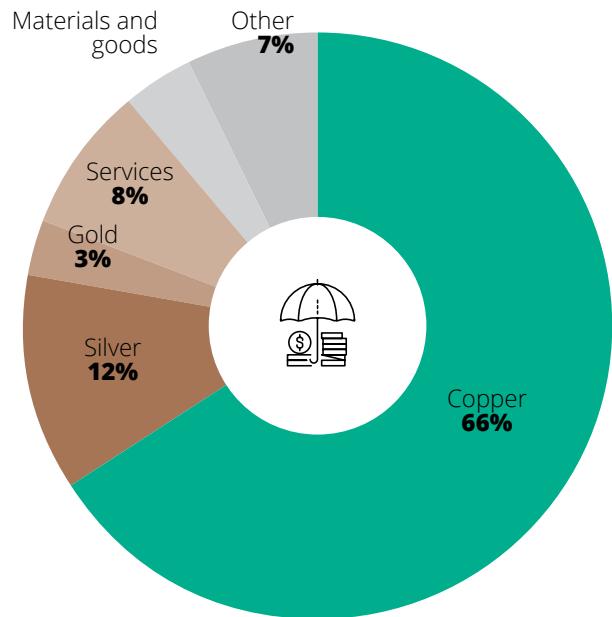
## Structure of consolidated sales revenue

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.

**Geographic structure of Group sales**



**Structure of Group sales by product**



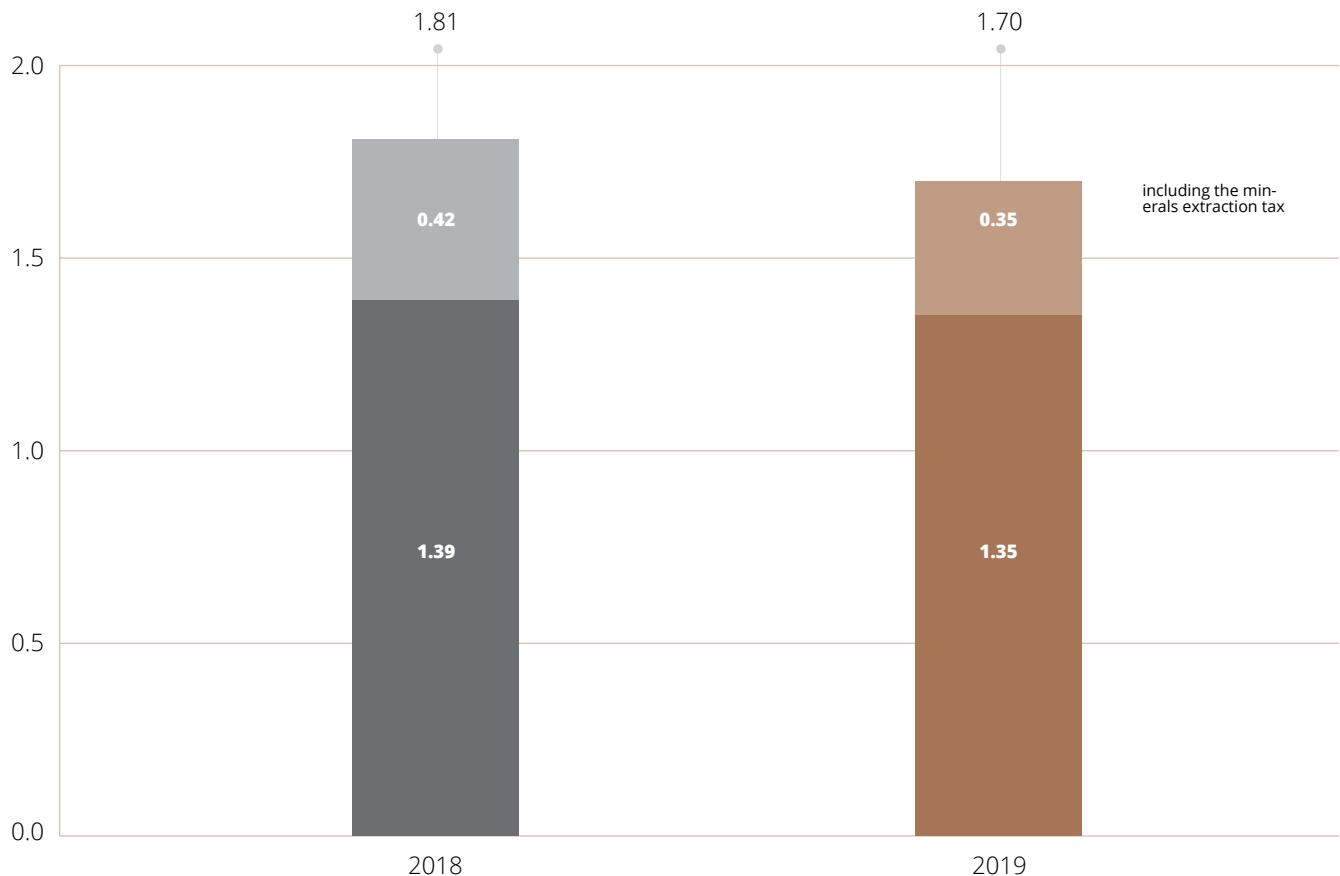
## C1 unit cost<sup>1)</sup>

in the Group.

### C1 – the Group

[USD/lb]

► -6% yoy



1) C1 Unit cost – 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

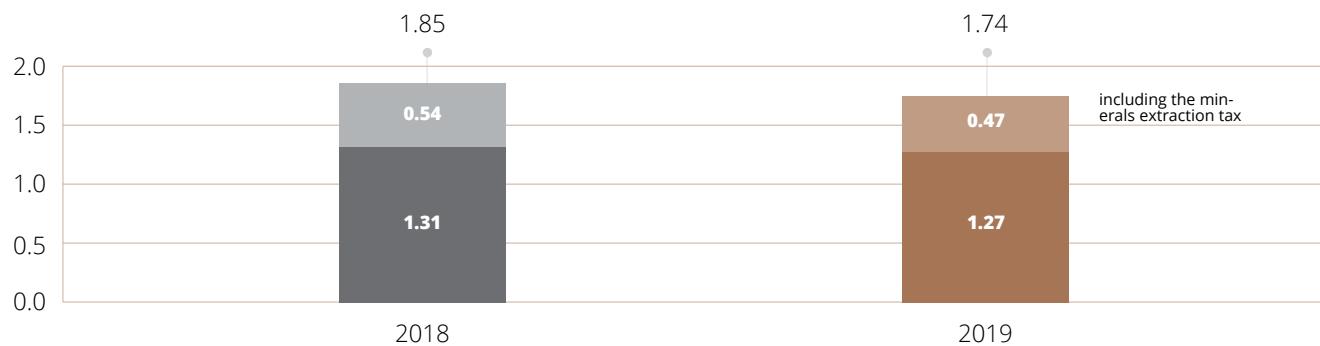
- ▶ The decrease in C1 cost of KGHM Polska Miedź S.A. was caused mainly by the depreciation of PLN vs. USD by 6% and a lower minerals extraction tax
- ▶ The decrease in C1 cost in KGHM INTERNATIONAL by 10% was driven, among others, by a reduction of operating costs and an increase in revenues on sales of associated metals (which reduce the cost)

- ▶ The increase in C1 cost in Sierra Gorda by 8% was driven mainly by the lower volume of sales of molybdenum (lower Mo content in ore) and therefore lower by-product credit revenues deducted in the calculation of C1

### C1 – KGHM Polska Miedź S.A.

[USD/lb]

►-6% **yoY**



### C1 – KGHM INTERNATIONAL

[USD/lb]

►-9% **yoY**



### C1 – Sierra Gorda

[USD/lb]

►+8% **yoY**



# Production results of KGHM Polska Miedź S.A.

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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:

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## **in mining**

- ▶ expanding mining operations within the Deep Głogów (Głogów Głęboki-Przemysłowy) area,
- ▶ improvement of the ore extraction technology, greater mining efficiency and improved occupational health and safety, by:
  - adapting the geometry of mining systems to local geological and mining conditions,
  - improving the efficiency of technological and active methods of limiting the threat of rock bursts and of other associated natural threats,
  - proper barren rock management in mining areas (selective extraction, siting of rock, mechanical ore mining),
- ▶ 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,
- ▶ commencing work related to assessing the Retków copper ore deposit in the Grodziszcz area,
- ▶ continued work on connecting the T/W-169 tunnel network with the projected sub-shaft area of the GG-1 shaft,
- ▶ construction of the GG-1 shaft, shaft sinking has reached a depth of 1099.3 meters,
- ▶ commencement of construction of the central air conditioning station at the GG-1 shaft,
- ▶ 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,
- ▶ maintaining the efficiency of mining vehicles in an assortment required to execute production tasks, and realisation of the planned scope of mine development and access work using the commissioning system at the level of 61.3 thousand running meters,

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## **in ore processing**

- ▶ maintaining the production capacity of individual Concentrators Division Areas to process the amount and quality of ore supplied,
- ▶ 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,
- ▶ continuation at the Rudna Concentrator Division of separating the concentrate produced into two concentrates with varied organic carbon content,
- ▶ improving flotation technology,

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## **in metallurgy**

- ▶ optimum utilisation of infrastructure enabled production targets to be fully met with respect to the main products,
- ▶ Metallurgy Development Program (MDP), with respect to:
  - continued construction and assembly work on key technological links under the program's component investment tasks, including the concentrate roasting installation,
  - commencement of construction involving replacement of the roof of the tankhouse at the Głogów I Copper Smelter and Refinery,
- ▶ 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,
- ▶ increasing the availability of revolving-reverberatory furnaces at the Lead Section, resulting in high lead recovery alongside lower Pb content in charge materials,
- ▶ 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,

## **in occupational health and safety**

- ▶ 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.

## **Mining 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. The content of silver in the ore extracted was at a similar level of 48.7 g/tonne. As a result the volume of copper in extracted ore was lower than in 2018 by 2.7 thousand tonnes of Cu 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 (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 was 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%.

### **Mine production of KGHM Polska Miedź S.A.**

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

## **Smelting 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 production

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.

## Metallurgical production of KGHM Polska Miedź S.A.

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

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#### **in mining**

- ▶ access and development work to intersect the deposit in the Deep Głogów mining area,
- ▶ continuation of work related to exploration of the Retków copper ore deposit in the Grodziszczne area,
- ▶ 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,
- ▶ continuation of work related to utilising the capacity of the input and output ventilation shafts in the interconnected mine ventilation system,
- ▶ achieving a level of dilution of the extracted ore which is adequate to the deposit's parameters,
- ▶ continuation of the GG-1 shaft construction project,
- ▶ continued construction of the central air conditioning system at the GG-1 shaft,
- ▶ continuation of Stage 1 of the Project „Construction of the GG-2 shaft” – continuation of planning work, acquisition of legal title to land,
- ▶ maintaining the efficiency of mining vehicles in an assortment required to execute production tasks,
- ▶ realisation of the planned scope of mine development and access work using the commissioning system in 2020,

#### **in ore processing**

- ▶ modernising the classification systems,
- ▶ improving the energy performance of the machinery park in the Concentrators Division,
- ▶ optimising the concentration process in terms of decreasing the impact of changes in ore quantity-quality parameters by applying the FloVis system,
- ▶ continued separation of concentrate produced into two products with varied organic carbon content at the Rudna Concentrator Division,
- ▶ 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),
- ▶ modernising the carbonate removal installation in the flotation process of the Polkowice Concentrator,
- ▶ optimising the milling, classification and flotation process,
- ▶ maintaining the availability of the machine park and the production capacity of individual Concentrators Division Areas to the amount of ore supplied,
- ▶ maintaining the production of concentrates in an amount and quality necessary for optimal use of the production capacity of the smelters and refineries,

- in metallurgy**
- ▶ minimising environmental impact by actions directed towards improving the effectiveness of the dedusting and hermetic sealing processes to decrease fugitive emissions,
  - ▶ maintaining recovery levels of copper and silver in metallurgical processes and the availability of metallurgical equipment,
  - ▶ 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,
  - ▶ continuation of the investment in revitalising the tankhouse at Głogów I Copper Smelter and Refinery,

- in occupational health and safety**
- ▶ consistent implementation of the Program to improve occupational health and safety in KGHM Polska Miedź S.A. "Think About the Consequences",
  - ▶ 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,
  - ▶ constant monitoring of occupational hazards and achieving organisational and technical goals aimed at limiting occupational risks and workplace accidents,
  - ▶ constant searching for new organisational and technical solutions aimed at improving occupational safety, in particular in the Company's mines.
  - ▶ 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,
  - ▶ efficient transposition of new European and domestic requirements with respect to OHS in the Company.

