

## C0. Introduction

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### C0.1

**(C0.1) Give a general description and introduction to your organization.**

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

The KGHM Polska Miedź S.A. Group is a global and innovative organisation, which conducts technologically advanced exploration-mining and metallurgical activities and has a geographically diversified portfolio of mining projects. KGHM’s business model is divided into 7 areas, through which the Group ensures a complete chain of value creation, from exploration to the sale of finished products. KGHM actively supports the realms of science, the arts and sport. Through its Foundation founded in 2003, KGHM Polska Miedź engages in charitable activities.

The KGHM Polska Miedź S.A. Group includes the Parent Entity – KGHM Polska Miedź S.A. – and 71 subsidiaries (as at 31 December 2020). Uniformity in such a complex organisation is ensured by KGHM’s values – zero harm, teamwork, results-driven, accountability and courage. For 60 years they have been the Company’s business compass, indicating the direction of development and the means of operation on the international market.

For over 20 years the Company has been listed on the Warsaw Stock Exchange. The Company’s shares are traded on the primary market of the WSE in the continuous trading system and are a component of the WIG, WIG20 and WIG30 main indices as well as the WIG – ESG index published since 3 September 2019, comprising listed companies which adhere to the principles of corporate social responsibility. The Company was also a permanent component of the RESPECT Index, from 19 November 2009 until 1 January 2020 when it ceased to be calculated and published. KGHM Polska Miedź S.A. is also a component of the sector index WIG-Mining. Moreover, KGHM Polska Miedź S.A. is a component company of the FTSE4Good Index Series. The FTSE4Good Index Series is part of the group of ethical investment indicators, reflecting criteria of corporate social responsibility and ESG risk management.

### C0.2

**(C0.2) State the start and end date of the year for which you are reporting data.**

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2020	December 31 2020	Yes	3 years

### C0.3

**(C0.3) Select the countries/areas for which you will be supplying data.**

Poland

### C0.4

**(C0.4) Select the currency used for all financial information disclosed throughout your response.**

PLN

### C0.5

**(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.**

### C-MM0.7

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**(C-MM0.7) Which part of the metals and mining value chain does your organization operate in?**

**Row 1**

**Mining**

- Copper
- Gold
- Platinum group metals
- Silver

**Processing metals**

- Copper
- Gold
- Platinum group metals
- Silver

**C1. Governance**

**C1.1**

**(C1.1) Is there board-level oversight of climate-related issues within your organization?**

No

**C1.1c**

**(C1.1c) Why is there no board-level oversight of climate-related issues and what are your plans to change this in the future?**

	Primary reason	Board-level oversight of climate-related issues will be introduced within the next two years	Please explain
Row 1	The company is in the process of developing strategic plans and targets, including the preparation of a Climate Policy (to be announced by end-2021) which will incorporate among others designations of key personnel / senior management who are responsible for oversight of climate policy implementation.	Yes, we plan to do so within the next two years	At present, responsibility for environmental protection issues is assigned to the Vice President (Production). The Corporate Risk Management Policy describes our systematic approach to risk: from identification and assessment, through analysis and response, to the monitoring of risk levels, including those related to the natural environment. Taking into consideration the key risk factors described in the Group's financial statements, risks related to environmental issues are dealt with by the KGHM Group. Our internal procedures call for the preparation of corporate risk reports which are presented each quarter to the Management Board and Supervisory Board. This means that oversight of key risks (including those related to environmental issues) is the direct responsibility of the Management Board. This also includes broadly-defined climate risk – as indicated, this issue will be developed over the next two years within the framework of a Climate Policy to specifically include risks and goals in terms of reducing CO2 emissions by the Parent Company in Poland and eventually by the entire KGHM Group.

**C1.2**

**(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.**

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Operating Officer (COO)	<Not Applicable>	Other, please specify (Occupational health and safety and control of environmental risks)	<Not Applicable>	Please select

**C1.2a**

**(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).**

**C1.3**

**(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?**

	Provide incentives for the management of climate-related issues	Comment
Row 1	No, not currently but we plan to introduce them in the next two years	Under Section 5 of the Remuneration Policy of Members of the Management Board and Supervisory Board of KGHM, reducing environmental impact is one of the management goals on which the allocation of variable remuneration may be dependent (the relevant criteria for allocation is reduced emissions of specified substances / reduced emissions fees. The possibility of expanding this to include climate-specific targets is being discussed.

