





Polska Miedź S.A. (hereinafter referred to as "KGHM" or the "Company"), as one of the largest global copper and silver producers, intends to develop its activity consciously on a continuous basis in compliance with the principles of sustainable development and responsible business, by performing its actions in a manner that takes into account both the organisation's impact on the climate, as well as the impact of climate change on the Company.

KGHM Polska Miedź S.A., as an ambitious participant in the green transformation, has set itself commitments not only as to the further development of its core activity but also as to the introduction of numerous changes in the Company's operations, with the aim of proving its awareness of climate change and enhancing its communication with all stakeholders in this regard.

The above-mentioned commitment is expressed by the adoption of the Climate Policy of KGHM Polska Miedź S.A. – a targeted document addressed both to external and internal stakeholders, with the primary aim of presenting the climate-related ambitions of KGHM Polska Miedź S.A. and defining the necessary scope of process and organisational changes to advance their execution and continuous improvement.







STRATEGIC CONTEXT

KGHM ACTS IN LINE WITH THE PRINCIPLES OF SUSTAINABLE DEVELOPMENT, INCLUDING IN THE AREA OF CLIMATE IMPACT

Responsibility is one of the primary values of KGHM Polska Miedź S.A., which builds its position as a strategic producer, a trusted contracting party, and an enterprise which acts in line with the principles of sustainable development. The above is expressed in KGHM's vision: **"To use our resources efficiently to become a leader in sustainable development"**.

KGHM's priorities are to protect the natural environment and to minimise the environmental impact originating from the Company's operations. Thanks to its adopted Environmental Policy KGHM sets the highest environmental standards as well as prevents and reduces its environmental impact.

In striving to advance the present and prospective standards, KGHM is also engaged in actions to satisfy one of the most urgent needs of the present generation: counteracting climate change. As pointed out by the **Intergovernmental Panel on Climate Change**, long-term climate change arising from greenhouse gas emissions will exert a permanent and irreversible impact on people and ecosystems. Containing these changes is a global task, one which requires active efforts.





CLIMATE POLICY OBJECTIVES AND BENEFITS FROM ITS IMPLEMENTATION

The objectives of the Climate Policy are as follows:

to define the ambitions

of KGHM Polska Miedź S.A. regarding the reduction of its impact on the climate and to adapt the operations of the Company to fulfil these ambitions **to describe how the Company should be managed** to adapt to existing and predicted climate change.

The scope and impact of the Climate Policy include the Parent Entity of the KGHM Group – KGHM Polska Miedź S.A., which will cascade the changes down to its subsidiaries. This Climate Policy complements the Strategy of the KGHM Group regarding the operations of KGHM Polska Miedź S.A. The Climate Policy will be followed by the Decarbonisation Programme of the KGHM Group.

The Climate Policy of KGHM Polska Miedź S.A. will directly support the achievement of the UN's Sustainable Development Goals¹ as regards:

> GOAL 7

Ensure access to affordable, reliable, sustainable and modern energy for all

GOAL **12**

Ensure sustainable consumption and production patterns

GOAL 13

Take urgent action to combat climate change and its impacts

By preparing and implementing the Climate Policy, KGHM will:

- again confirm its far-reaching ambitions regarding the reduction of the Company's environmental footprint;
- strengthen its market position by gaining the possibility to position its products better;
- comply with the latest standards defined by the document "Best Practice for GPW-Listed Companies" of the Warsaw Stock Exchange;
- adapt to the changes in its surroundings related to increases in the prices of energy and CO₂ emission allowances;
- contribute significantly to the decarbonisation of the whole Polish economy as one of the most energy-intensive enterprises in Poland;
- address the increasingly demanding expectations of the financial markets, shareholders and investors;
- ensure further improvement of the living and working conditions in the regions where it operates;
- gradually improve its ESG ratings.

KGHM'S PRODUCTS SUPPORT THE TRANSFORMATION TO A LOW-CARBON ECONOMY



Decarbonisation is another major economic transformation, whose reach will affect all economy sectors and geographical areas of the world.