## 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%).

<b>Volume of sale of main products of KGHM Polska Miedź S.A.</b>								
	<b>Unit</b>	<b>2019</b>	<b>2018</b>	<b>Change (%)</b>	<b>4Q'19</b>	<b>3Q'19</b>	<b>2Q'19</b>	<b>1Q'19</b>
Cathodes and cathode parts	kt	<b>275.7</b>	214.3	+28.7	73.4	63.8	71.4	67.1
Copper wire rod and OFE rod	kt	<b>267.4</b>	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	<b>13.9</b>	13.2	+5.3	3.3	3.7	3.2	3.7
<b>Total copper and copper products 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	<b>1,392.8</b>	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	<b>101.4</b>	83.8	+21.0	32.7	18.0	30.4	20.3
Refined lead	kt	<b>30.0</b>	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 rose by 9% in 2019 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.

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

	<b>2019</b>	<b>2018</b>	<b>Change (%)</b>	<b>4Q'19</b>	<b>3Q'19</b>	<b>2Q'19</b>	<b>1Q'19</b>
Cathodes and cathode parts	<b>6,533</b>	5,097	+28.2	1,739	1,477	1,650	1,667
Copper wire rod and OFE rod	<b>6,611</b>	6,525	+1.3	1,612	1,647	1,747	1,605
Payable copper in concentrate <sup>1</sup>	-	400	x	-	-	-	-
Other copper products	<b>330</b>	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	<b>2,789</b>	2,101	+32.7	785	690	694	620
Payable silver in concentrate <sup>2</sup>	-	141	x	-	-	-	-
Metallic gold	<b>543</b>	381	+42.5	186	104	151	101
Refined lead	<b>247</b>	262	(5.7)	71	56	57	63
Other goods and services	<b>394</b>	345	+14.2	121	84	85	105
Merchandise and materials	<b>236</b>	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>

1) 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)

2) value of payable silver less the Ag refining premium (RcAg)

# Geographical breakdown of sales

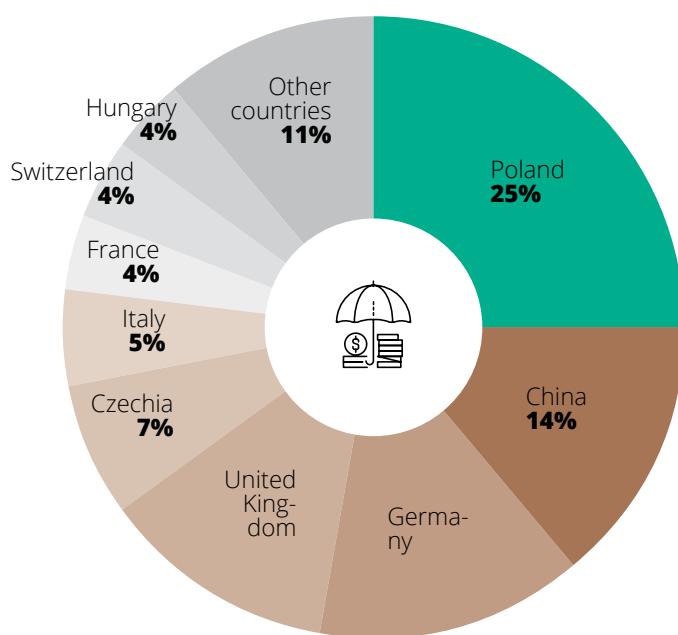
In 2019, KGHM Polska Miedź S.A. earned most of its revenues from domestic sales, which amounted to 25% of total revenues. Amongst KGHM's other customers, the largest came from China (14%), Germany (14%), the United Kingdom (12%)

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.

## Sales revenue of KGHM Polska Miedź S.A. by market

(in PLN million)



## Costs

The Company's cost of sales, selling costs and administrative expenses (cost of products, goods 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 were 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.

## 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	<b>1,298</b>	1,173	+10.7	335	330	319	314
Employee benefits expenses	<b>3,594</b>	3,324	+8.1	936	948	871	839
Materials and energy, including:	<b>6,196</b>	5,312	+16.6	1,540	1,515	1,550	1,591

- purchased metal-bearing materials	<b>3,778</b>	3,040	+24.3	890	900	996	992
- electrical and other energy	<b>939</b>	803	+16.9	255	255	195	234
External services	<b>1,767</b>	1,649	+7.2	486	458	434	389
Taxes and charges, including:	<b>1,917</b>	2,083	(8.0)	424	427	543	523
- minerals extraction tax	<b>1,520</b>	1,671	(9.0)	328	326	446	420

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:

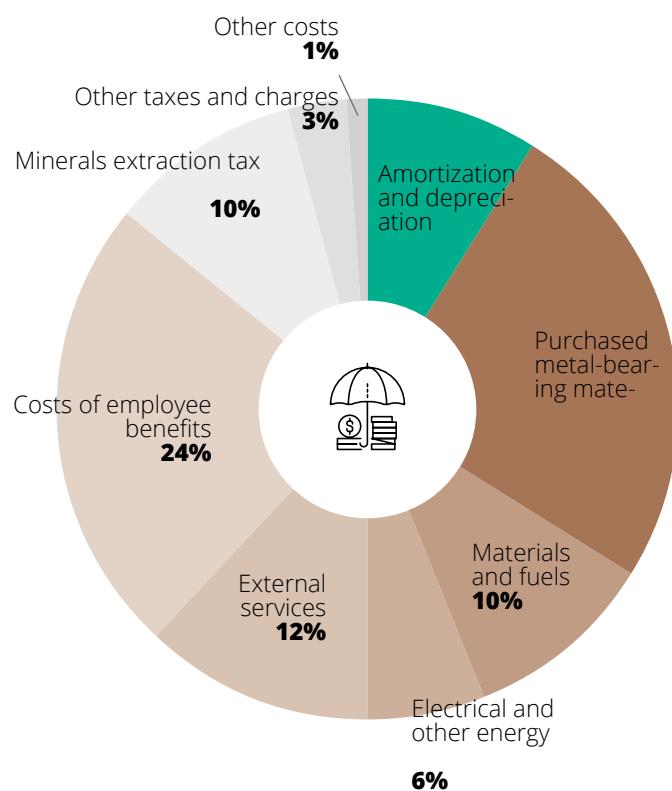
- ▶ labour costs (+PLN 270 million) – due to an increase in remuneration and a higher provision for the annual bonus,
- ▶ cost of materials and energy consumed (+PLN 146 million) – mainly due to higher energy purchase prices and to the lack of the previous support in the form of yellow certifi

cates 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.

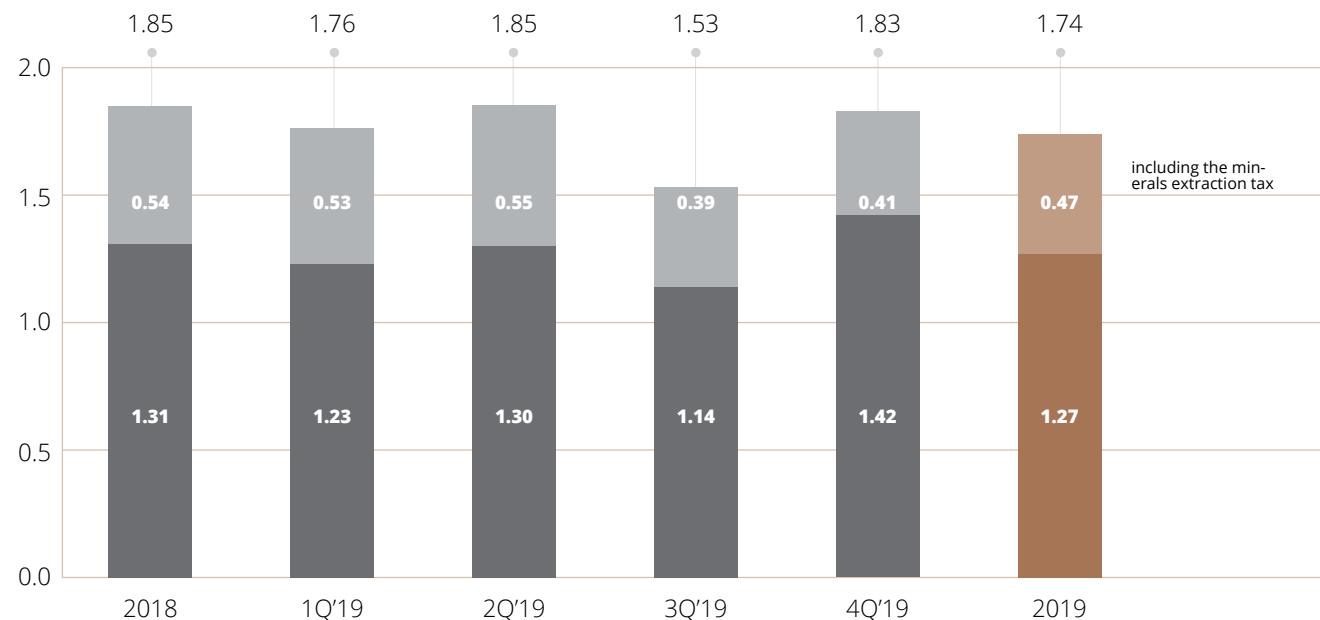
### Structure of expenses by nature in 2019



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%.

## Cost of producing copper in concentrate – C1

(USD/lb)

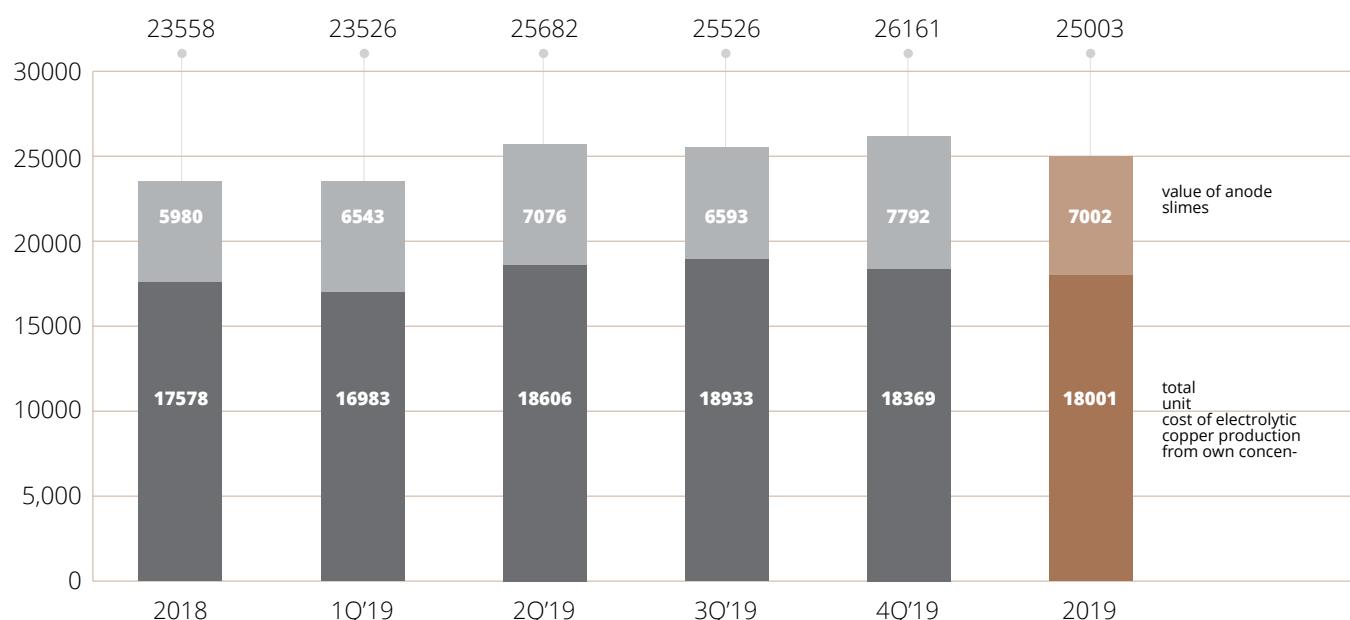


**Cost of producing copper in concentrate - C1** (unit cash cost of producing payable copper in concentrate, reflecting costs of ore extraction and processing, transport costs, the minerals extraction tax, administrative costs during the mining stage, and smelter treatment and refining charges (TC/RC),

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.