**C2. Risks and opportunities**

**C2.1**

**(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?**

Yes

**C2.1a**

**(C2.1a) How does your organization define short-, medium- and long-term time horizons?**

	From (years)	To (years)	Comment
Short-term	0	1	
Medium-term	1	10	
Long-term	10	30	

**C2.1b**

**(C2.1b) How does your organization define substantive financial or strategic impact on your business?**

The risk in various areas of the KGHM Polska Miedź SA Group's operations is identified, assessed and analyzed on an ongoing basis in the context of the possibility of its reduction. Risks may have various effects, thus, in order to ensure the widest possible recognition of a potential impact and limit the assessment subjectivity, the Impact assessment dimensions have been defined, incl.: Finances – determines the impact of effects of a particular risk with reference to the financial dimension through applying value ranges. Strategy – within this dimension the assessment of risk impact on the ability to implement strategic objectives is made. The risks are monitored by the Corporate Risk and Compliance Department, and in terms of financial risk additionally by the department of the General Treasury Director - Corporate Treasurer.

**C2.2**

**(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.**

**Value chain stage(s) covered**

Direct operations  
Upstream  
Downstream

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

Annually

**Time horizon(s) covered**

Short-term

**Description of process**

Definition of Context - The objective of the stage is to collect information necessary for the conduction of a cyclical process of corporate risk management and its continuous excellence, among others through update of the adopted approach and method of operation on the basis of know-how and experience of the participants of this process, results of monitoring, including internal and external audits, reviews and verifications. Definition of Context consist of three actions: specification of the external, internal and risk management context.

**Value chain stage(s) covered**

Direct operations  
Upstream  
Downstream

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

More than once a year

**Time horizon(s) covered**

Short-term

**Description of process**

Risk Identification and Assessment - The objective of the stage is to collect and order the knowledge on the risk present within the organization and those, the sources of which lie outside the organization, their assessment and developing a Risk Map on their basis. The final outcome of the stage is the selection of key risks. At this stage of the process, risks that may have impact on the achievement of objectives (strategic/business) both at the KGHM Capital Group level and at the level of KGHM Branches and KGHM Capital Group Companies are identified and assessed. The main objective of this stage is to develop a complete list of risks that may facilitate, inhibit, accelerate or delay the achievement of objectives. Risks are systematized into categories and subcategories in the form of a Risk Model, which is used by the KGHM Capital Group as a standardized risk taxonomy. After identification, the risks undergo assessment with the use of Risk Assessment Matrix. This stage of the process includes also the analysis in order to identify potential sources of risk and specify the possible financial and non-financial effects of their materialisation.

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**Value chain stage(s) covered**

Direct operations  
Upstream  
Downstream

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

More than once a year

**Time horizon(s) covered**

Short-term

**Description of process**

Analysis and Response to Risk - The aim of this stage is to deepen the knowledge and understanding of the nature of key risks selected at the previous stage. Cause and effect analyses and a in-depth description of risk handling methods are to allow undertaking decision on the maintenance or possible change of the current handling method. Directional decision is called the Response to risk. The change of the handling procedure requires the Adjustment Measures, i.e. the organizational, process, systemic and other changes, the aim of which is to reduce the level of the key negative risk or to increase the key positive risk, to be specified.

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**Value chain stage(s) covered**

Direct operations  
Upstream  
Downstream

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

More than once a year

**Time horizon(s) covered**

Short-term  
Medium-term  
Long-term

**Description of process**

Monitoring and communication - The aim of the monitoring and communication process is to ensure that the applied Risk Response Plan is effective (interim and periodic reports), new risks are identified, changes in the internal and external environment and their impact on the operation have been detected and the appropriate measures were taken in response to incidents. Effective, well-planned and appropriately implemented risk monitoring enables flexible and fast responses to changes taking place in the external and internal environment (e.g. escalation of risk, changes in the measures related to response to risk, or the risk assessment parameters, etc.). Effective risk monitoring involves also periodic reviews of Key Risk Indicators, completeness and timeliness of reporting the implementation status of Response to Risk (update of information on Adjustment Measures).

