

**Assessment of the standing of KGHM Polska Miedź S.A. for the year ended 31 December 2018, including an evaluation of the internal control, risk management and compliance systems and the internal audit function**

*(Adopted by Resolution No. 34/X/19 of the Supervisory Board of KGHM Polska Miedź S.A. dated 17 April 2019)*

April, 2019

*Translation from the original Polish version. In the event of differences resulting from the translation, reference should be made to the official Polish version.*

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## **1. Introduction**

In accordance with section II.Z.10.1 of the „Best Practice for GPW Listed Companies” the Supervisory Board of KGHM Polska Miedź S.A. hereby presents an „Assessment of the standing of KGHM Polska Miedź S.A. for the year ended 31 December 2018, including an evaluation of the internal control, risk management and compliance systems and the internal audit function”. This assessment was prepared based on documents submitted by the Management Board, discussions held with the participation of the Management Board and other individuals invited to attend meetings of the Supervisory Board, and also takes into account the financial statements and the reports of the Management Board on the activities of KGHM Polska Miedź S.A. and of the KGHM Polska Miedź S.A. Group, and based on the conclusions from the audit of the Company’s accounts by a Certified Auditor.

## **2. Economic results of KGHM Polska Miedź S.A. in 2018**

### **2.1 Mine and metallurgical production**

In 2018 extraction of ore (dry weight) amounted to 30.3 million tonnes, which was 0.9 million tonnes less than in 2017. The average copper content in extracted ore was lower than the amount recorded in 2017 due to mining in regions with a lower copper ore content and amounted to 1.49%. In the case of silver in ore, content was higher by 1.7% and amounted to 48.6 g/t.

As a result the amount of copper in extracted ore was lower than in 2017 by 14.8 thousand tonnes of Cu and amounted to 452.0 thousand tonnes. The volume of silver in ore decreased by 18 tonnes and amounted to 1 471 tonnes.

In 2018, 30.3 million tonnes of ore (dry weight) were processed (or 1 247 thousand tonnes less than in 2017). The lower amount of ore extracted by the mines directly affected the amount of copper in concentrate, which amounted to 401.3 thousand tonnes.

The production of concentrate (dry weight) decreased as compared to 2017 by 72 thousand tonnes (a decrease from 1 833 thousand tonnes to 1 761 thousand tonnes), while silver in concentrate was lower than the amount produced in 2017 by 2%.

The production of electrolytic copper as compared to 2017 decreased by 20.2 thousand tonnes, or by 3.9%. The lower production of electrolytic copper was due to the maintenance shutdown of the concentrate smelting installation at the Głogów II Copper Smelter and Refinery, which lasted from 8 April to 25 June.

Production re-commenced 8 days sooner than projected by the initial schedules. By supplementing own concentrate with purchased metal-bearing materials in the form of scrap, copper blister and imported concentrate, existing technological capacity was effectively used.

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

In comparison to 2017, the production of metallic gold decreased by 1 061 kg, or 29%, and metallic silver production was lower by 29 tonnes, closing the year at 1 189 tonnes.

### **2.2 Macroeconomic conditions in 2018**

In 2018 the average annual price of copper was 6 523 USD/t, or an increase compared to the prior year by 6%. The price of silver, which averaged 15.71 USD/ounce, decreased by 8%.

The average annual USD/PLN exchange rate (per the NBP) in 2018 amounted to 3.61 USD/PLN and was lower by 4% than the rate in 2017 (3.78 USD/PLN).

### **2.3 Sales**

In 2018, the volume of copper sales by KGHM Polska Miedź S.A. amounted to 514.4 thousand tonnes and was comparable to the sales volume in 2017 (+2%), although in 2018 there were sales of copper concentrate in the amount of 149.5 thousand tonnes dry weight (of which 22.3 thousand tonnes was Cu). There was however

a decrease in the volume of cathodes sold by 19.2 thousand tonnes (-8%). Sales of copper wire rod increased by 2.8 thousand tonnes (+1%) and OFE rod by 2.1 thousand tonnes (+16%).

Sales of metallic silver in KGHM Polska Miedź S.A. in 2018 amounted to 1 147 tonnes and were lower than the level of sales in 2017 by 38 tonnes (-3%). In 2018 there also occurred the sale of silver in concentrate (81 tonnes).

The volume of gold sales in 2018 amounted to 83.8 thousand troy ounces, or a decrease by 28% as compared to 2017 (117.1 thousand troy ounces).