## Pre-precious metals credit unit cost of electrolytic copper production – from own concentrate

(PLN/t)



**Pre-precious metals credit unit cost of electrolytic 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 Cu (9%). The increase in unit cost was affected mainly by higher costs of labour, energy, depreciation and amortisation and third party services.

# Financial results

GRI 201-1

## Financial results of the KGHM Polska Miedź S.A. Group

Increase in revenues and EBITDA in the KGHM Group with a lower profit

### Group revenues higher by PLN 2.2 billion

- ▶ Increase in all segments of the Group – the most significant one in KGHM Polska Miedź S.A. (+12%)
- ▶ Impact of increased copper, gold and silver sales volume and a more favourable exchange rate with lower prices of copper

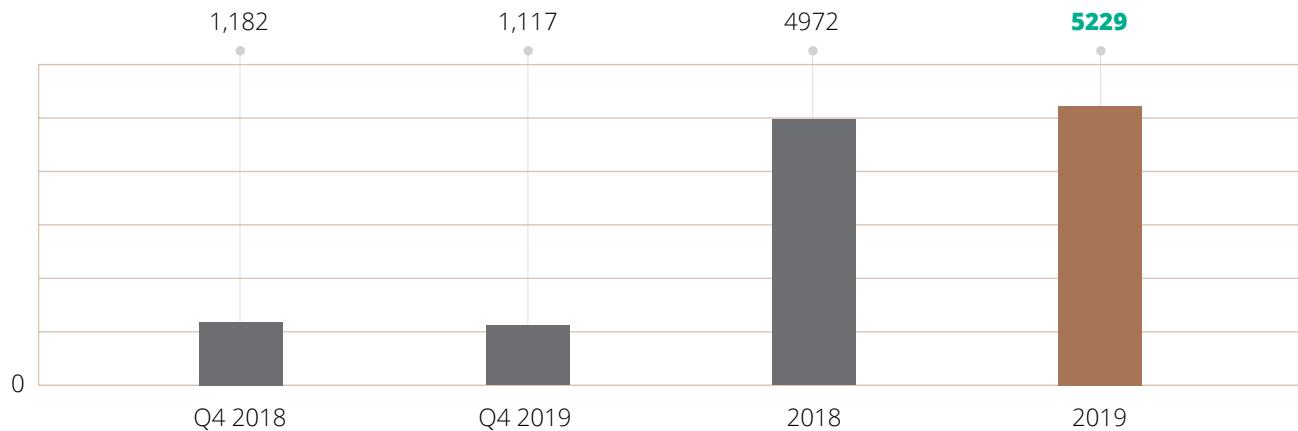
### Net result lower by PLN 237 million

- ▶ Deterioration in the operating result and a lower result as regards the share in the results of joint ventures accounted for using the equity method

#### Group EBITDA<sup>1)</sup>

[in PLN million]

► +5% yoy

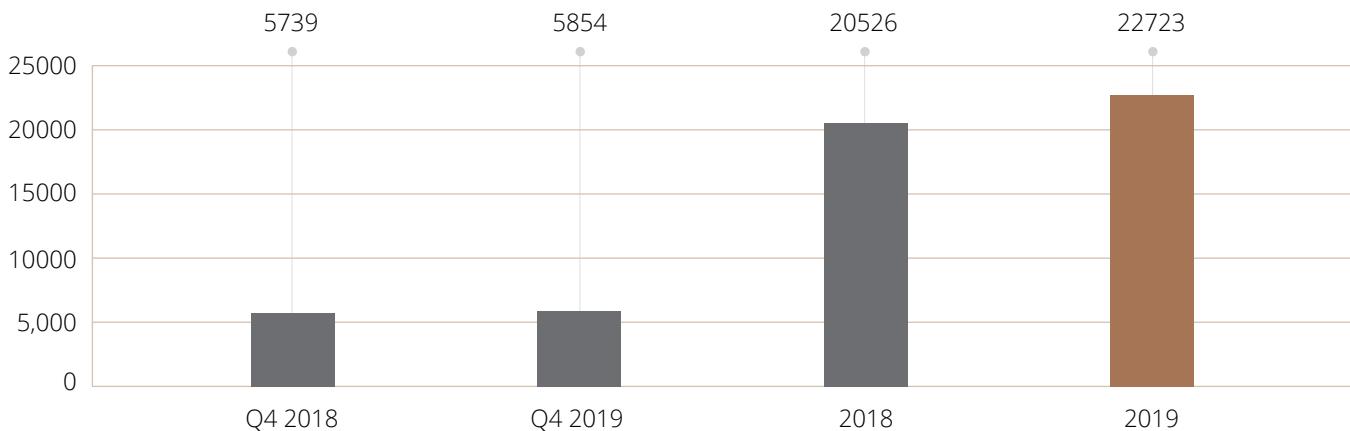


1) Adjusted EBITDA = EBITDA (profit/(loss) on sales + depreciation/amortisation) adjusted by impairment losses / reversals on non-current assets

#### Group revenue

[in PLN million]

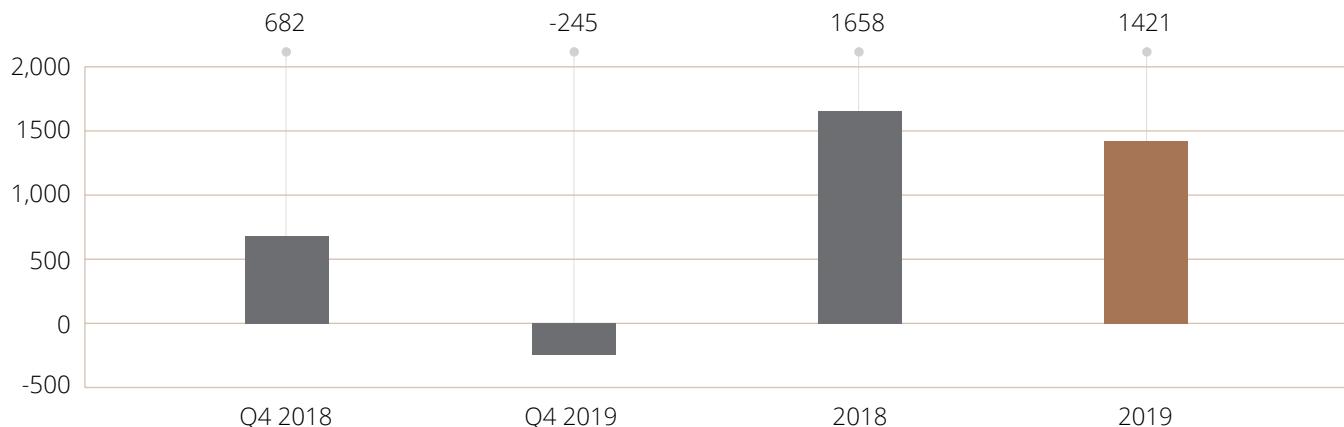
► +11% yoy



## Profit/(loss) of the Group

[in PLN million]

 -14% **yoY**



## Statement of profit

Financial results of the Group (in PLN million)							
	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Revenues from contracts with customers	<b>22,723</b>	20,526	+10.7	5,854	5,641	5,740	5,488
Cost of sales, selling costs and administrative expenses		(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	<b>9</b>	328	(97.3)	(77)	(17)	21	82
Other operating income and (costs)	<b>186</b>	308	(39.6)	(564)	720	(167)	197
Finance income / (costs)	<b>(528)</b>	(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>

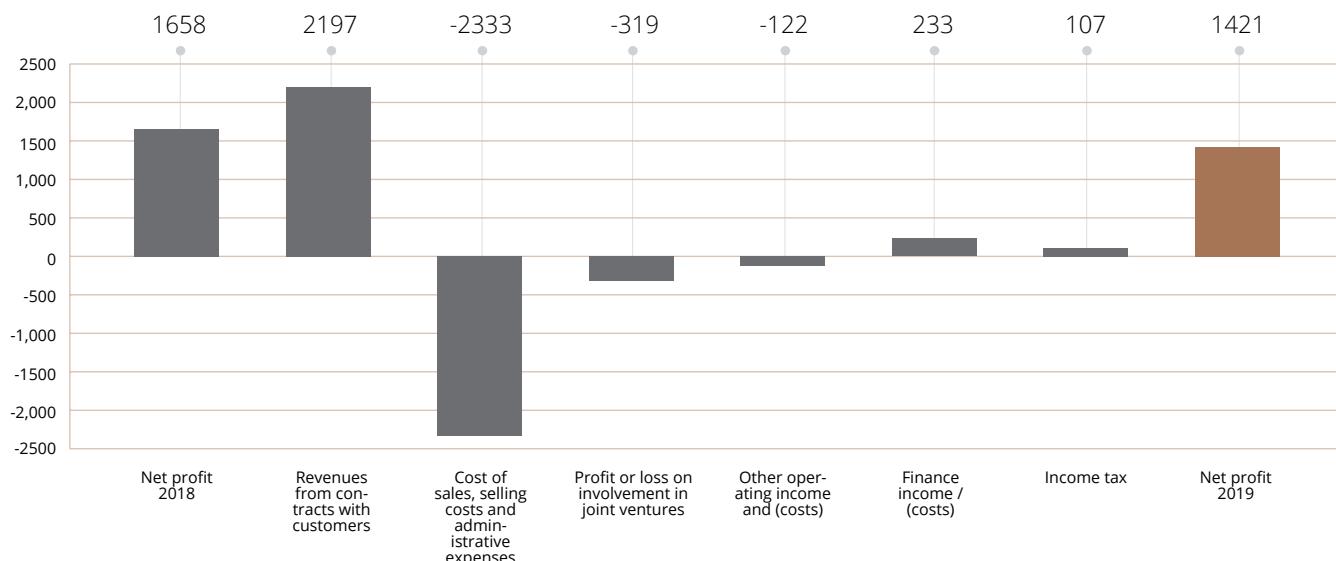
1) Adjusted EBITDA = profit on sales + depreciation/amortisation (recognised in profit or loss) + impairment loss (-reversal of impairment losses) on non-current assets recognised in cost of sales, selling costs and administrative expenses) according to part 2 of the consolidated financial statements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

# Main factors impacting the change in profit or loss of the Group

<b>Item</b>	<b>Impact on change of profit or loss (in PLN million)</b>	<b>Description</b>
<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).
<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)
<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.