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**Value chain stage(s) covered**

Direct operations  
Upstream  
Downstream

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

Annually

**Time horizon(s) covered**

Medium-term

**Description of process**

Risk Identification and Assessment - Identified and assessed are the risks that may threaten the achievement of the main goal of a given strategic area and result in the lack of implementation of initiatives under individual operational objectives. Risks at the strategic level are decomposed into risks at the corporate level in accordance with the KGHM Corporate Risk Management Procedure and Methodology. Risk mitigation takes place at the corporate level, and the consolidated assessment of their vulnerability comes down to risk assessment at the strategic level.

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**C2.2a**

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**(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?**

	Relevance & inclusion	Please explain
Current regulation	Relevant, not included	Related to the other "relevant, always included" risk types
Emerging regulation	Relevant, always included	According to Risk Model (Corporate Risk Category: External)
Technology	Relevant, not included	Related to the other "relevant, always included" risk types
Legal	Relevant, always included	According to Risk Model (Corporate Risk Category: External)
Market	Relevant, always included	According to Risk Model (Corporate Risk Category: External, Voluntary, Internal)
Reputation	Relevant, always included	According to Risk Model (Corporate Risk Category: External, Internal)
Acute physical	Relevant, always included	According to Risk Model (Corporate Risk Category: Value Chain, External, Internal)
Chronic physical	Relevant, always included	According to Risk Model (Corporate Risk Category: Value Chain, External)

**C2.3**

**(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes

**C2.3a**

**(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.**

**Identifier**

Risk 1

**Where in the value chain does the risk driver occur?**

Upstream

**Risk type & Primary climate-related risk driver**

Legal	Exposure to litigation
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**Primary potential financial impact**

Increased capital expenditures

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

The risk of non-compliance, which might result in sanctions, legal disputes and claims in respect of failure to avoid or reduce the adverse impact on climate or to adapt to climate change. The risk involved in the increasing legal requirements regarding climate, potential wrong interpretation of new laws and regulations or non-compliance with legal requirements.

**Time horizon**

Medium-term

**Likelihood**

Please select

**Magnitude of impact**

Please select

**Are you able to provide a potential financial impact figure?**

Please select

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

**Cost of response to risk**

**Description of response and explanation of cost calculation**

As part of the Corporate Risk Management process in the KGHM Group, each identified risk is assessed in terms of impact on Laws and Regulations – assessment of the compliance of occurrences with the applicable laws, the necessity to participate in proceedings before public administration authorities responsible for supervision and regulation and potential sanctions resulting from such proceedings. In order to standardize the approach to ensuring compliance defined as observance of the requirements arising from the applicable legal (external and internal) regulations or voluntarily assumed legal obligations and standards (including ethical standards), the Management Board of KGHM Polska Miedz S.A. adopted the Compliance Management Policy in the KGHM Polska Miedz S.A. Group and the Compliance Management Procedure and Methodology in KGHM Polska Miedz S.A. in 2020. A consistent compliance system in the KGHM Polska Miedz S.A. Group is an element of effective management as part of corporate governance through e.g. a more efficient response and readiness for regulatory changes, care for reputation and ethical culture building in the organization as well as awareness raising and enhancement of the sense of responsibility for compliance among employees.

**Comment**

The Enterprise Risk Management Policy describes our systematic approach to risks identification, analysis, thorough risk treatment and monitoring (threats and

opportunities). This comprehensive risk management framework is aligned with our growth strategy, efforts in operational effectiveness improvement and sustainable and corporate responsible business implementation. The Enterprise Risk Management Policy is available on the KGHM website (<https://kgmh.com/en/investors/risk-management/risk-management-process>). More details on corporate risk management process can be found 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 ( 12. RISK MANAGEMENT IN THE GROUP ).

**Identifier**

Risk 2

**Where in the value chain does the risk driver occur?**

Upstream

**Risk type & Primary climate-related risk driver**

Chronic physical	Changes in precipitation patterns and extreme variability in weather patterns
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**Primary potential financial impact**

Decreased revenues due to reduced production capacity

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Certain events, in particular ones related to the long-term climate change, such as temperature change and limited availability of water, might disrupt the continuity of the Core Production Business and lead to changes in the conditions of pursuing business activities (long-term physical risk). The KGHM Group is exposed to climate risk related to the adverse impact on the enterprise. The risk exposure is associated with factors arising from certain events, in particular ones related to the long-term climate change leading e.g. to heat waves and limited availability of water, which may disrupt the value chain, continuity of the Core Production Business. The risk is associated with the changes in the conditions of running business activity due to environmental or climate changes. The KGHM Group is exposed to the risk of unavailability of power sources necessary for its operations. This risk entails, among others, the possibility of power supply being suspended as a result of prolonged droughts. Global climate changes may result in, among other things, lower rainfall, resulting in temporary reduction of water levels in rivers, which in turn may restrict the operations of power plants supplying KGHM if cooling water is not available or if the permitted temperature of water released back into rivers is exceeded.