Total sales revenue of KGHM Polska Miedź S.A. in 2018 amounted to PLN 15 757 million and was comparable to the revenues achieved in 2017 (a decrease by 2%, in 2017: PLN 16 024 million).

Revenues from copper sales in 2018 amounted to PLN 12 342 million, or a difference of +1% compared to the level of sales revenue in the prior year (PLN 12 213 million).

Revenues from metallic silver sales in 2018 amounted to PLN 2 101 million and were lower by 14% as compared to the level of sales revenue in 2017. Additionally, in 2018 KGHM Polska Miedź S.A. earned revenues from the sale of silver in concentrate in the amount of PLN 141 million.

The decrease in revenues from silver sales in 2018 was mainly due to the decrease in the price of this metal expressed in the Polish zloty as compared to 2017. Revenues from gold sales in 2018 amounted to PLN 381 million, and in 2017 to PLN 556 million. The difference was due to lower production of gold in 2018.

#### **2.4 Cost of sales, selling costs and administrative expenses**

The Company's cost of sales, selling costs and administrative expenses (cost of products, merchandise and materials sold plus selling costs and administrative expenses) in 2018 amounted to PLN 13 460 million and was 4% higher as compared to 2017. The Company's cost of sales, selling costs and administrative expenses was substantially affected by the change in inventories of half-finished products, products and work in progress, which in 2018 amounted to -PLN 236 million (in 2017 -PLN 1 097 million) and was mainly due to the decrease in the level of half-finished products inventories. At the end of 2018 there was a slight increase in inventories of work in progress and finished goods.

Total expenses by nature in 2018 as compared to 2017 were lower by 2.1%, mainly due to the lower consumption of purchased metal-bearing materials (a lower amount by 27 thousand tonnes and a lower price by 1.5%) as well as a lower minerals extraction tax (lower production of own concentrate and lower silver prices).

**The cost of producing copper in concentrate - C1** was as follows: in 2017: 1.52 USD/lb and in 2018: 1.85 USD/lb. The cost was impacted by a strengthening in the PLN as compared to the USD, lower silver prices and lower production of own concentrate.

#### **2.5 Financial results**

The Company recorded a profit for 2018 in the amount of PLN 2 025 million, or PLN 702 million (53%) higher than in the prior year.

The improvement in the result was mainly due to the following factors:

- a decrease in sales revenue by PLN 376 million, excluding the impact of hedging transactions, comprised of:
- a decrease in revenues from sales of basic products by PLN 643 million (Cu, Ag, Au) due to a less favourable average annual USD/PLN exchange rate (a change from 3.78 to 3.61 USD/PLN),
- a decrease in revenues by PLN 575 million due to a lower volume of copper sales (-14.2 kt, -3%), silver (-38 t, -3%) and gold (-33 koz t, -28%),
- an increase in revenues by PLN 461 million due to the sale of copper concentrate (a change from PLN 80 million to PLN 541 million),

- an increase in revenues by PLN 419 million due to higher prices of copper (+357 USD/t, +6%) and gold (+11 USD/koz t, +1%) alongside lower silver prices (1.34 USD/oz t, -8%),
- a decrease in revenues by PLN 38 million due to the sale of merchandise and other goods and services, including the value of third party processing of concentrate into cathodes (-PLN 58 million) and lower sales of refined lead (-PLN 12 million).
- and an increase in cost of sales, selling costs and administrative expenses by PLN 561 million, including:
  - an increase in costs by PLN 861 million due to a change in inventories of half-finished products, products and work in progress in 2018 (reducing costs) amounting to -PLN 236 million, compared to 2017: -PLN 1 097 million,
  - lower consumption of purchased metal-bearing materials by 27 thousand tonnes Cu (-18%) alongside a lower purchase price by 1.5%.
  - an increase in other by PLN 410 million, including other expenses by nature by PLN 419 million, mainly due to a change in costs: other materials and energy (+PLN 191 million), external services (+PLN 118 million), depreciation/amortisation (+PLN 101 million), employee benefits (+PLN 114 million) and the minerals extraction tax (-PLN 94 million).
- a change in the balance of impairment losses recognised/reversed from -PLN 330 million in 2017 to +PLN 355 million in 2018,
- the impact of exchange differences (-PLN 274 million),
- an increase in dividend income by PLN 235 million, and
- the impact of hedging transactions (+PLN 227 million).

In addition there was an increase in the result by PLN 822 million due to items which were not measured under the principles applied in accordance with IFRS 9 since 1 January 2018.