## Change in profit/loss in 2019

[in PLN million]



## Cash flows

### Cash flow of the Group (in PLN million)

	2019	2018	Change (%)	4Q'19	3Q'19	2Q'19	1Q'19
Profit / (loss) before income tax	<b>2,122</b>	2,466	(13.9)	(302)	972	614	838
Depreciation/amortisation recognised in profit or loss	<b>1,920</b>	1,796	+6.9	562	437	468	453
Share of losses of joint ventures accounted for using the equity method	<b>438</b>	662	(33.8)	269	106	63	-
Gains due to the reversal of allowances for impairment of loans granted to joint ventures	<b>(106)</b>	(733)	(85.5)	(106)	-	-	-
Interest on loans granted to joint ventures	<b>(341)</b>	(257)	+32.7	(86)	(89)	(84)	(82)
Other interest	<b>244</b>	109	×2.2	138	7	52	47
Impairment losses on non-current assets	<b>51</b>	69	(26.1)	51	-	-	-
Exchange differences	<b>184</b>	(36)	×	294	(157)	103	(56)
Change in employee benefits provisions and liabilities	<b>114</b>	244	(53.3)	137	37	(68)	8
Change in other receivables and liabilities	<b>(176)</b>	20	×	171	(57)	(218)	(72)
Change in derivatives	<b>(31)</b>	(121)	(74.4)	(33)	52	(31)	(19)

Other adjustments	<b>(84)</b>	42	×	(29)	(55)	(2)	2
Exclusions of income and costs, total	<b>2,213</b>	1,795	+23.3	1,368	281	283	281
Income tax paid	<b>(410)</b>	(802)	(48.9)	(76)	(77)	(191)	(66)
Changes in working capital	<b>1,123</b>	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 assets	<b>(2,872)</b>	(2,609)	+10.1	(807)	(649)	(691)	(725)
Expenditures on other property, plant and equipment and intangible assets	<b>(360)</b>	(266)	+35.3	(111)	(61)	(58)	(130)
Expenditures on financial assets designated for decommissioning of mines and other technological facilities	<b>(293)</b>	(26)	×11.3	(1)	-	(203)	(89)
Acquisition of newly-issued shares of joint ventures	<b>(439)</b>	(666)	(34.1)	(267)	(109)	(63)	-
Proceeds from financial assets designated for decommissioning of mines and other technological facilities	<b>335</b>	9	×37.2	67	-	202	66
Other	<b>(14)</b>	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	<b>4,730</b>	2,276	×2.1	333	972	280	3,145
Proceeds from the issue of debt financial instruments	<b>2,000</b>	-	×	-	-	2,000	-
Repayments of borrowings	<b>(7,746)</b>	(2,100)	×3.7	(1,364)	(1,358)	(1,957)	(3,067)
Repayment of lease liabilities	<b>(52)</b>	(10)	×5.2	(9)	(19)	(16)	(8)
Interest paid on borrowings	<b>(239)</b>	(119)	×2.0	(122)	(9)	(54)	(54)
Other	<b>(1)</b>	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>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	<b>(38)</b>	18	×	5	(4)	2	(41)
Cash and cash equivalents at the beginning of the period	<b>957</b>	586	+63.3	748	1,106	590	957
<b>Cash and cash equivalents at the 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

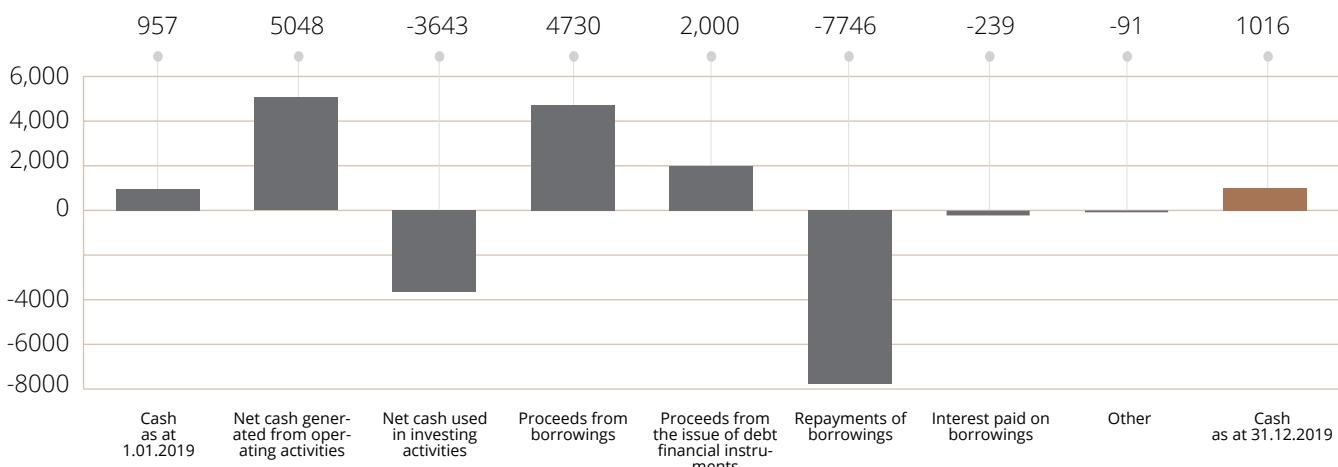
expenditures on financial assets designated for mine decommissioning and other technological facilities in the amount of PLN 293 million. Proceeds from investing activities were mainly derived from proceeds from financial assets designated for mine decommissioning and other technological facilities in 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.

## Cash flow in 2019

[in PLN million]



## Assets

### Consolidated assets (in PLN million)

	<b>31.12.2019</b>	<b>31.12.2018</b>	<b>Change (%)</b>	<b>30.09.2019</b>	<b>30.06.2019</b>	<b>31.03.2019</b>
Mining and metallurgical property, plant and equipment	<b>19,498</b>	17,507	+11.4	19,221	18,632	18,126
Mining and metallurgical intangible assets	<b>1,966</b>	1,657	+18.6	1,826	1,715	1,654
Other property, plant and equipment	<b>2,829</b>	2,789	+1.4	2,968	2,945	2,930
Other intangible assets	<b>155</b>	224	(30.8)	155	155	287
Joint ventures accounted for using the equity method	-	4	x	4	4	4

Loans extended to joint ventures	<b>5,694</b>	5,199	+9.5	5,796	5,327	5,389
Derivatives	<b>124</b>	320	(61.3)	162	258	250
Other financial instruments measured at fair value	<b>448</b>	541	(17.2)	428	463	520
Other financial instruments measured at amortised cost	<b>656</b>	716	(8.4)	783	751	757
Deferred tax assets	<b>157</b>	309	(49.2)	236	223	452
Other non-financial assets	<b>142</b>	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	<b>4,741</b>	4,983	(4.9)	5,338	5,277	5,444
Trade receivables	<b>688</b>	799	(13.9)	758	723	1,011
Tax assets	<b>571</b>	417	+36.9	415	288	312
Derivatives	<b>293</b>	301	(2.7)	363	324	140
Other financial assets	<b>280</b>	273	+2.6	457	420	286
Other non-financial assets	<b>151</b>	132	+14.4	326	326	258
Cash and cash equivalents	<b>1,016</b>	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>

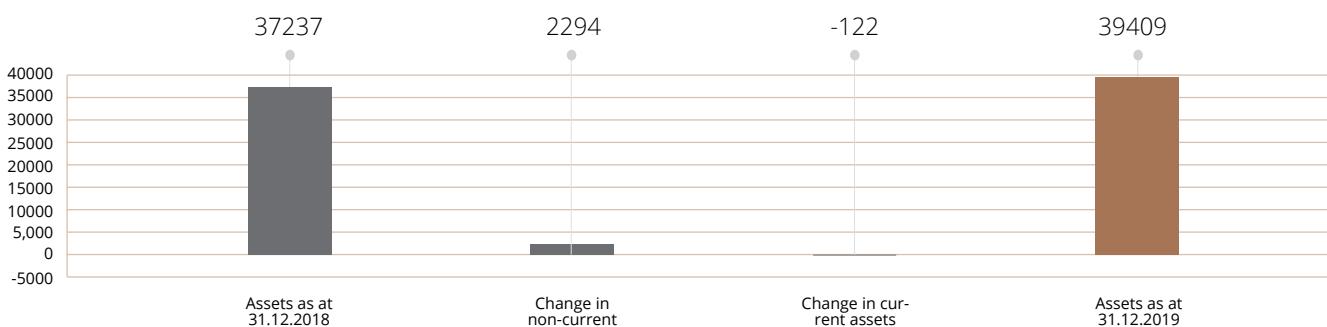
At the end of 2019, total assets in the consolidated statement of financial position amounted to PLN 39,409 million and were higher as compared to 31 December 2018 by PLN 2,172 million.

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.

### Change in assets in 2019

[in PLN million]



# Equity and liabilities

<b>Consolidated equity and liabilities</b> (in PLN million)						
	<b>31.12.2019</b>	<b>31.12.2018</b>	<b>Change (%)</b>	<b>30.09.2019</b>	<b>30.06.2019</b>	<b>31.03.2019</b>
Share capital	<b>2,000</b>	2,000	-	2,000	2,000	2,000
Other reserves from measurement of financial instruments	<b>(738)</b>	(444)	+66.2	(767)	(468)	(682)
Accumulated other comprehensive income other than from measurement of financial instruments	<b>1,954</b>	2,005	(2.5)	1,845	1,897	1,906
Retained earnings	<b>16,894</b>	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>	+5.1	<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>95</b>	<b>93</b>	<b>93</b>
<b>Equity</b>	<b>20,202</b>	<b>19,225</b>	+5.1	<b>20,310</b>	<b>19,964</b>	<b>19,441</b>
Borrowings, lease and debt securities	<b>7,525</b>	6,878	+9.4	7,795	7,910	6,867
Derivatives	<b>183</b>	162	+13.0	395	127	171
Employee benefits liabilities	<b>2,613</b>	2,447	+6.8	2,573	2,649	2,534
Provisions for decommissioning costs of mines and other facilities	<b>1,774</b>	1,564	+13.4	1,944	1,712	1,593
Deferred tax liabilities	<b>445</b>	498	(10.6)	422	404	587
Other liabilities	<b>631</b>	598	+5.5	623	598	603
<b>Non-current liabilities</b>	<b>13,171</b>	<b>12,147</b>	+8.4	<b>13,752</b>	<b>13,400</b>	<b>12,355</b>
Borrowings, lease and debt securities	<b>348</b>	1,071	(67.5)	1,346	1,050	1,795
Derivatives	<b>91</b>	43	×2.1	66	47	55
Trade and similar payables	<b>2,766</b>	2,053	+34.7	1,656	1,882	1,917
Employee benefits liabilities	<b>1,150</b>	1,044	+10.2	1,124	1,036	891
Tax liabilities	<b>433</b>	349	+24.1	530	453	678

Provisions for liabilities and other charges	<b>222</b>	271	(18.1)	148	162	265
Other liabilities	<b>1,026</b>	1,034	(0.8)	1,167	1,051	1,121
<b>Current liabilities</b>	<b>6,036</b>	<b>5,865</b>	+2.9	<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>	+6.6	<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>	+5.8	<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.

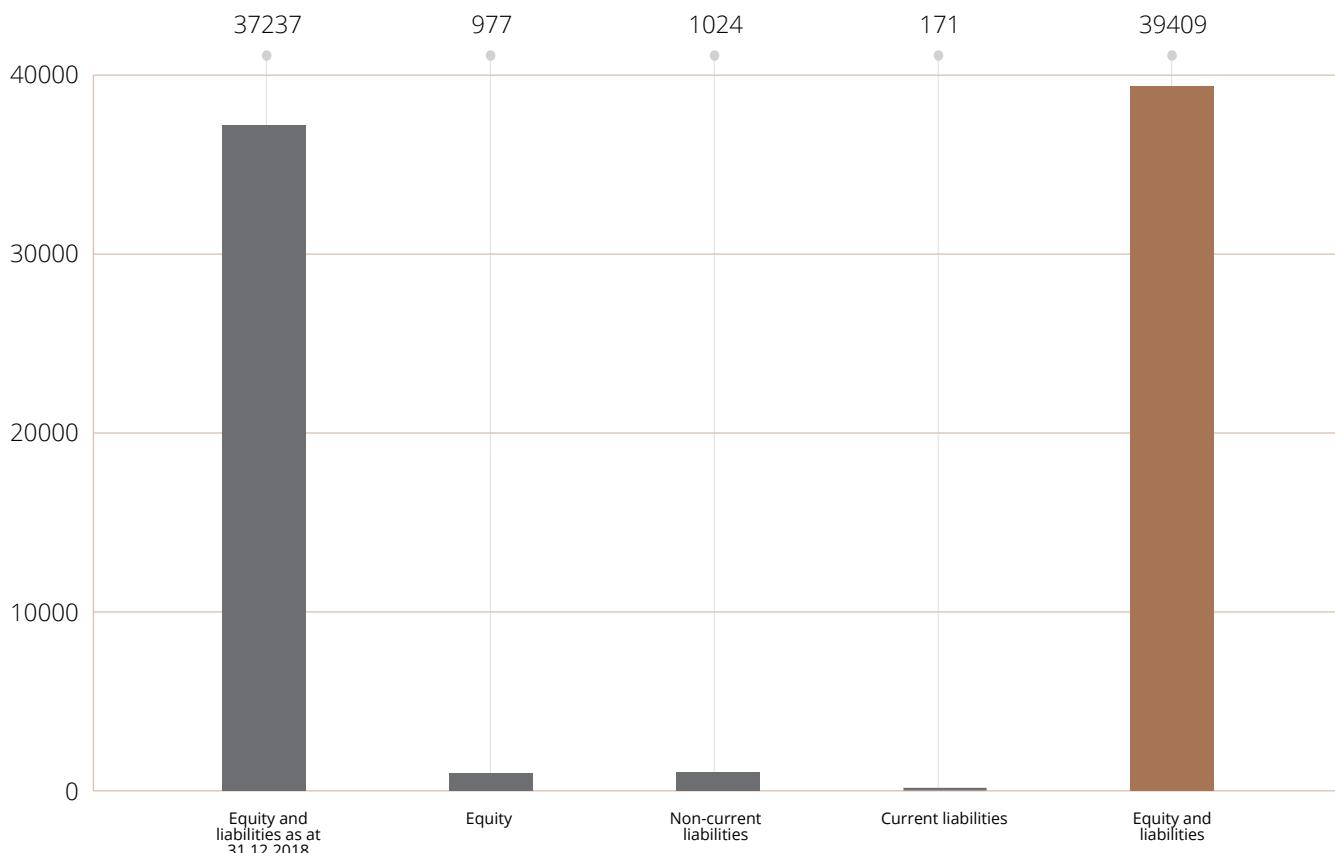
Non-current liabilities of the KGHM Polska Miedź S.A. Group as at 31 December 2019 amounted to PLN 13,171 million and were higher by PLN 1,024 million compared to the end of 2018, mainly due to an increase in liabilities due to non-current borrowings by PLN 647 million, provisions for

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.