KGHM, as one of the largest global copper producers, will have a significant impact on the successful transformation into a low-carbon economy. The new role will stem from having to satisfy the growing demand for copper, which is a key component of the green economy of the future. Apart from supporting the transformation directly by providing the key resource, KGHM will also contribute indirectly to the reduction of greenhouse gas emissions. Furthermore, given this perceived reality, KGHM sees the potential for increasing its role in the global economy – generating new, previously unattainable opportunities to improve the competitive potential of the Company.



REDUCING EMISSIONS WILL BE A SIGNIFICANT ASPECT OF KGHM'S COMPETITIVE ADVANTAGE

In light of the activities of the competition in the European and global copper markets, KGHM assumes that the reduction of the organisation's emissions and of its products' carbon footprint will constitute one of the competitive advantages of KGHM. Therefore, it is important to set ambitious emission reduction targets and to support the achievement of these targets through dedicated internal processes in KGHM.



¹ Sustainable Development Goals listed in the final document from the United Nations summit: "Transforming our world: the 2030 Agenda for Sustainable Development", adopted by the General Assembly on 25 September 2015.

REGULATORY ENVIRONMENT

KGHM TAKES INTO ACCOUNT ITS OBLIGATIONS ARISING FROM CHANGES IN THE REGULATORY ENVIRONMENT

KGHM is adapting to the changing regulatory considerations and the obligations arising therefrom related to KGHM's climate impact and to the impact of climate change on the Company. The obligations arising from regulations regarding the mutual impact of the Company and the climate on one another include in particular:

Increasingly greater pressure for decarbonisation imposed by the European Union, in particular:

- reduction of the number of allowances under the EU's greenhouse gas emission allowances trading system,
- significant curtailment of the possibility of support for installations that use fossil fuels based on the European Commission's Guidelines on State aid for environmental protection and energy, and,
- the introduction of preferential taxation of environmentally-effective energy carriers in the amendment to the Energy Taxation Directive, which require KGHM to reduce its emissions so that the satisfaction of the Company's demand for electricity and heat remains profitable;

The EU's Corporate Sustainability Reporting Directive initiative, which will require KGHM to fulfil specific obligations. Only those obligations related to KGHM's climate impact will be fulfilled as part of the Climate Policy:

- taking the climate impact of investments into account,
- aligning the goals of the Company's governing bodies and the remuneration of their members with the avoidance of climate change risks;

The EU's initiative for sustainable supply chains as regards KGHM's climate impact, as well as industry self-regulation in this regard (requirements of the London Bullion Market Association, London Metal Exchange and Copper Mark);

Growing requirements as regards non-financial reporting, according to which KGHM will need to continue to submit annual non-financial information reports; such information will be additionally extended by indicators specifying the share in turnover, in capital expenditure (CAPEX) and in operating expenditure (OPEX), of the following areas of activity:

- Taxonomy-eligible activity,
- Taxonomy-noneligible activity,
- Taxonomy-aligned activity;

Obligations arising from the Act on Electromobility and Alternative Fuels, which KGHM meets as an operator of publically-available charging stations.



In addition, along with the growing refinement of the methods for defining paths towards a low-carbon economy, the probability is high that new legislation will be introduced leading to the implementation of new laws and the modification of existing ones.

To deal with these challenges, KGHM engages in ongoing monitoring of legislative actions aimed at pre-emptive actions to prepare the organisation for the possible consequences of growing legislative pressure.

CLIMATE TRANSFORMATION FROM THE REGULATORY PERSPECTIVE IS AN OPPORTUNITY FOR KGHM

KGHM intends to actively take advantage of the opportunities resulting from its participation in the climate transformation, including the benefits related to dedicated EU funds.



The perspective regulations introduce simplifications in the use of renewable energy sources, such as::

- the standardisation of Power Purchase Agreements,
- the possibility of directly connecting its own renewable energy sources (RES) installations to its own production plants, which will be used by KGHM to increase the share of consumption of energy from RES

Hydrogen Strategies of the EU and of Poland, along with the announced support for the use of hydrogen for decarbonisation, indicate a promising direction for KGHM as regards replacement of natural gas with hydrogen in production processes.

The EU's sustainable products initiative is an opportunity for KGHM to increase the use of recycled materials in its products thanks to regulatory facilitation of production process organisation. The above might position KGHM in the sustainable products market.

The possibility of including mining and metallurgical activity in the EU's environmentally--sustainable activity classification system (Taxonomy) might increase KGHM's credibility amongst stakeholders.