## **2.6 Assets, equity and liabilities**

As at 31 December 2018, total assets amounted to PLN 34 250 million, or an increase as compared to the end of 2017 by PLN 3 303 million, or by 11%, mainly due to increases in the following items:

- non-current financial instruments by PLN 1 422 million, including mainly loans granted (+PLN 1 290 million) and derivatives (+PLN 210 million),
- mining and metallurgical property, plant and equipment by PLN 1 027 million, arising from the realisation of investments – expenditures on property, plant and equipment and intangible assets in 2018 amounted to PLN 2 132 million,
- cash and cash equivalents by PLN 393 million, and
- inventories by PLN 245 million, including mainly half-finished products and work in progress (+PLN 144 million) and finished products (+PLN 117 million),

alongside a decrease in **trade receivables** by PLN 724 million in connection with the implementation of new receivables financing programs (factoring), a decrease of copper prices in the second half of 2018 and a change in the manner of settling December spot contracts.

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

- equity by PLN 1 789 million, including with respect to the profit for 2018 in the amount of PLN 2 025 million,
- borrowings and cash pool liabilities by PLN 705 million, due to exchange rate differences (+PLN 597 million), accrued interest (+PLN 277 million) and cash flows (-PLN 169 million),
- employee benefits liabilities by PLN 318 million and in trade payables by PLN 200 million, and
- provisions for decommissioning costs of mines and other technological facilities by PLN 184 million,

alongside a decrease in derivatives by PLN 77 million.

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In 2018 the Group's level of Net Debt/EBITDA amounted to 1.6 while the Group's long-term goal for maintaining financial liquidity is to maintain the net debt /EBITDA ratio at a level of up to 2.0.

### **3. Key events in 2018 and selected issues requiring attention**

#### **3.1 Review of the Strategy**

In terms of the strategic actions taken in 2018, an important event was the decision made by the Management Board on the necessity to conduct a strategic review and, ultimately, to update the Company's Strategy. The justification for this review was dictated by a variety of factors. These included both external as well as internal factors. The Strategy for the years 2017-2021 was adopted a year and a half ago. This was a time of rapid changes in the mining industry. Apart from macroeconomic challenges there are also megatrends which have a major impact on the entire mining sector. Modern technology, innovation, pressures for closed-end operations, balanced investments, electromobility, demand for commodities – all of these meant that the Company's Management Board felt a responsibility to react dynamically and to adapt to prevailing rules and trends in order to maintain the high position of KGHM Polska Miedź S.A. in the world.

To ensure the effectiveness of the strategic review process, the Company's Management Board appointed an internal Team to Analyse the Strategy of KGHM Polska Miedź S.A. for the years 2017-2021 with an outlook to 2040, and to develop recommendations regarding the future directions of development of the KGHM Polska Miedź S.A. Group. A series of meetings and consultations were held with appropriate units responsible for individual strategic areas. Internal analyses of the Company's resources and needs were made. This was followed by a comparison with market conditions. The result was the Strategy for the years 2019-2023 presented in December 2018.

The updated Strategy did not change the Company's current approach to business operations. KGHM Polska Miedź S.A. upholds its responsible approach and its long-term thinking about the company's future. Nonetheless the current conditions mean that the Company will act with a greater concentration on four strategic directions, the so-called 4E – elasticity (flexibility), efficiency, ecology and e-industry. These in turn are divided into 6 strategic areas which, though updated, represent continuity in terms of the previous executory and supporting strategies previously in force in the Company. The areas in question are production, development, innovation, efficient organisation, people and the environment and financial stability. Each of these have their own unique goals and appropriate means of measurement in the form of KPIs, which simplify the monitoring of their advancement. In terms of the international assets, the key strategic goal is to increase production while maintaining cost-effectiveness. The most important action in this regard is to continuously optimise production capacity at the Sierra Gorda mine, with a planned increase in average annual daily ore processing to 130 thousand tonnes from 2020. The process of operationalising the Strategy is currently underway in the Company, which is aimed at the comprehensive detailing and scheduling of specific actions.

#### **3.2 Capital expenditures**

In 2018, capital expenditures on property, plant and equipment amounted to PLN 2 132 million (including expenditures incurred on uncompleted development work of PLN 5 million and borrowing costs of PLN 133 million).

Around 62% of costs were incurred on projects related to the replacement of equipment and maintaining mine production, primarily aimed at maintaining mine production on the level set in the production plan.