### Change in equity and liabilities in 2019

[in PLN million]



# Contingent assets and liabilities due to guarantees granted

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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.:

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- ▶ 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:

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- ▶ 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 obliga-
- tions 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.

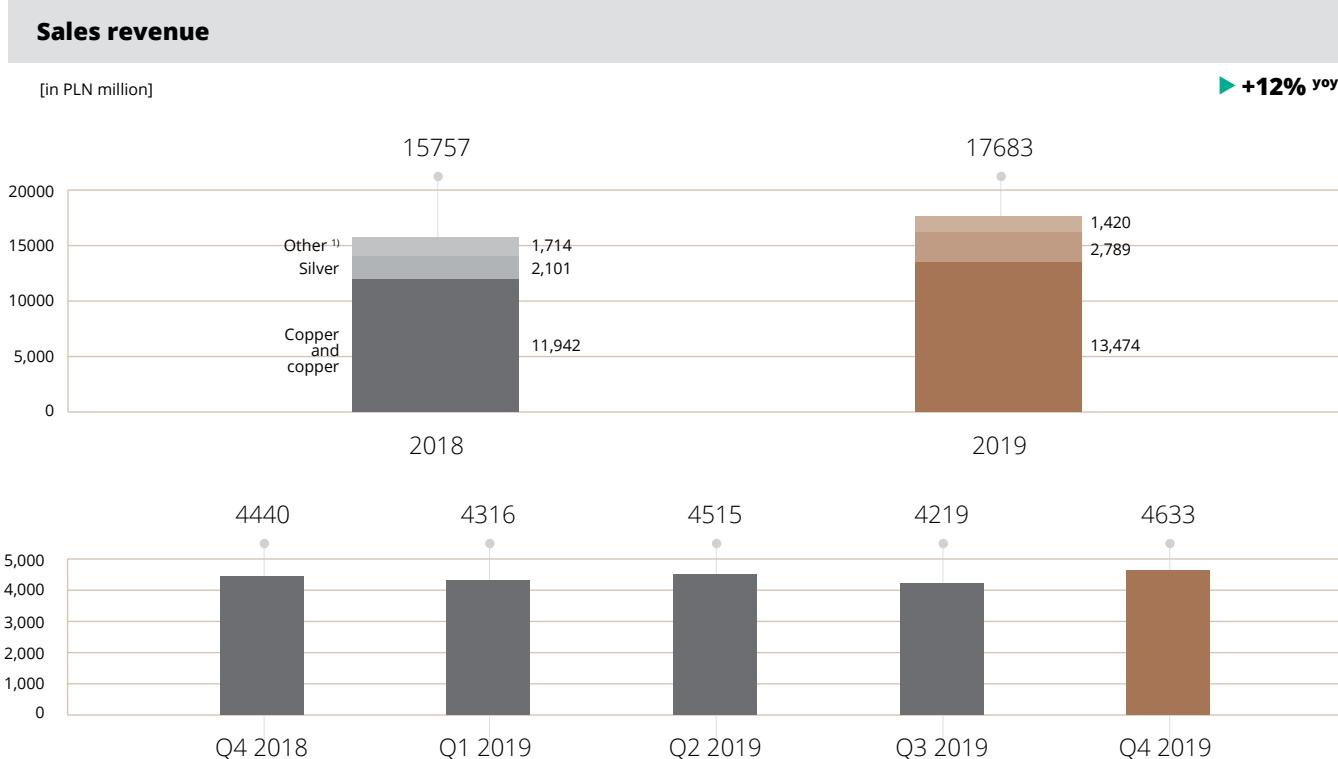
# Financial results of KGHM Polska Miedź S.A.

## Sales revenue of KGHM Polska Miedź S.A.

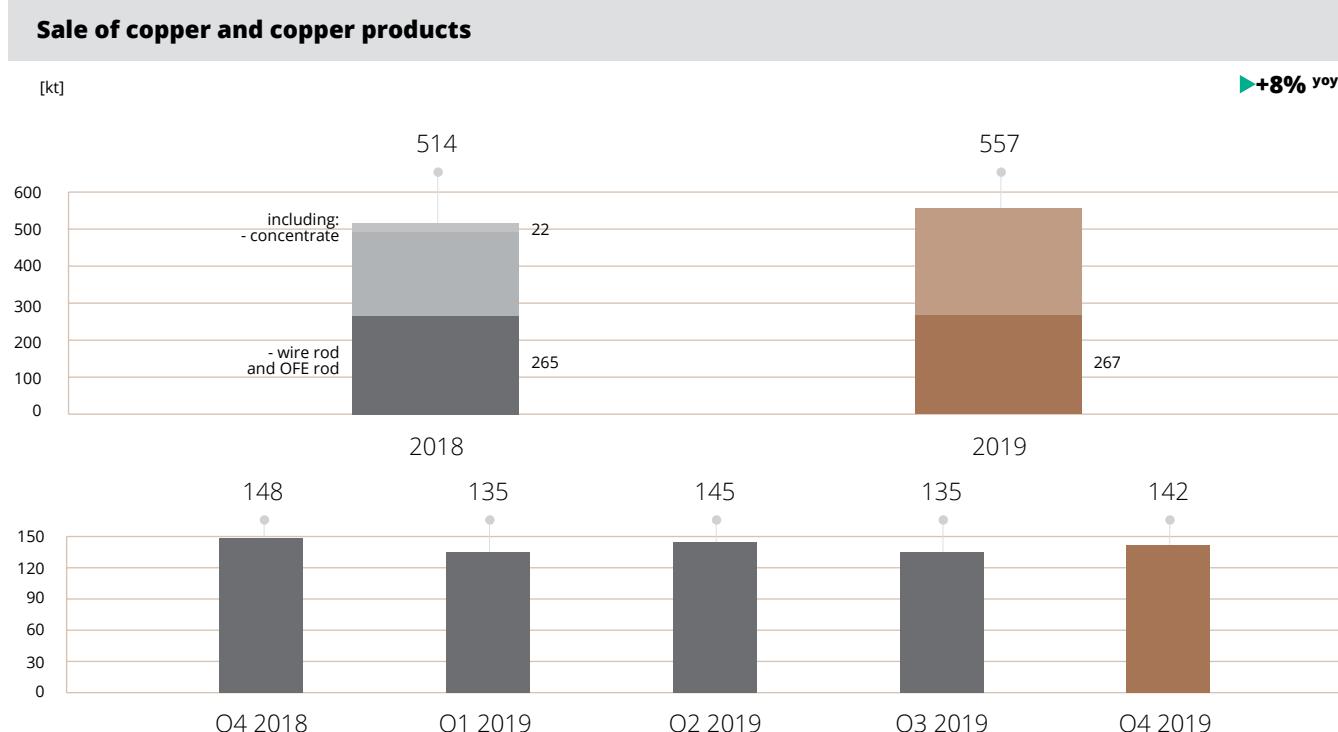
**Sales revenue achieved in 2019 were PLN 1,926 million (+12% higher than those in 2018 as a result of:**

- ▶ higher sales volume (copper by 8% and silver by 14%)

▶ more favourable USD/PLN exchange rate (+6%) and silver prices (+3%) alongside with worse copper prices (-8%)



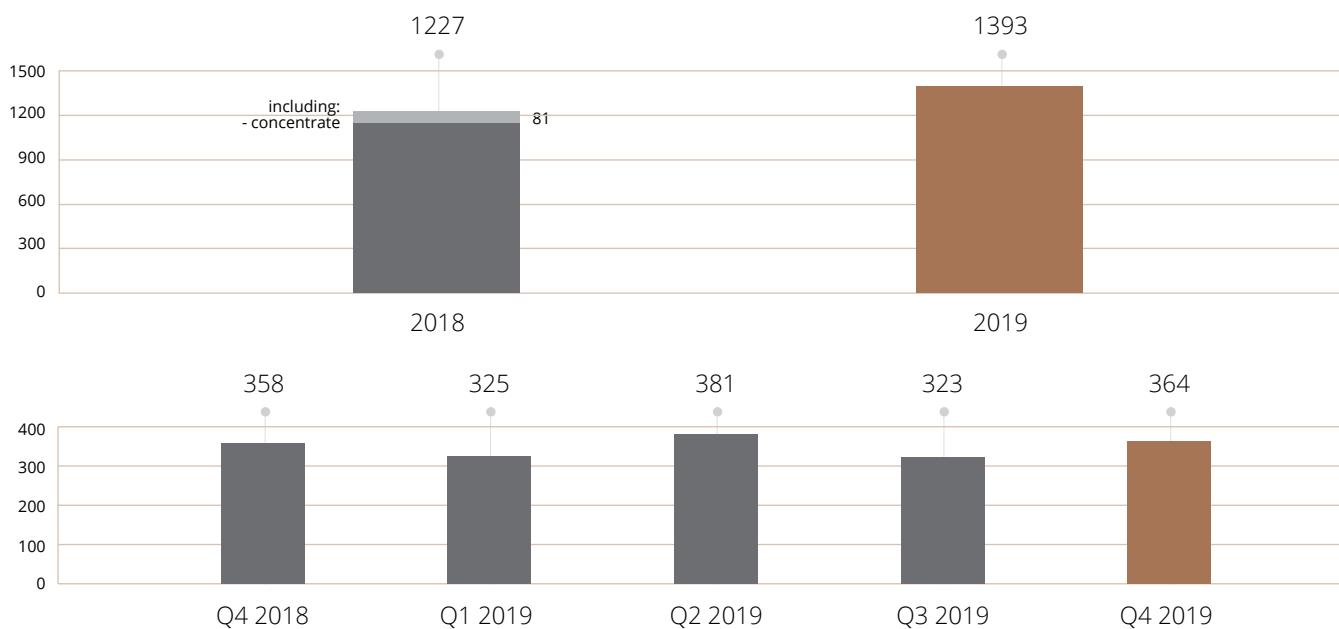
1) Including Cu in concentrate in 2018 (PLN 400



## Sales of silver

[t]