STAKEHOLDERS' EXPECTATIONS

SATISFYING STAKEHOLDERS' EXPECTATIONS WILL BE A SOURCE OF KGHM'S LONG-TERM VALUE CREATION

KGHM intends to satisfy the growing expectations of stakeholders in terms of climate protection activities. This Climate Policy and the commitments included herein will enhance the transparency of the message and the periodic non-financial reporting disclosures – both in terms of KGHM's climate impact and the Company's adaptation to climate change.

The Company is aware that an improvement in its ESG ratings, which are regarded by institutional investors and financing institutions as significant for investment decisions, will require the continuation of existing efforts as well as implementation of new actions, including improvement in the quality of climate-related information reporting.

At the same time, implementation of the Climate Policy will contribute to the ongoing cooperation and dialogue with local communities and local governments, including through dedicated educational programs related to climate protection.

Undoubtedly, all the above-mentioned actions will not only be beneficial for KGHM's surroundings but will also contribute to a significant extent to the creation of long-term shareholders value.





OUR COMMITMENTS - climate goals



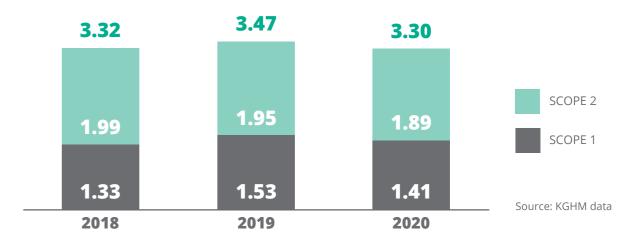


Chart 1. Scope 1 and Scope 2 greenhouse gas emissions of KGHM Polska Miedź S.A. in the period 2018–2020 [million t of CO₂e]

Detailed data concerning the annual emissions of KGHM Polska Miedź S.A. for the period 2018–2020 are included, among others, in the CDP survey available on KGHM's website, which contains emissions indicators, GWP (global warming potential) coefficients and their sources, as well as greenhouse gas emissions intensity indicators.

The above emissions level was determined based on the GHG Protocol standard, excluding the rule requiring consideration of the entire organisation, i.e., the Group as a whole. This results directly from the fact that KGHM Polska Miedź S.A. is the key single emitter of greenhouse gases in the Group. In 2022, KGHM will conduct a full survey of Scope 1 and Scope 2 emissions at its subsidiaries, so that, by the first half of 2023, it will be able to announce the total Scope 1 and Scope 2 emissions for the entire organisation within the meaning of the GHG Protocol.

The above emissions data for KGHM do not cover Scope 3 emissions according to the GHG Protocol, i.e. other indirect emissions being beyond the organisation's control but covering the whole of KGHM's value chain. **KGHM will publish data concerning Scope 3 emissions for the Group no later than in the first half of 2024.**

Furthermore, in order to increase the effectiveness of actions related to Scope 3 emissions KGHM intends to conduct educational campaigns in the future for stakeholders responsible for Scope 3 emissions, i.e. among others suppliers, customers, and employees, for the purpose of raising climate change awareness.

GREENHOUSE GAS EMISSIONS OF KGHM POLSKA MIEDŹ S.A.

KGHM Polska Miedź S.A. emits approximately 3.3 million tonnes of CO₂ equivalent annually, approximately 40% of which consists of Scope 1 emissions and 60% of which are Scope 2 emissions according to the GHG Protocol.

SCOPE

1
EMISSIONS

are direct emissions related above all to the Company's production activity, i.e. in particular emissions from metallurgical processes, emissions related to the use of engine fuels by mining vehicles and machines in the mines, and emissions related to the generation of energy from own sources with the use of natural gas.

SCOPE 2 EMISSIONS

in turn, are indirect emissions related to the use of the electricity and heat purchased on the market. Their level depends above all on the energy mix in the Polish Power System.



AMBITIONS FOR THE REDUCTION OF GREENHOUSE GAS EMISSIONS BY KGHM POLSKA MIEDŹ S.A. IN THE 2030 AND 2050 PERSPECTIVE



THE OVERRIDING OBJECTIVE

of the Climate Policy of KGHM Polska Miedź S.A. is for the Company – as the Parent Entity of the KGHM Group – to achieve climate neutrality by 2050 with respect to Scope 1 and Scope 2 greenhouse gas emissions, with the maximum possible reduction of the emissions.