**Time horizon**

Long-term

**Likelihood**

Please select

**Magnitude of impact**

Please select

**Are you able to provide a potential financial impact figure?**

Please select

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

**Cost of response to risk**

**Description of response and explanation of cost calculation**

Systematic limitation of energy consumption under the implemented, PN-EN ISO50001:2018-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. Commencement of work to prepare 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 part applicable to the Metals and Mining sector. It will also include medium-term (2030) and long-term (2050) quantitative goals aimed at minimizing activities in regions exposed to a long-term or severe physical risk.

**Comment**

**Identifier**

Risk 3

**Where in the value chain does the risk driver occur?**

Upstream

**Risk type & Primary climate-related risk driver**

Acute physical	Other, please specify (Risks related to the environment, natural hazards and force majeure from the short-term perspective.)
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**Primary potential financial impact**

Decreased revenues due to reduced production capacity

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Certain events, in particular ones related to weather, such as storms, floods, fires, gales, which might destroy the infrastructure and disrupt the supply chain (severe physical risk). A consequence of the increased frequency of extreme weather events can be an infrastructure breakdown disrupting the Core Production Business. KGHM

Polska Miedź S.A. is exposed to a specific 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. A possible disruption of the supply chain and logistics as a result of extreme weather events onshore and offshore.

**Time horizon**

Short-term

**Likelihood**

Please select

**Magnitude of impact**

Please select

**Are you able to provide a potential financial impact figure?**

Please select

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

**Cost of response to risk**

**Description of response and explanation of cost calculation**

Preventive management of key infrastructure elements affecting production continuity. Appointment of a task and expert teams in the area of counteracting infrastructure breakdowns. 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. Ongoing monitoring of the microclimate parameters and introduction of remote control and visualization and surveillance systems (CCTV cameras) in workplaces with particularly adverse climate parameters. Reduction of external and internal losses and relative humidity and increase in airing intensity. The use of shortened working time. Constant contact with suppliers is maintained to enable a quick reaction to delays through the supplier and supply direction diversification strategy employed in the KGHM Group and application of alternative solutions, e.g. substitutes, changes in production/assembly schedules.

**Comment**

**Identifier**

Risk 4

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Emerging regulation	Other, please specify (Risk related to political factors. )
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**Primary potential financial impact**

Increased capital expenditures

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

The KGHM Group is exposed to the risk of non-compliance with the generally applicable legal requirements, internal corporate regulations and voluntarily adopted legal obligations and standards. The risk of interruptions to operations or the need to reorganize work due to new legislation may have a substantial impact on the operations of the KGHM Group (such as the risk of transitioning to the low-carbon economy, circular economy).

**Time horizon**

Medium-term

**Likelihood**

Please select

**Magnitude of impact**

Please select

**Are you able to provide a potential financial impact figure?**

Please select

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

**Cost of response to risk**

**Description of response and explanation of cost calculation**

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 organizations). Taking prophylactic actions aimed at adapting to

organizational, infrastructural and technological changes.

**Comment**

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**Identifier**

Risk 5

**Where in the value chain does the risk driver occur?**

Downstream

**Risk type & Primary climate-related risk driver**

Market	Changing customer behavior
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**Primary potential financial impact**

Decreased revenues due to reduced demand for products and services

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

The risk related to the increased expectations and awareness of stakeholders regarding climate and environmental issues, which may lead to an increase in operating and investment costs of the activity, and in extreme cases to its limitation. The changing requirements of consumers are also connected with paying attention to the method of production, and not only to the quality and price of the final good.

**Time horizon**

Medium-term

**Likelihood**

Please select

**Magnitude of impact**

Please select

**Are you able to provide a potential financial impact figure?**

Please select

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

**Cost of response to risk**

**Description of response and explanation of cost calculation**

Care and due diligence in identification of expectations and requirements of the external stakeholders concerning the climate and environmental issues and consideration given to these issues in the long-term, strategic perspective. Establishment of trade and business relationships with entities that declare care about environmental protection and comply with the regulations applicable in this regard.