►+13% yoy

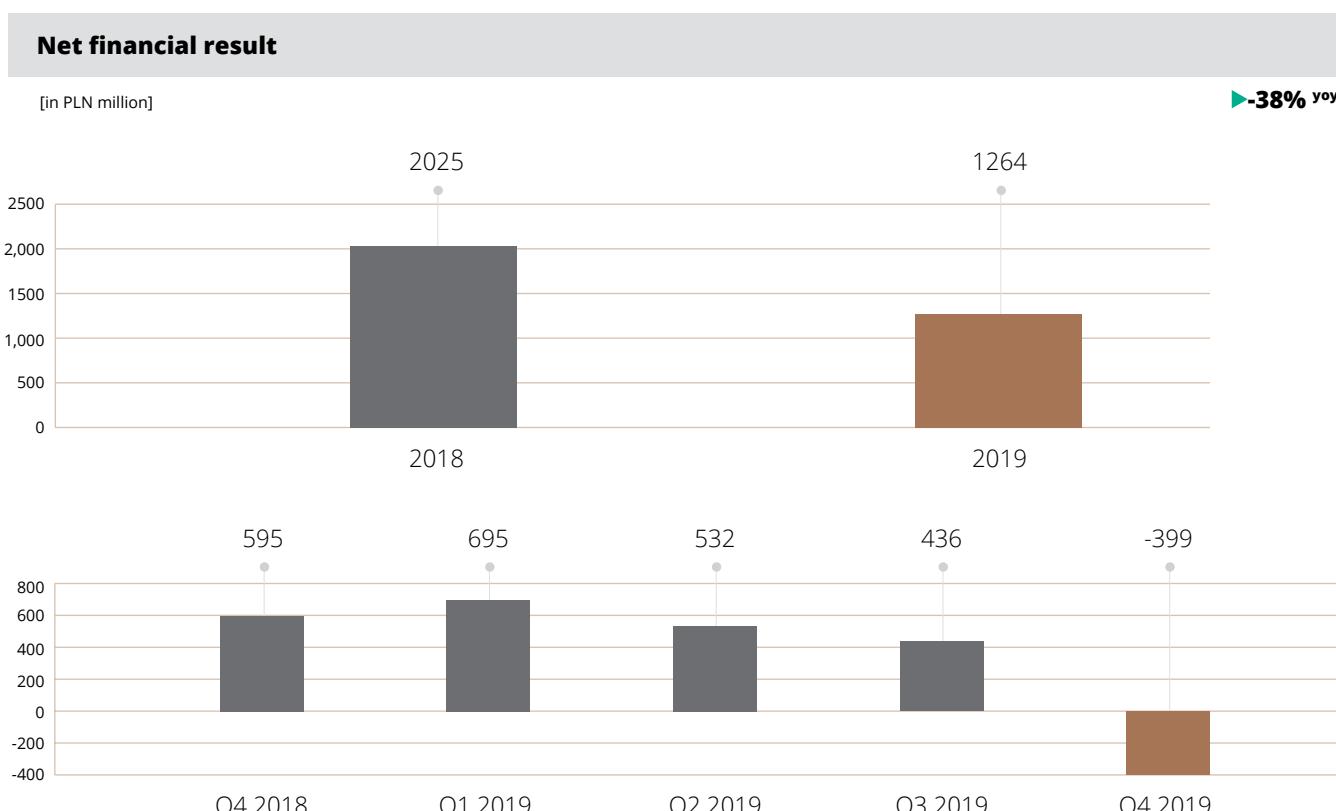
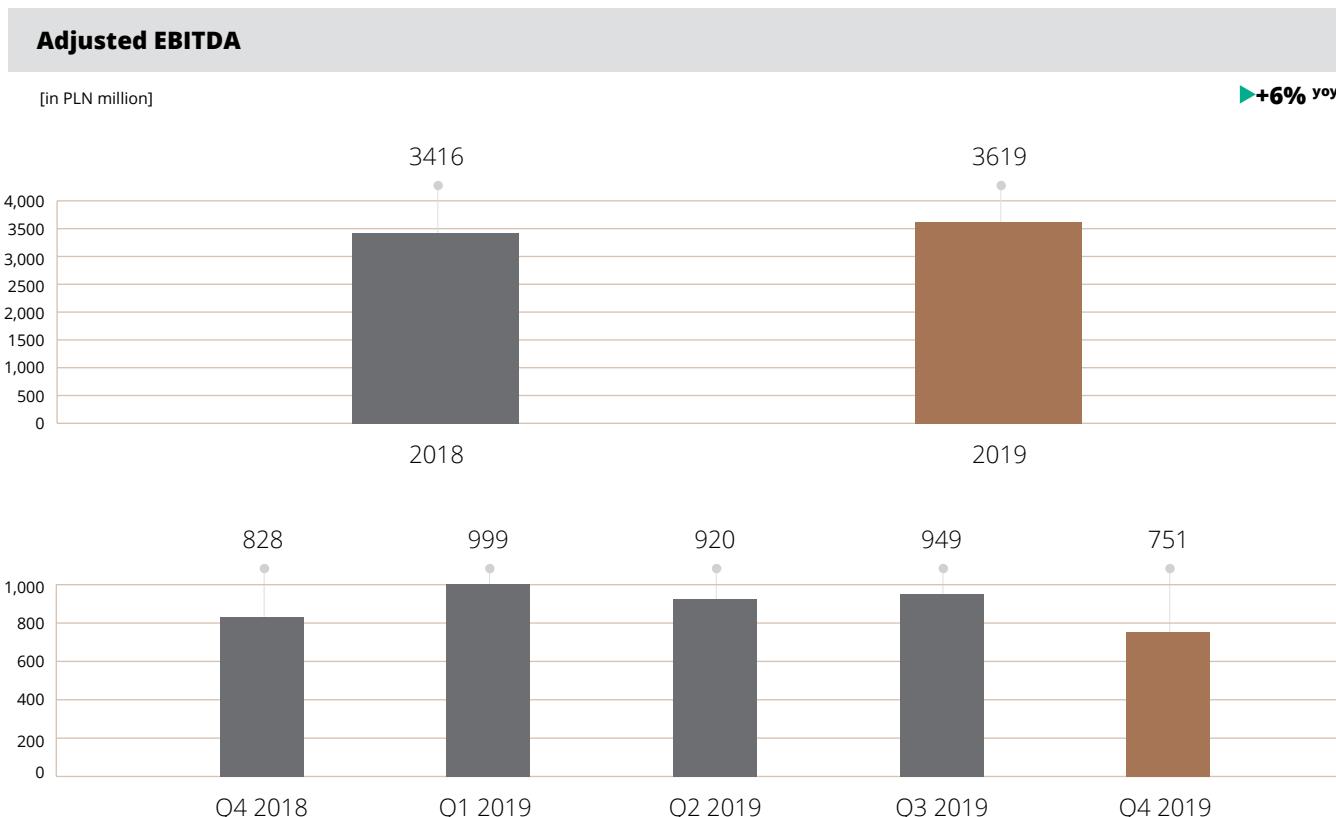


## EBITDA and net financial results of KGHM Polska Miedź S.A.

### Increase in unit EBITDA with an accompanying decrease in net financial result

► EBITDA 6% above the 2018 result due to a higher volume of copper sales and more favourable exchange rate (increase in revenue).

► The net result of PLN 761 million (-38%) was lower than in 2018 due to impairment – impairment loss recognised on shares and investment certificates in subsidiaries in 2019 (-PLN 460 million), while in 2018 such impairment loss was reversed (+PLN 355 million)



## 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.

<b>Key items of the statement of profit or loss of KGHM Polska Miedź S.A. (in PLN million)</b>							
	<b>2019</b>	<b>2018</b>	<b>Change (%)</b>	<b>4Q'19</b>	<b>3Q'19</b>	<b>2Q'19</b>	<b>1Q'19</b>
Revenues from contracts with customers	<b>17,683</b>	15,757	+12.2	4,633	4,219	4,515	4,316
- adjustment to revenues due to hedging transactions	<b>245</b>	125	+96.0	75	93	43	34
Cost of sales, selling costs and administrative expenses		(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	<b>168</b>	386	(56.5)	(340)	492	(127)	143
- interest on loans granted and other financial receivables	<b>272</b>	244	+11.5	60	80	66	66
- dividend income	<b>37</b>	239	(84.5)	-	-	37	-
- provisions (recognised)/released	<b>(39)</b>	(150)	(74.0)	(78)	1	37	0
- measurement and realisation of derivatives	<b>(122)</b>	(136)	(10.3)	(65)	(29)	(9)	(19)
- fees and charges on re-invoicing of costs of bank guarantees securing the payment of liabilities	<b>31</b>	53	(41.5)	(19)	22	9	19
- (recognition)/reversal of impairment losses on financial instruments	<b>102</b>	270	(62.2)	3	(3)	7	95
- (recognition)/reversal of impairment losses on shares and investment certificates in subsidiaries	<b>(460)</b>	355	×	(460)	-	-	-
Fair value gains/(losses) on financial assets measured at fair value through profit or loss	<b>84</b>	(63)	×	(53)	(5)	62	80
- other	<b>(34)</b>	(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	<b>(209)</b>	(592)	(64.7)	265	(532)	165	(107)
- interest on borrowings	<b>(183)</b>	(127)	+44.1	(108)	5	(43)	(37)
- fees and commissions on bank and other loans	<b>(49)</b>	(23)	×2.1	(26)	(10)	(7)	(6)

- measurement and realisation of derivatives	<b>(22)</b>	11	×	(4)	(1)	(5)	(12)
- unwinding of the discount effect	<b>(41)</b>	(43)	(4.7)	(10)	(10)	(10)	(11)
<b>Profit/loss 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	<b>(663)</b>	(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	<b>(1,220)</b>	(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>

1) 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)

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

Item	Impact on change of 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 main 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.

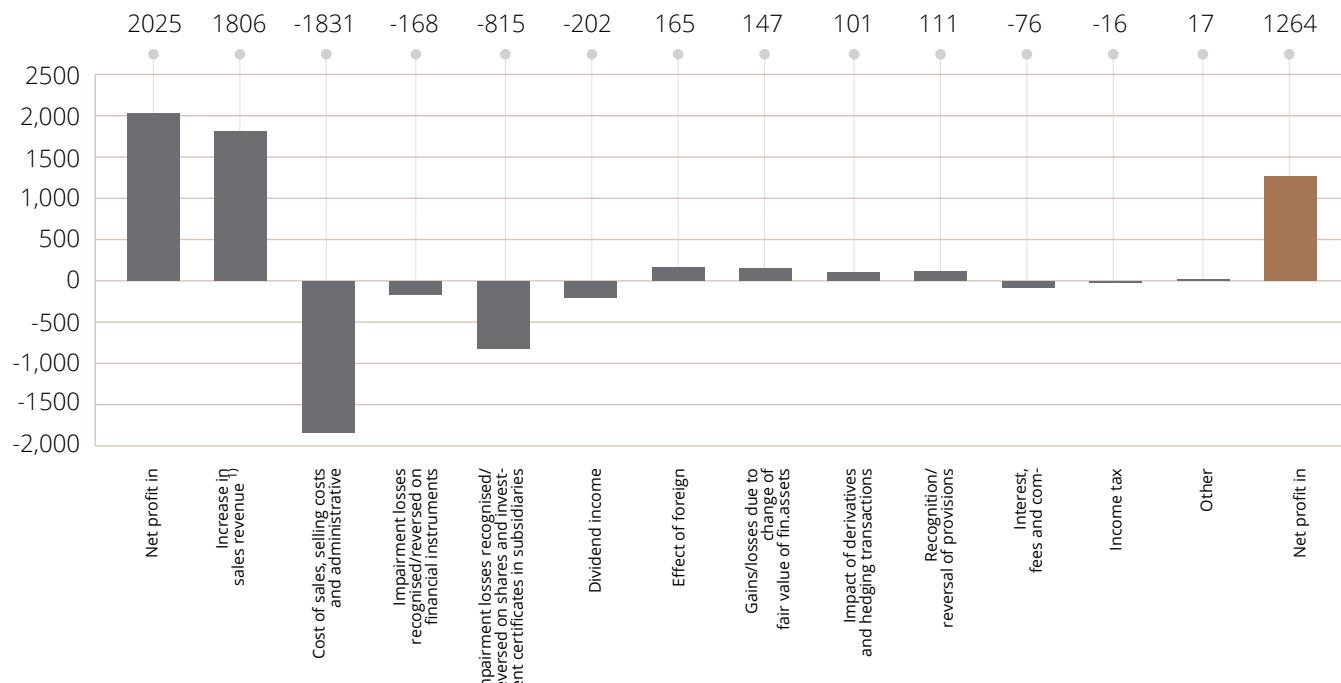
<b>Provisions (recognised)/released (+PLN 111 million)</b>	+55	A decrease in provisions recognised, from PLN -162 million to PLN -107 million.
	+56	An increase in provisions released, from PLN 12 million to PLN 68 million.
<b>Change in the balance of income and costs due to interest on borrowings (-PLN 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.