THE INTERMEDIATE OBJECTIVE

of KGHM Polska Miedź S.A. is to reduce total Scope 1 and Scope 2 emission levels by 30% by 2030 relative to the emission levels in 2020.

THE REDUCTION TARGETS

for the entire KGHM Group will be announced publicly no later than in the first half of 2023. The emission reduction targets indicated in this Climate Policy for the Parent Entity of the KGHM Group, i.e., KGHM Polska Miedź S.A., already include the key portion of the greenhouse gas emissions of the KGHM Group.





MEANS

KEY AREAS AND METHODS OF REDUCTION OF GREENHOUSE GAS EMISSIONS

As part of the efforts towards climate neutrality in 2050, KGHM Polska Miedź S.A. must undertake significant measures related to decarbonisation of all key components of its operations. Considering the current development and availability of advanced technologies, the primary activities of the Company until 2030 will be aimed at reducing indirect Scope 2 emissions, and the key activities aimed at reducing direct Scope 1 emissions will be performed successively until 2050.



THE PRIMARY METHODS
OF REDUCING
THE COMPANY'S
CARBON FOOTPRINT
IN TERMS OF SCOPE 1
DIRECT EMISSIONS
WILL INCLUDE:

using hydrogen technologies in production processes

the development of electromobility (gradual replacement of lightweight surface vehicles and mining machines with electric ones)

the implementation of advanced technologies on the production line

the gradual replacement of conventional energy sources with zero-emission ones

the use of CCS/CCU technologies to manage the remaining CO₂ emissions from metallurgical processes

Due to the early level of development of the majority of the above-mentioned technologies, **it is assumed** that by 2030 KGHM will focus its efforts above all on the continuation or launch of research and development work in selected areas and on the launch of pilot projects. The full implementation of new and innovative solutions, leading to the achievement of the expected decarbonisation effects in the area of direct emissions, will take place in the period 2030–2050.

The primary focus of decarbonisation as respects Scope 2 indirect emissions will be the gradual withdrawal from the use of electricity and heat acquired from the market in favour of increased use of its own energy sources. The key element supporting the reduction of Scope 2 emissions will be the continuous improvement of energy efficiency by the production divisions and improvement of production processes.

The development of internal zero-emission and low-carbon sources will include, over the short and medium term, construction or acquisition of RES (photo-voltaic power stations and wind energy generation), while over the long term it will be complemented by the use of nuclear energy: namely, small modular reactors (SMR). Due to the necessity to ensure technical security, i.e. uninterrupted energy supply, the development of own sources will be supported by the construction of energy storage infrastructure with the use of hydrogen.

It is assumed that by 2030 KGHM Polska Miedź S.A. will satisfy at least 50% of its energy demand from its own, mostly zero-emission, sources. Ultimately, by 2050 the Company will achieve the status of energy self-producer, with a considerable share of energy generation from SMR.

Comprehensive capital expenditures related to the execution of measures that reduce greenhouse gas emissions will be set forth in the KGHM Group's Decarbonisation Programme and made public.



OTHER PRO-ENVIRONMENTAL ACTIVITIES BY KGHM

The complementary efforts made by KGHM for the benefit of the environment already go beyond reduction of greenhouse gas emissions. They include in particular:



All the above examples show the importance of the implementation of strategic assumptions related to ecology for KGHM. This is associated with the conviction, deriving from the ideas of sustainable development, that a responsible business must take into account not only the effectiveness of its actions but also its environmental impact. Therefore, the pro-environmental efforts which have been made by the Company for many years are not ad-hoc actions. This path has been taken deliberately and will be followed consistently by KGHM.

ADAPTATION OF THE OPERATIONS

of the operations of the Company to achieve its greenhouse gas emission reduction targets and incorporation of the impact of climate risk in internal processes

IMPLEMENTATION OF CLIMATE REPORTING STANDARDS COMPLIANT WITH TCFD RECOMMENDATIONS

KGHM's ambition is to be an important participant in the green transformation. This is reflected not only in the development of its core business activity but also in the introduction of numerous changes in the Company's operations, with the aim of demonstrating its awareness of climate change and enhancing communication with all of its stakeholders in this regard. For the purpose of ensuring compliance of the Company's activities with best market practices, KGHM will strive to implement a climate reporting system based on the Recommendations of the Task Force on Climate-Related Financial Disclosures of 2017, hereinafter referred to as "TCFD Recommendations".