The remaining expenditures in 2018 were incurred on development projects affecting the core production line, production volume, the implementation of activities optimising the use of existing infrastructure, maintaining production costs and adaptation of the company's operations to changes in standards, laws and regulations.

In 2018, the Supervisory Board gave particular attention to overseeing the following development projects:

<p>The <b>Żelazny Most</b> tailings storage facility (in 2018 expenditures incurred amounted to PLN 215 million)</p>	<p>Based on the permit received in 2016 to develop the Main Facility to a crown height of 195 meters a.s.l. and a permit to further operate the Tailings Storage Facility, the dam is being built up successively as part of the on-going operations of the Division.</p> <p>In March 2018, a permit was issued for construction of the Southern Quarter. Construction of the Southern Quarter will enable the additional deposition of waste tailings in the amount of around approx. 170 million m<sup>3</sup>.</p> <p>In May 2018, a contract was signed for construction of the Southern Quarter with the company Budimex. Construction is underway.</p> <p>A substitute building permit for the Tailings Segregation and Thickening Station was received. Construction commenced on the Tailings Segregation and Thickening Station.</p>
<p><b>Outfitting of the mines</b> (in 2018 expenditures of PLN 312 million were incurred, including PLN 48 million on the Deposit Access Program)</p>	<p>Investments being carried out in the mines are related to developing the infrastructure of the mining regions, ventilation and air conditioning equipment and investments in conveyor belt and pipe transport.</p>
<p><b>Replacement of the machinery park in the mines</b> (in 2018 expenditures of PLN 266 million were incurred)</p>	<p>With respect to modernisation and replacement of mining machinery, 263 pieces of mining equipment were purchased (in the replacement category).</p>
<p><b>Deposit Access Program – DAP (previously GGP)</b> (in 2018 total expenditures of PLN 413 million were incurred on the project, including PLN 48 million on outfitting the mines and PLN 365 million on development projects)</p>	<p>Work under the program includes projects related to the development of mine infrastructure (development and access work and mine work and infrastructure required to outfit these areas).</p> <p>Work continued on the sinking of the <b>GG-1 shaft</b> (material-transport, as well as providing ventilation). The shaft's target depth is 1 350 meters with a diameter of 7.5 meters.</p> <p>Preparatory work continued related to obtaining construction permits for <b>construction of the GG-2 („Odra”) shaft complex</b>. Discussions with the local government related to the plans to build the GG-2 were concluded. An Agreement was signed. The Municipal Authorities requested a change in the Study of Conditions and Directions of Land Management and in the Municipal Land Management Plan. Work is underway with the designer and the urban planning office.</p> <p>Work commenced on the construction of the <b>Surface-based Central Air Conditioning System at the GG-1 shaft</b>. Work continued on the project to build an <b>Ice Water Transportation System (IWTS)</b>. Environmental approval was received to advance the IWTS.</p> <p>Also in 2018, 45.2 km of access and preparatory tunneling were built (total investment and other costs) in the Rudna and Polkowice-Sieroszowice mines, representing nearly 80% of total access and preparatory tunneling built in KGHM in the Rudna, Polkowice-Sieroszowice and Lubin mines (a total of 57.3 km).</p>