1) Cost of products, goods and materials sold plus selling costs and administrative expenses



## Change of net result of KGHM Polska Miedź S.A.

[in PLN million]



## Cash flows

### 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	<b>1,927</b>	2,672	(27.9)	(443)	658	781	931
Depreciation/amortisation recognised in profit or loss	<b>1,220</b>	1,119	+9.0	327	307	312	274
Exchange differences	<b>200</b>	181	+10.5	89	86	11	14
Other adjustments	<b>188</b>	(1,000)	×	1,007	(178)	(474)	(167)
Exclusions of income and costs, total	<b>1,608</b>	300	×5.4	1,423	215	(151)	121
Income tax paid	<b>(465)</b>	(710)	(34.5)	(70)	(74)	(258)	(63)
Changes in working capital	<b>973</b>	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	<b>(2,294)</b>	(1,884)	+21.8	(584)	(456)	(465)	(789)
Expenditures on other property, plant and equipment and intangible assets	<b>(72)</b>	(23)	×3.1	(8)	(6)	(2)	(56)

Expenditures on the acquisition of investment certificates and shares in subsidiaries	<b>(430)</b>	(10)	×43.0	(2)	(37)	-	(391)
Loans granted	<b>(445)</b>	(682)	(34.8)	(273)	(109)	(63)	-
Proceeds from the redemption of investment certificates	<b>404</b>	-	×	-	13	-	391
Dividends received	<b>37</b>	239	(84.5)	-	27	10	-
Other	<b>(54)</b>	(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	<b>4,669</b>	2,257	×2.1	293	953	280	3,143
Proceeds from the issue of debt financial instruments	<b>2,000</b>	-	×	-	-	2,000	-
Repayments of borrowings	<b>(7,726)</b>	(2,073)	×3.7	(1,358)	(1,352)	(1,951)	(3,065)
Interest paid	<b>(228)</b>	(152)	+50.0	(121)	(8)	(51)	(48)
Other	<b>20</b>	(80)	×	41	22	(98)	55
<b>Net cash generated from/(used in) financing activities</b>	<b>(1,265)</b>	<b>(48)</b>	<b>×26.4</b>	<b>(1,145)</b>	<b>(385)</b>	<b>180</b>	<b>85</b>
<b>Net cash flow</b>	<b>(76)</b>	<b>368</b>	<b>×</b>	<b>183</b>	<b>(393)</b>	<b>402</b>	<b>(268)</b>
Foreign exchange gains/(losses) on cash and cash equivalents	<b>(35)</b>	25	×	(4)	4	(3)	(32)
Cash and cash equivalents at the beginning of the period	<b>627</b>	234	×2.7	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

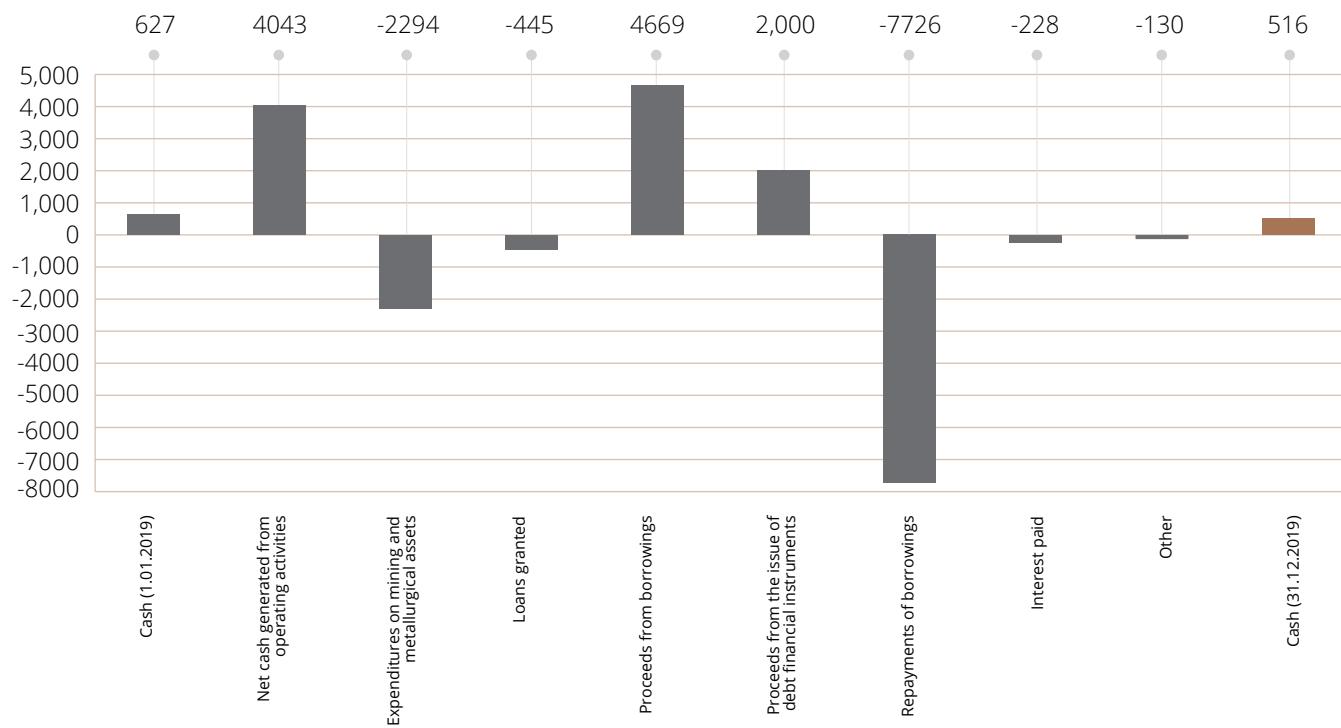
in the amount of PLN -430 million were almost entirely offset by proceeds from the redemption of investment certificates in the amount of PLN +404 million.

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.

## Cash flows of KGHM Polska Miedź S.A.

[in PLN million]



## Assets, equity and liabilities

### Assets of KGHM Polska Miedź S.A. (in PLN million)

	<b>31.12.2019</b>	<b>31.12.2018</b>	<b>Change (%)</b>	<b>30.09.2019</b>	<b>30.06.2019</b>	<b>31.03.2019</b>
Mining and metallurgical property, plant and equipment	<b>18,092</b>	16,382	+10.4	17,769	17,359	16,922
Mining and metallurgical intangible assets	<b>651</b>	576	+13.0	628	616	649
Other property, plant and equipment	<b>103</b>	92	+12.0	89	89	90
Other intangible assets	<b>61</b>	52	+17.3	47	48	50
Investments in subsidiaries	<b>2,946</b>	3,510	(16.1)	3,405	3,415	3,377
Financial instruments, including:	<b>8,200</b>	7,453	+10.0	8,218	7,709	7,768
- loans granted	<b>7,217</b>	6,262	+15.3	7,273	6,641	6,623
- derivatives	<b>123</b>	319	(61.4)	162	257	249
Deferred tax assets	<b>-</b>	9	×	12	-	93
Other non-financial assets	<b>58</b>	24	×2.4	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	<b>3,783</b>	4,102	(7.8)	4,329	4,362	4,484

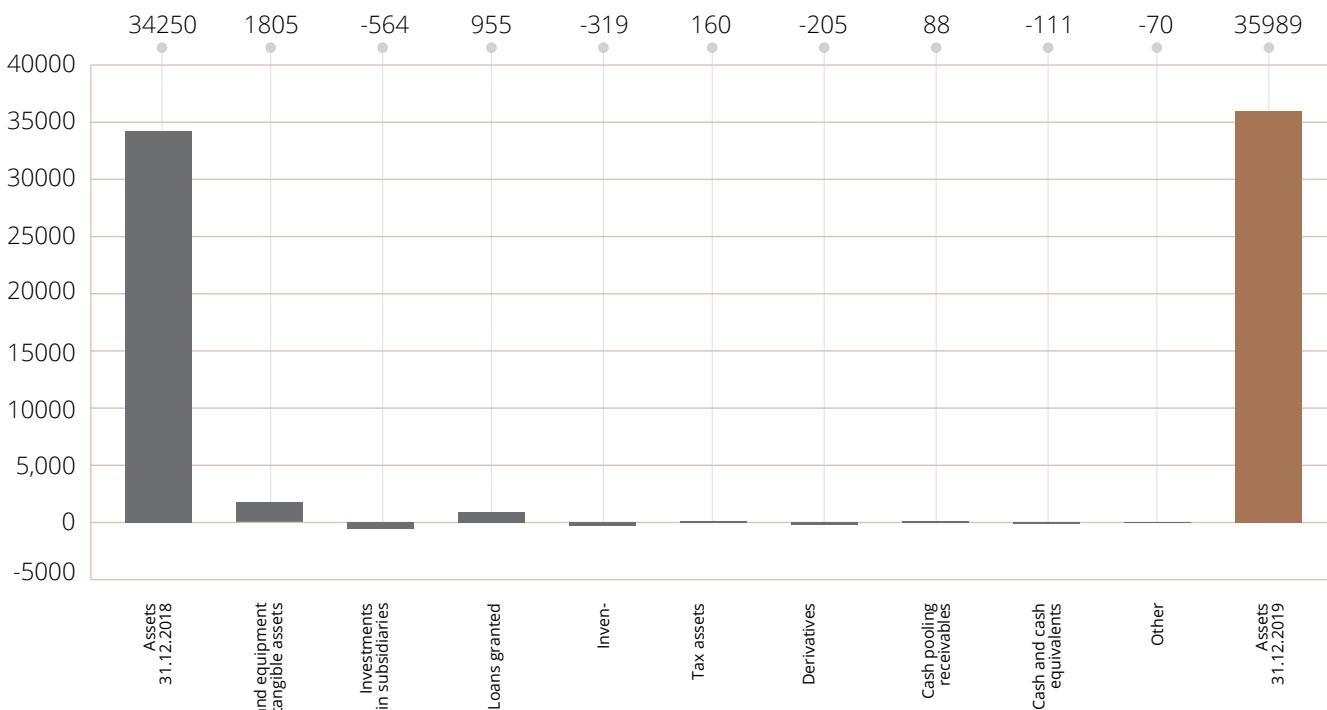
Trade receivables	<b>243</b>	310	(21.6)	242	206	540
Tax assets	<b>435</b>	275	+58.2	336	222	171
Derivatives	<b>291</b>	300	(3.0)	363	323	139
Cash pooling receivables	<b>335</b>	247	+35.6	464	403	285
Other financial assets	<b>221</b>	242	(8.7)	389	348	221
Other non-financial assets	<b>54</b>	49	+10.2	126	194	117
Cash and cash equivalents	<b>516</b>	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).