KGHM's intention is that the scope of information disclosed as part of the abovementioned standards constitute a second, after the non-financial report, source of knowledge for all stakeholders about the relationship between KGHM and climate change.

For the purpose of complying with the above commitment, KGHM is planning to publish a climate report: a document aimed at comprehensively describing the anticipated impact of climate change on KGHM's operations and how the Company is prepared for this.

The potential achievement, as part of the above-mentioned report, of full compliance with the TCFD Recommendations by KGHM will take many years and will require a range of process and organisational changes.





KGHM'S APPROACH TO ORGANISATIONAL AND PROCESS CHANGES UNDER THE TCFD RECOMMENDATIONS

The first step towards the implementation of a new reporting system will be the preparation of the corporate layer for the requirements imposed by the TCFD Recommendations, involving the introduction of numerous changes to KGHM Polska Miedź S.A. – the Parent Entity of the KGHM Polska Miedź S.A. Group.

The currently planned changes will concern key business and management processes – in particular related to or contributing to the reduction of greenhouse gas emissions by KGHM. Their scope will cover all four areas of the TCFD Recommendations (2017) through:

Changes in the area of Governance, aimed at introducing mechanisms for the monitoring and oversight of climate issues by KGHM's management, including the Management Board,

Changes in the area of KGHM's strategic management and Strategy, aimed at introducing mechanisms that take into account the climate context in the Strategy update, implementation and monitoring processes,

Changes in the area of Risk Management, aimed at fully integrating climate risks with the present Corporate Risk Management System of KGHM Polska Miedź S.A.,

Changes in the area of Metrics and Targets, aimed at introducing an emissions measurement process for the KGHM Group which is fully compliant with the GHG Protocol, and at implementing preliminary metrics for monitoring improvements in the resilience of the business model of KGHM Polska Miedź S.A. to climate change.





SCOPE OF ORGANISATIONAL AND PROCESS CHANGES OF KGHM POLSKA MIEDŹ S.A. UNDER TCFD RECOMMENDATIONS

KGHM is planning to introduce a range of changes compliant with the TCFD Recommendations over the coming year or so. The key changes will cover:



- Establishing processes and determining the frequency of informing the management about climate-related issues (including progress regarding the Climate Policy and the reduction targets),
- Taking into account climate-related issues while preparing and updating the strategy, the risk management policy, the annual budgets and the business plans,
- Determining the manner in which the management monitors and supervises the progress of advancement of goals and tasks related to climate issues,
- Defining the roles and obligations of the management regarding climate-related issues and the related organisational structure (positions and/or committees),
- Establishing the processes of informing the management about climate-related issues,
- Defining the manner by which management monitors climate-related issues,

In the area of Strategy:

- As part of an analysis of the strategic context, taking into account the short-, medium- and long-term perspective and indicating the strategic climate-related issues for each time perspective,
- Preparing procedures to assess climate-related risks and opportunities having a significant financial impact on the organisation,
- Establishing a standardised approach to the identification and assessment of climate-related issues with an impact on the organisation's business, strategy, and financial planning,
- Taking into account climate-related issues in the financial planning process,
- Consideration of the strategy's resilience to climate-related risks and opportunities, taking into account the transition to an economy with lower greenhouse gas emissions in accordance with the scenario assuming a reduction of the temperature increase by 2 °C or less, and including the performed scenario analysis in this process, which assumes an increased physical climate-related risk,

In the area of Risk Management (understood as risks and opportunities related to climate change):

- Introducing a climate risk management process for the purpose of identifying and assessing climate-related risk and determining the importance of climate-related risk relative to other risks,
- Taking into account the existing and emerging regulatory climate-related requirements in the risk management process,
- Taking into account the potential impact and scope of climate-related risk in non-financial reporting,
- Taking into account the definitions of the applied terminology concerning risk or references to applied risk classification frameworks in non-financial reporting,
- Taking into account the manner of decision-making related to climate-related risk mitigation, transfer and acceptance or control in the risk management process,
- Integrating the climate-related risk identification and management process with the existing risk management process,