	<p>Ore extraction in 2018 from the GGP region (mining in the G-25 section of the Rudna mine and drift work carried out through the GU department) amounted to 2 428 thousand tonnes of copper ore, dry weight.</p> <p>Metal grades in the GGP region in KGHM in total in 2018 averaged as follows: 1.63% of copper and 84.2 g/t of silver.</p>
<p><b>Pyrometallurgy Modernisation Program</b></p>	<p>In 2017, work continued on the final stage of the PMP project – acquiring operating permits, ramping-up production and acquiring operating permits as well as handovers of orders and contracts.</p> <p>In 2018, the flash furnace of the Głogów I Copper Smelter and Refinery operated at 77.6% of target efficiency.</p> <p>Average accrued efficiency of concentrate processing in the new flash furnace in 2018 was 102.4 t/h, with an efficiency of 103.1 t/h (designed capacity of 132 t/h) for the entire period to date from start-up (i.e. since 15 October 2016). Taking into account target efficiency (132 t/h), the figure of 102.4 t/h represents 77.6% of target efficiency. Processing efficiency in the new flash furnace will increase after the start-up and stabilisation of the concentrate roasting installation.</p>
<p><b>Metallurgy Development Program</b> (in 2018 expenditures of PLN 52 million were incurred)</p>	<p>Work continued on key technological links under the program's key investment tasks, i.e. construction of a Steam Drier at the Głogów II Copper Smelter and Refinery and a copper concentrate roasting installation.</p> <p>Work continued on the realisation, settlement and handover of projects related to adapting technical infrastructure to the change in technology at the Głogów I Copper Smelter and Refinery, based on implementing technical and technological activities with respect to:</p> <ul style="list-style-type: none"> <li>– replacement of property, plant and equipment,</li> <li>– ensuring compliance with EU laws and other legal requirements,</li> <li>– adapting energy, roadway and other infrastructure at Głogów I, and</li> <li>– providing power supply, remote control and lighting to existing facilities and equipment at Głogów I.</li> </ul>
<p><b>Program to adapt the technological installations of KGHM to the requirements of BAT Conclusions for the non-ferrous metals industry together with restricting arsenic emissions (BATAs)</b> (in 2018 expenditures of PLN 2 million were incurred)</p>	<p>The BATAs Program which began in 2018 comprises 26 new investment projects, including 20 at the Głogów Copper Smelter and Refinery and 6 at the Legnica Copper Smelter and Refinery.</p> <p>By the end of December 2018 11 projects had commenced, including 9 at the Głogów Copper Smelter and Refinery and 2 at the Legnica Copper Smelter and Refinery. In addition, 7 tenders are underway, while project assumptions are being updated for 8 projects.</p>
<p><b>Increasing cathode production at the Legnica Copper Smelter and Refinery to 160 kt of copper cathode/year (HML160)</b> (in 2018 expenditures of PLN 83 million were incurred)</p>	<p>In 2018 work on the project comprised continued construction of the Revolving Casting-Refining Furnace (RCR) at the Legnica Copper Smelter and Refinery. The following equipment was assembled: the RCR furnace, post combustion chamber, full evaporation tower, casting machinery, the installation to provide utilities, electrical installation and the APKiA (“Aparatury Kontrolno-Pomiarowej i Automatyki”, or Control-Measurement and Automation Apparatus).</p>

<b>Program KGHM 4.0.</b> (in 2018 expenditures of PLN 41 million were incurred)	<p>The KGHM 4.0 Program which began in 2018 is a venture which addresses the Industry 4.0. concept within the technical-organisational environment of KGHM Polska Miedź S.A. The KGHM 4.0 Program comprises the advancement of projects in 3 areas: INDUSTRY, ICT and SUPPORTING PROJECTS. The Program is aimed at the unified management of production and the utilisation of data in order to improve productivity and efficiency.</p> <p>In December 2018 an electric vehicle charging station open to the public was created in Lubin. This is a result of an agreement with the company Tauron, which foresees the cooperation between the companies in the area of electromobility, including the construction of vehicle charging station infrastructure for car-sharing services (so-called "auta na minuty"), and mutual pro-ecological activities.</p>
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### **3.3 Żelazny Most Tailings Storage Facility**

In 2018, expenditures incurred on the Żelazny Most Tailings Storage Facility amounted to PLN 215 million.

Based on the permit received in 2016 to develop the Main Facility to a crown height of 195 meters a.s.l. and a permit to further operate the Tailings Storage Facility, the dam is being built up successively as part of the on-going operations of the Division. In March 2018, a building permit was issued for the Southern Quarter. Construction of the Southern Quarter will enable the additional deposition of waste tailings in the amount of around 170 million m<sup>3</sup>.

In May 2018, a contract was signed for construction of the Southern Quarter with the company Budimex. Construction is underway. A substitute building permit for the Tailings Segregation and Thickening Station was received. Construction commenced on the Tailings Segregation and Thickening Station.

### **3.4 Change in technology at the Głogów I Copper Smelter and Refinery**

Copper production by the Głogów I Copper Smelter and Refinery in 2018 was at the targeted level, while the availability of the flash furnace was higher than planned by 0.93%.

The investment related to the copper concentrate roasting installation reached the final stage. The main task of the copper concentrate roasting installation is to eliminate organic carbon from concentrate, which in turn reduces the calorific value of the charge material to the flash furnace and enable higher production. The organic carbon elimination installation is a prototype on the world scale and requires work on optimising its performance and improving reliability. Following a series of trials in 2018, the copper concentrate roasting installation is in the ramp-up stage to designed capacity.

Achievement by the concentrate roasting installation of the target parameters will enable completion of the process of changing the technology at the Głogów I Copper Smelter and Refinery and higher production capacity by Głogów I in accordance with the project's targets.