#### Change of net result of KGHM Polska Miedź S.A.

[in PLN million]



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

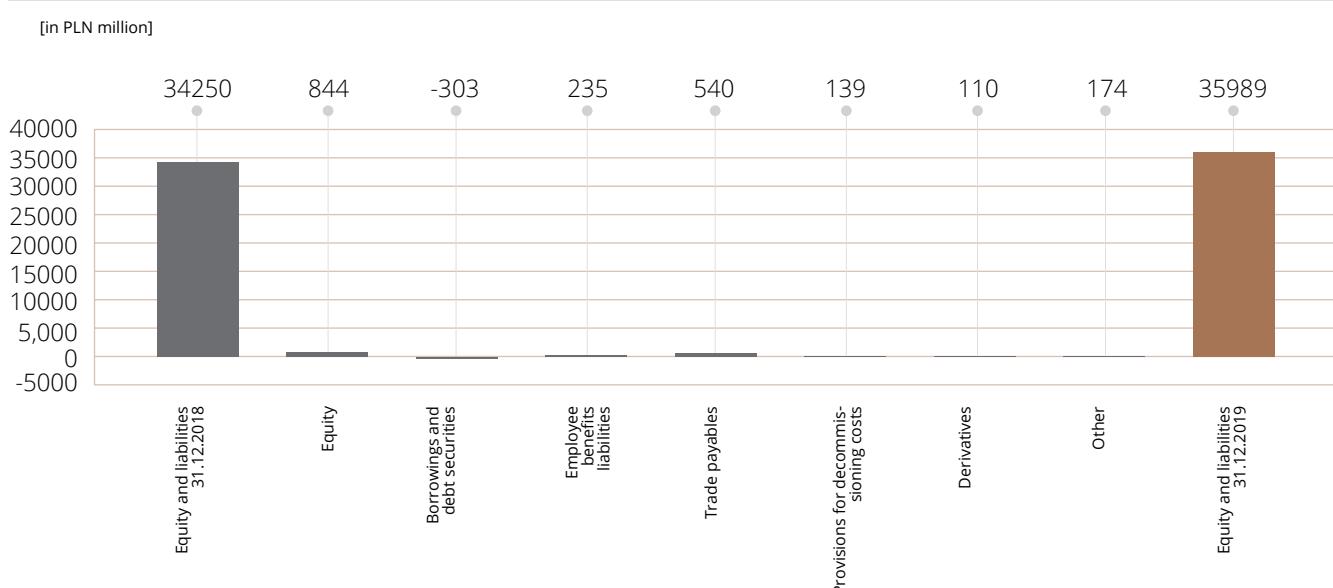
	<b>31.12.2019</b>	<b>31.12.2018</b>	<b>Change (%)</b>	<b>30.09.2019</b>	<b>30.06.2019</b>	<b>31.03.2019</b>
Share capital	<b>2,000</b>	2,000	-	2,000	2,000	2,000
Other reserves from measurement of financial instruments	<b>(698)</b>	(307)	×2.3	(730)	(437)	(552)
Accumulated other comprehensive income	<b>(622)</b>	(593)	+4.9	(616)	(713)	(645)
Retained earnings	<b>19,209</b>	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	<b>7,215</b>	6,758	+6.8	7,525	7,652	6,637
Derivatives	<b>131</b>	68	+92.6	324	52	84
Employee benefits liabilities	<b>2,363</b>	2,235	+5.7	2,347	2,425	2,311
Provisions for decommissioning costs of mines and other technological facilities	<b>1,119</b>	980	+14.2	1,270	1,099	982
Other non-current liabilities	<b>277</b>	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	<b>275</b>	1,035	(73.4)	1,290	996	1,740
Cash pooling liabilities	<b>130</b>	80	+62.5	80	50	135
Derivatives	<b>60</b>	13	×4.6	29	14	19
Trade payables	<b>2,460</b>	1,920	+28.1	1,439	1,610	1,631
Employee benefits liabilities	<b>890</b>	783	+13.7	841	770	696
Tax liabilities	<b>258</b>	233	+10.7	424	360	516
Provisions for liabilities and other charges	<b>158</b>	190		82	87	190

Other current liabilities	<b>764</b>	711	+7.5	684	709	684
Current liabilities	<b>4,995</b>	4,965	+0.6	4,869	4,596	5,611

### **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).

### **Change in equity and liabilities of KGHM Polska Miedź S.A. in 2019**



### **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 Źelazny 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.

# Reported non-financial indicators

Selected indicators of GRI standards illustrating activities relating to ethical issues in the KGHM Polska Miedź S.A. Group and KGHM Polska Miedź S.A. in 2019

## G205-3 Confirmed incidents of corruption and actions taken

Recorded corruption cases ended in:	KGHM Polska Miedź S.A. Group	KGHM Polska Miedź S.A.
disciplinary dismissal or punishment of employees	2	0
refusal to renew contracts with business partners due to breach of corruption rules	0	0
legal actions pertaining to corruption practices taken against the reporting organization or its employees in the reporting period	0	0
<b>Total</b>	<b>2</b>	<b>0</b>

Selected indicators of GRI standards illustrating activities relating to ethical issues in the KGHM Polska Miedź S.A. Group and KGHM Polska Miedź S.A.

## GRI 102-8 Total number of employees

<b>Total number of employees (head count)</b>	<b>Number of employees</b>	
	KGHM Group	KGHM Polska Miedź S.A.
<b>Total</b>	<b>34,329</b>	<b>18,536*</b>

\* workers for whom KGHM Polska Miedź S.A. is the main place of employment (the total number of KGHM Polska Miedź S.A. employees as at 31 December 2019 was 18,539)

**GRI 401-1 New employee hires and employee turnover**

New hires in 2019:	Total number of employees (head count) broken down to:	Number of employees (calculated in terms of persons)		Number of new hires		Rate of new employee hires (calculated in terms of persons)	
		KGHM Group	KGHM Polska Miedź S.A.	KGHM Group	KGHM Polska Miedź S.A.	KGHM Group	KGHM Polska Miedź S.A.
	Total	34,329	18,536*	2,519	988	7.33%	5.33%
Employee depar- tures in 2019:	Total number of employee departures (head count) broken down to:	Number of employees (calculated in terms of persons)		Number of employee depar- tures (head count)		Percentage of employee departures	
		KGHM Group	KGHM Polska Miedź S.A.	KGHM Group	KGHM Polska Miedź S.A.	KGHM Group	KGHM Polska Miedź S.A.
	Total	34,329	18,536*	2,570	952	7.48%	5.14%

**GRI 403-2 Number of work-related accidents by gender**

	KGHM Group		KGHM Polska Miedź S.A.	
	Women	Men	Women	Men
Total number of work accidents (incidents)	78	464	4	295
Number of fatal accidents (incidents)	0	3	0	3
Number of severe accidents (incidents)	0	3	0	2
Number of minor accidents (incidents)	74	450	0	290
<b>Total number of people injured in accidents</b>	<b>531</b>		<b>299</b>	

**GRI 404-1 Average hours of training per year per employee**

	<b>Total number of training hours</b>	
	<b>Total</b>	
	KGHM Group	KGHM Polska Miedź S.A.
Total number of training hours	575,861	431,949
Number of employees	34,329	18,536*
<b>Average number of training hours</b>	16.77	23.30

\* workers for whom KGHM Polska Miedź S.A. is the main place of employment (the total number of KGHM Polska Miedź S.A. employees as at 31 December 2019 was 18,539)



Selected indicators for 2019 illustrating activities in the area of social issues:

<b>List of donations from the KGHM Polska Miedź Foundation for institutions and individuals in 2019, by areas</b>		
AREA	<b>Donations</b>	
	<b>Amount awarded [PLN]</b>	<b>Number of projects/ number of individuals</b>
<b>DONATIONS FOR INSTITUTIONS</b>	<b>17,763,651.78</b>	<b>313</b>
1. HEALTH AND SAFETY	3,453,005.00	45
2. SCIENCE AND EDUCATION	2,422,608.56	56
3. SPORTS AND RECREATION	3,266,227.33	88
4. CULTURE AND TRADITION	8,621,810.89	124
<b>DONATIONS FOR INDIVIDUALS</b>	<b>1,194,825.18</b>	<b>169</b>
1. HEALTH CARE	1,187,691.18	168
2. SOCIAL ASSISTANCE	7,134.00	1
"Health Promotion and Environmental Hazards Prevention Program"	1,285,513.00	616 (children)
<b>TOTAL DONATION AMOUNT</b>	<b>PLN 20,243,989.96</b>	

A detailed list of donations granted to institutions is presented at <http://www.fundacjakghm.pl/>

Selected GRI Standards indicators for 2019 presenting actions in the area of environmental issues:

<b>G302-1 Direct and indirect energy consumption within the organization</b>			
1	Total consumption of energy from renewables (own or purchased) in Joules or a multiples thereof, broken down by type of raw material	Values (MWh)	
		KGHM Group	KGHM Polska Miedź S.A.
Non-renewable	coal	923,951.00	0.00
	natural gas	2,585,715.77	2 379 0006.19
	heating oil	10,107.98	0.00
	Diesel fuel	264,089.27	0.00
<b>Total</b>	<b>Total consumption</b>	<b>3,783,864.24</b>	<b>2,379,006.19</b>
2	Total consumption of energy from renewables (own or purchased) in Joules or a multiples thereof, broken down by type of raw material	Values (MWh)	
		KGHM Group	KGHM Polska Miedź S.A.
Renewable	biomass	51.00	0.00
	Biofuels	0.00	0.00
	wind energy	31.00	0.00
	solar energy	672.10	0.00
	geothermal energy	576.00	0.00
	Hydro energy	14.00	0.00
	Other (t)	4.70	0.00
<b>Total</b>	<b>Total consumption</b>	<b>1,348.80</b>	<b>0.00</b>
3	Total consumption of energy produced or purchased, by electricity, heat in Joules or multiples thereof	Values (MWh)	
		KGHM Group	KGHM Polska Miedź S.A.
	electricity	3,196,744.42	2,975,298.86
	heat (including consumption of steam, consumption of cooling energy)	513,092.97	260,650.44
<b>Total</b>	<b>Energy consumption</b>	<b>3,709,837.39</b>	<b>3,235,949.30</b>
4	Total energy sales: electricity, heat, cooling and steam, in Joules or multiples thereof	Values (MWh)	
		KGHM Group	KGHM Polska Miedź S.A.

	Total sales of electricity	474,459.15	389,166.33
	Total sales of heat (including: heat in steam, heat in water, cooling energy)	1,259,227.34	20,458.33
<b>Total</b>	<b>Sales</b>	<b>1,733,686.49</b>	<b>409,624.66</b>
<b>5</b>	<b>Total energy consumption within the organization according to the formula</b>	<b>5,761,363.94</b>	<b>5,205,330.82</b>

#### G305-2 Indirect greenhouse gas emissions

Indirect emissions, by source	Greenhouse gas emissions (tCO2e)	
	KGHM Group	KGHM Polska Miedź S.A.
"Emissions resulting from electricity purchased for own needs"	1,946,213.58	1,815,871.13
"Emissions resulting from heat purchased for own needs"	480,568.78	
"Emissions resulting from cooling energy or steam purchased for own needs"	21,284.06	161,014.64**
<b>Total indirect emissions</b>	<b>2,448,066.43</b>	<b>1,976,885.77</b>

\*\* because of the provisions of Polish law associated with the obligation to prepare reports on a detailed breakdown of indirect emissions in Scope 2 by the end of the quarter of the year following the reporting year, detailed data on emission levels associated with the purchased heat, shown separately for the part related to cooling or steam will be known after this Report is published

#### G306-2 Total weight of waste by type and disposal method

<b>Total weight of non-hazardous waste and inert waste as well as hazardous waste, by treatment method</b>	<b>Weight of waste in 2019 [tonnes]</b>			
	<b>non-hazardous waste and inert waste</b>		<b>hazardous waste</b>	
	KGHM Group	KGHM Polska Miedź S.A.	KGHM Group	KGHM Polska Miedź S.A.
1 Re-use of waste	29,999.90	9,429.22	32.33	0.00
2 Recycling (including organic recycling, e.g. composting)	4,913.91	2,931.56	102.68	28.90

3	Recovery (including recovery of energy)	19,906,853.66	19,794,336.14	146,177.15	130,319.82
4	Incineration (or use as fuel)	47.94	16.76	137.37	0.00
5	Storage in landfills	10,178,747.00	10,177,462.61	3,300.31	153,881.82
6	Dumping in deep wells	0.00	0.00	0.00	0.00
7	Storage on site	184,789.38	188,342.39	36,131.33	36,081.45
8	Other	2,182.02	203.16	288.00	35,037.51
<b>TOTAL</b>		<b>30,470,177.52</b>	<b>30,329,367.56</b>	<b>331,359.35</b>	<b>311,636.34</b>

**G307-1 Monetary value of fines and total number of non-financial sanctions for non-compliance with environmental laws and regulations**

The evidence confirming the effectiveness of environmental initiatives and the reduced environmental impact of our activities is that there have been no non-financial sanctions imposed on the KGHM Polska Miedź S.A. Group and on the Parent Entity.

	KGHM GROUP	KGHM POLSKA MIEDŹ S.A.
"Total value of fines for non-compliance with environmental laws and regulations [PLN]"	357,940.00	0.00
"Number of non-financial, administrative and judicial sanctions imposed on the organization for non-compliance with environmental legislation, including international declarations / conventions / treaties and national, regional and local laws, as well as voluntary arrangements with regulatory bodies that are considered binding."	2	0

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## Contact data

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Correspondence should be sent to the address of the Company's Head Office

**KGHM Polska Miedź S.A.**

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