In the area of Metrics and Targets:

- Preparing and introducing key indicators used for measuring and managing climate-related risks and opportunities (climate risk) to the organisation,
- Introducing an internal carbon dioxide emissions price (as part of the internal carbon pricing approach),
- Implementing a system of measuring, collecting and reporting data concerning greenhouse gas emissions and related risks,
- Setting key climate-related targets of the organisation, such as greenhouse gas emissions,
- Defining the time frames and base years when setting the absolute targets,
- Taking into account the factors connected with climate protection in the remuneration policy, including, in particular, in the salaries of the management.



IMPACT OF CLIMATE RISKS ON KGHM'S ACTIVITY AND ROLE OF SCENARIO ANALYSIS IN THE RISK MANAGEMENT PROCESS

As an organisation that is aware of the impact of climate change on its business activity, KGHM has fully integrated the Climate Risk Management process with the Corporate Risk Management process of the KGHM Group. These actions reflect the Company's efforts to achieve operational excellence and its mission to behave in line with the principles of sustainable business. As a result of the above-mentioned actions, KGHM has identified a new category of climate risks, the importance of which is equal to the other risk categories for the Company, i.e. value chain, technology, exterior, internal and market risks.

The risk management process in the KGHM Group is composed of four stages:

analysis **Monitoring and Determination** of the context identification communication and response and assessment

The first and second stages should be indicated as the key ones from the point of view of taking climate risks into account. The other stages are performed in the same manner as the overall corporate risk management process.

As part of the first stage of the risk management process (Determination of the context), KGHM has taken into account climate change by performing a scenario analysis based on recognised reports of the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA). The above-mentioned analysis is being carried out at present based on 5 base scenarios: the Stated Policies Scenario (STEPS), the Sustainable Development Scenario (SDS), Net Zero Emissions by 2050 (NZE2050), RCP4.5 and RCP8.5. Each of them has a range of assumptions:

- in the case of transitional scenarios, as regards pursuit of the adopted climate policies and the resulting changes to the parameters that are significant from the point of view of KGHM e.g. prices of emission allowances, energy consumption, changes in the copper demand,
- in the case of physical scenarios the starting point of analysis is concentration levels of greenhouse gases in the atmosphere and the resulting changes in Earth's temperature and their consequences.

The scenario analysis takes into account assumptions considered in three time perspectives:

short-term (2023–2025) medium-term (2030) and long-term (2050) ones

The presumptions concerning the change to the average Earth temperature relative to the pre-industrial level range from the most stringent ones, anticipating an increase in the average Earth temperature by 1.5 °C by 2100 (NZE2050) to those regarded as business-as-usual, which predicts an increase by 3.2–5.4 °C by 2100 (RCP8.5). Ultimately KGHM Polska Miedź S.A. will strive to prepare its own scenarios, which will be the basis for an analysis of the impact of climate change on the organisation. This way the Company will achieve the most tailored and customised approach, which will be the basis for making business decisions regarding assessment of the organisation's resilience to potential climate change.

The above-mentioned analysis constitutes a key foundation of building a register of climate risks based on the TCFD Recommendations as part of the second stage of the process: Risk identification and assessment. In order to ensure consistency, the register of risks created in the process is divided into **risk categories**:

PHYSICAL

including chronic and acute risks

TRANSITIONAL

including subcategories of regulatory, reputation, market and technology risks

OPPORTUNITIES

which are presented under the subcategories of resource savings, energy sources, products or services, markets and business resilience



IMPROVEMENT OF KGHM'S CLIMATE REPORTING COMPLIANCE AND QUALITY AS PART OF THE TCFD RECOMMENDATIONS

The changes presented constitute the above-mentioned first step towards maximisation of stakeholder trust in the context of the relationship between KGHM and climate change. As part of the planned publication of the climate report, KGHM intends to strive for the role of leader of the green transformation by:

Including all, not only key, corporate processes of KGHM in the process and organisational changes arising from the TCFD Recommendations

Decomposing the management processes into all subsidiaries
of KGHM Polska Miedź S.A., including
the international assets