### **3.5 Half-finished product inventories**

The change in inventories of half-finished products and concentrates is a result of the periodic maintenance performed on the smelters, while their level must ensure production continuity throughout the production process.

Prior to the planned maintenance shutdown at the Głogów II Copper Smelter and Refinery for the period April – June 2018, anode inventories were increased to a level enabling the achievement of target copper cathode production under the budget. During the shutdown of the smelters until maintenance was completed, these inventories were successively reduced and used in the production of cathodes and in stabilising the process of electrorefining.

During the shutdown, concentrate inventories increased, reaching their maximum level in June 2018. To optimise their level, 150 thousand tonnes of concentrate were sold and, thanks to a shortening of the maintenance shutdown at Głogów II by 8 days and the stability of the copper production process, concentrate inventories were successively brought down.

During 2018 attempts were made to intensify the processing of concentrate from the Lubin concentrator in the flash furnaces in order to maintain an optimum structure of processed concentrate and to reduce the share of Lubin concentrate in inventories. The level of concentrate inventories which remained at year's end enables intensified processing in the years 2019 -2020 and achievement of higher production plans.

### **3.6 Situation in the international assets**

#### **Sierra Gorda mine in Chile**

Production of copper in concentrate in 2018 amounted to 96.9 thousand tonnes, while production of molybdenum in concentrate amounted to 26.7 million pounds (on a 100% basis).

The work performed in 2018 concentrated on stabilising the processing installation and increasing metal recovery. Maintaining production at the level of 2017 alongside a decrease in copper grade in ore was possible due to the improved efficiency in the utilisation of assets at the processing stage. In 2018, preventative actions were undertaken with respect to maintenance and the exchange of installation elements, which enabled an increase in the period between major maintenance work on the Ore Processing Plant from 2 months in 2017 to 3 months in 2018, and consequently an increase in the volume of ore processed by 7% compared to 2017. With respect to molybdenum, production decreased as compared to 2017 by 9.0 million pounds due to mining in an area of lower molybdenum content (the sequence of mining in an area with a lower grade of this metal resulted from the approved mining plan).

Currently work is aimed at developing the mine by actions aimed at optimising the production process, the result of which should be an increase in the average annual daily ore processing capacity of Sierra Gorda to at least 130 thousand tonnes from 2020.

In 2018, work was carried out aimed at minimising the potential risk of the oxide project and increasing its efficiency, mainly by analysing the option of preliminary crushing of the ore prior to the process of leaching. This analysis included crushing tests. In addition, tests involving the leaching of the crushed ore in columns were carried out. Preliminary verification of the procedure related to altering the project's permits was also carried out.

#### **Operating assets of KGHM International**

In 2018, the production assets of KGHM International (excluding Sierra Gorda) produced in total 78.8 thousand tonnes of copper, 0.9 thousand tonnes of nickel, 1.6 tonnes of silver and 67.6 thousand ounces of gold, palladium and platinum.

With respect to actions undertaken to date aimed at further development of the production assets of KGHM International, the basic technical and economic assumptions of the production assets were updated. In the fourth quarter of 2018, production re-commenced in the McCreedy mine in the Sudbury Basin and at the same time the decision was taken to suspend mining in the Morrison region as at the end of the first quarter of 2019.

### **3.7 Occupational health and safety in KGHM Polska Miedź S.A. in 2018**

In 2018, the Company recorded a decrease in the total number of workplace accidents (as defined by the Act on social insurance due to workplace accidents and occupational illnesses), with a year-on-year decrease from 300 to 297 injured (-3). This decrease in workplace accidents was due in particular to the surface-based divisions, in which in 2018 there were 60 workplace accidents recorded, as compared to 65 events recorded in 2017 (-5). The number of workplace accidents in the mines of KGHM Polska Miedź S.A. in 2018 was slightly higher and amounted to 237 injured, as compared to 235 recorded in 2017 (+2). Most of the accidents (approx. 98.7%) involved light injuries, mainly caused by loss of balance by employees, contact (striking) by or through moveable/immovable objects, falling rocks, and injuries caused by the use of workplace tools.

In 2018, the Company continued work involving implementation of the multi-year Program to Improve Occupational Health and Safety in KGHM Polska Miedź S.A. to the year 2020, adding new valuable initiatives. The program is an element of the updated strategy of KGHM Polska Miedź S.A. for the years 2017 – 2021 with an outlook to 2040. The Company intends to continue its efforts to achieve the long-term vision of „Zero

accidents due to personal and technical reasons, zero occupational illnesses among our employees and contractors". The variety of tasks realised to date has borne fruit in the form of a decrease in the incidence rate of workplace accidents. The ratio LTIFR<sub>KGHM</sub> (Lost Time Injury Frequency Rate KGHM) in 2018, or the total number of workplace accidents in the Company per million hours worked for the entire core business of KGHM Polska Miedź S.A., decreased by 1.1 % as compared to 2017, and amounted to 10.3 (2017 = 10.4) and at the same time was lower by 45% than the amount recorded in 2010 (the number of workplace accidents per employee decreased during this same period by 46.2%).

#### **4. Assessment of the risk management system in the Company in 2018**

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

Under the Corporate Risk Management Policy and Procedure and the Rules of the Corporate Risk and Compliance Committee updated in 2018, the process of corporate risk management in the Group is consistently performed. In the companies of the Group, documents regulating the management of corporate risk are consistent with those of the Parent Entity. KGHM Polska Miedź S.A. oversees the process of managing corporate risk in the Group. Each year, the process of managing corporate risk is subjected to an efficiency audit (compliant with the guidelines of Best Practice for WSE Listed Companies 2016).

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

This comprehensive approach to analysing risk factors also comprises the identification of risk factors related to achieving the strategic goals. In 2018, risks were reviewed related to achievement of the strategic goals contained in the Main Strategy and in the Executory and Support Strategies.

Following is the organisational structure of risk management in the Parent Entity as updated in 2018. The breakdown of rights and responsibilities applies best practice principles for Corporate Governance and the generally recognised model of three lines of defense.

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

Supervisory Board (Audit Committee)					
Performs annual assessment of the effectiveness of the risk management process and monitors the level of key risk factors and ways to address them.					
Management Board					
Has ultimate responsibility for the risk management system and supervision of its individual elements.					
1st line of defense	2nd line of defense			3rd line of defense	
Management	Risk Committees				Audit
Managers are responsible for identifying, assessing and analysing risk factors and for the implementation, within their daily duties, of responses to risk. The task of the management staff is ongoing supervision of the application of appropriate responses to risk within the tasks realised, to ensure the expected level of risk is not exceeded.	Support effective risk management and ongoing supervision of key risk factors.				The Internal Audit Plan is based on assessing risk and subordinated business goals, assessed is the current level of individual risk factors and the degree of efficiency with which they are managed.  Internal Audit Rules  Executive Director for Audit and Control  <i>Reports to the President of the Management Board</i>
	Corporate Risk and Compliance Committee	Market Risk Committee	Credit Risk Committee	Financial Liquidity Committee	
	Manages corporate risk and continuously monitors key risk factors	Manages risk of changes in metals prices (e.g.: copper and silver) as well as exchange and interest rates	Manages risk of failure of debtors to meet their obligations	Manages risk of loss of liquidity, understood as the ability to pay financial liabilities on time and to obtain financing for operations	
	<i>Corporate Risk Management Policy</i>	<i>Market Risk Management Policy</i>	<i>Credit Risk Management Policy</i>	<i>Liquidity Management Policy</i>	
	Department of Corporate Risk Management and Compliance	Executive Director for Treasury Operations - Corporate Treasurer			
	<i>Reports to the Management Board</i>	<i>Reports to the Vice President of the Management Board (Finance)</i>			

### Market, credit and liquidity risk

The management of individual market, credit and liquidity risks is regulated by individual, detailed regulations in KGHM Polska Miedź S.A. as set forth in the following documents:

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

Based on the Market Risk Management Policy, Financial Liquidity Management Policy and Credit Risk Management Policy adopted by the Company, the Company's Management Board manages the identification of various types of financial risk. Understanding the threats arising from the Company's exposure to risk and maintaining an appropriate organisational structure and procedures enable an effective achievement of tasks. The Company identifies and measures financial risk on an ongoing basis, and also takes actions aimed at minimising their impact on the financial position.

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 Board is responsible for the management of the types of risk described in the Company and for complying with the individual policies adopted in this

regard. The Management Board is supported in the execution of risk management policy by the Market Risk Committee, Credit Risk Committee and Financial Liquidity Committee, entities which have functioned in the Company for many years. The management of individual types of risk includes both the processes 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 applied in the Company.

Since 2014, the Company has centralised the process of market risk management in selected mining companies of 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). The goals of market risk management at the Group level are achieved by their realisation in individual Group companies, with coordination of these activities by the Parent Entity, i.e. KGHM Polska Miedź S.A. Key tasks were centralised in the Company related to the process of market risk management in the Group (such as coordination of the identification of sources of exposure to market risk, the proposal of hedging strategies, contacts with financial institutions aimed at concluding, confirming and settling derivatives transactions and calculating estimates of fair value).

## **5. Evaluation of the compliance system in the Company in 2018**

KGHM Polska Miedź S.A. defines compliance as adherence to laws generally in force and to voluntarily adopted legal regulations (e.g. ISO standards). The Company recognises that compliance is an important element in its effective functioning, which requires that decisive actions to be taken to ensure that this goal is achieved.

For this reason as well, there exist in KGHM Polska Miedź S.A. a variety of organisational units (such as the Department of Corporate Risk Management and Compliance, the Department of Supply Chain Security and the Ethics and Anti-Corruption Procedures Unit) as well as systemic solutions (such as employee access to legal documents, formalised internal procedures for the interpretation of laws, processes to identify legal requirements and to assess their compliance in terms of the ISO standards in force in the Company), which are aimed at ensuring compliance.

In 2018 a fundamental review was carried out of the solutions applied in the Company in this regard, which resulted in the establishment of the Regulations Analysis Department, which among others is tasked with monitoring draft regulations at the regional, national and international levels, which enables the Company to be pro-active in this regard.

Moreover, a variety of new or updated normative acts were introduced with respect to security and preventing losses in the KGHM Polska Miedź S.A. Group, ethics (such as the updated Code of Ethics and the whistleblower procedure), social responsibility with respect to the gold and silver supply chain and protecting personal data.

## **6. Evaluation of the internal audit and internal control systems**

The internal audit system is aimed at ensuring effective and efficient Company operations, the accuracy of financial reporting and the compliance of the Company's actions with laws in force and internal regulations.

The internal control system comprises the areas of oversight, general internal procedures, the function of compliance with laws, the financial reporting system, organisational structures, IT systems audits and other control mechanisms aiding in the achievement of the Company's goals as well as having an impact on its security and the stability of its functioning. The purpose of the internal control system is the rational realisation of effective and efficient operations, the accuracy of information disclosed, in particular as regards financial statements as well as the adequacy and operational efficiency of the audits conducted.

The internal control system is supervised in the Company by:

- the actions of the Company's Management Board, involving the establishment of an appropriate and effective internal control system,
- monitoring the efficiency of the internal control system by the Supervisory Board's Audit Committee, and
- oversight by the owners of individual business areas over their respective organisational units.

In addition, in terms of institutional control, actions are undertaken by specialised units, in particular in the Security and Preventing Losses division and the Audit and Control division.

The internal audit function plays a special role, and is performed by a separate organisational unit in the structure of KGHM Polska Miedź S.A. – the Internal Audit Department, headed by the Executive Director for Audit and Control. The internal audit function is overseen by the Supervisory Board's Audit Committee, which issues opinions on internal audit regulations and the internal audit plan, and receives an annual report on the execution of audit plans.

The Internal Audit Department systematically evaluates and monitors the control mechanisms and identifies potential risks in individual processes occurring in the Company and in the entire Group, as well as uncovers irregularities and violations of existing procedures.

Auditing activities focus on assessing risk and evaluating and monitoring the functioning of the internal control systems in individual processes occurring in the Company and Group.

The work of internal auditing in KGHM Polska Miedź S.A. is based on the principle of independence, and may encompass virtually all areas of the Company's and Group's operations. In cases where the employees of the Internal Audit Department do not possess sufficient competence in an area which is to be assessed, the Department makes use of independent internal or external experts.

In 2018, the Department performed assessments in 30 various subject areas. Most of these assessments in specific areas were performed in several, or a dozen or so, Group subsidiaries simultaneously. These tasks were performed both in the divisions as well as in companies of the KGHM Polska Miedź Group, including those outside Poland.

As a result of audits performed in 2017, recommendations were formulated for implementation. The observations, results and recommendations from the comprehensive work were described in the Report on the Implementation of the Internal Audit Plan for 2018 of the KGHM Polska Miedź S.A. Group.

The audits carried out uncovered irregularities and violations most often of a procedural nature, violations of employee rules, and also ineffective management of resources in various units of the KGHM Group. The recommendations made in respect of the controlled units were aimed at eliminating the identified irregularities and strengthening the internal control system by implementing mitigative procedures. The implementation of recommendations is continuously monitored by the Internal Audit Department.