**Comment**

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**Identifier**

Risk 6

**Where in the value chain does the risk driver occur?**

Downstream

**Risk type & Primary climate-related risk driver**

Reputation	Increased stakeholder concern or negative stakeholder feedback
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**Primary potential financial impact**

Decreased revenues due to reduced demand for products and services

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

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 organization 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 KGHM Group. In extreme cases, the materialization of this risk may lead to the blocking of development plans.

**Time horizon**

Medium-term

**Likelihood**

Please select

**Magnitude of impact**

Please select



**Are you able to provide a potential financial impact figure?**

Please select

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

**Cost of response to risk**

**Description of response and explanation of cost calculation**

Care and due diligence in identification of expectations and requirements of the external stakeholders concerning the climate and environmental issues. Establishment of trade and business relationships with entities that declare care about environmental protection and comply with the regulations applicable in this regard.

**Comment**

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C2.4

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**(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

C2.4a

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**(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.**

**Identifier**

Opp1

**Where in the value chain does the opportunity occur?**

Downstream

**Opportunity type**

Markets

**Primary climate-related opportunity driver**

Other, please specify (Shift in consumer preferences)

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

**Company-specific description**

The opportunity coming from increased demand for copper arising from the necessity to supply it to meet the needs of the low-carbon economy as a result of a higher level of electrification (increased copper consumption for purposes related to manufacturing components for electrical vehicles and development of electromobility). A stable growth of the global demand for copper is expected until 2030. The forecast growth will be an effect of, among others, the dynamically increasing demand from industries associated with renewable energy sources.

**Time horizon**

Medium-term

**Likelihood**

Please select

**Magnitude of impact**

Please select

**Are you able to provide a potential financial impact figure?**

Please select

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

**Cost to realize opportunity**

**Strategy to realize opportunity and explanation of cost calculation**

Care and due diligence in identification of expectations and requirements of the external stakeholders concerning the climate and environmental issues and consideration given to these issues in the long-term, strategic perspective. Establishment of trade and business relationships with entities that declare care about environmental protection and comply with the regulations applicable in this regard.

**Comment**

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**Identifier**

Opp2

**Where in the value chain does the opportunity occur?**

Upstream

**Opportunity type**

Energy source

**Primary climate-related opportunity driver**

Use of lower-emission sources of energy

**Primary potential financial impact**

Returns on investment in low-emission technology

**Company-specific description**

The opportunity coming from investments in our own renewable energy sources, which result in reducing production costs and ensuring continuity of operation with the simultaneous reduction of greenhouse gases (photovoltaics / wind farms).

**Time horizon**

Long-term

**Likelihood**

Please select

**Magnitude of impact**

Please select

**Are you able to provide a potential financial impact figure?**

Please select

**Potential financial impact figure (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – minimum (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – maximum (currency)**

&lt;Not Applicable&gt;

**Explanation of financial impact figure****Cost to realize opportunity****Strategy to realize opportunity and explanation of cost calculation**

Systematic limitation of energy consumption under the implemented, PN-EN ISO50001:2018-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. The KGHM Group Strategy takes into account the global trends that define the environmental challenges. Efficient risk management system encompassing also climate risk management allowing for risk categorization, identification, assessment and management as well as plans for its mitigation (also at the long-term, strategic level).

**Comment****Identifier**

Opp3

**Where in the value chain does the opportunity occur?**

Downstream

**Opportunity type**

Resilience

**Primary climate-related opportunity driver**

Other, please specify (Use of recycling)

**Primary potential financial impact**

Reduced direct costs

**Company-specific description**

The opportunity coming from increased consumption and capability to process a volume of copper scrap and copper-bearing materials by KGHM's smelters and refineries, which results in improved efficiency of waste management in global terms in the context of resource use and longer copper life cycle – a change in the customer's and the Regulator's approach in favor of circular economy and low-carbon economy.

**Time horizon**

Medium-term

**Likelihood**

Please select

**Magnitude of impact**

Please select

**Are you able to provide a potential financial impact figure?**

Please select

**Potential financial impact figure (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – minimum (currency)**

&lt;Not Applicable&gt;

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

**Cost to realize opportunity**

**Strategy to realize opportunity and explanation of cost calculation**

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 organizations). Taking prophylactic actions aimed at adapting to organizational, infrastructural and technological changes.

**Comment**

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**Identifier**

Opp4

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Markets

**Primary climate-related opportunity driver**

Other, please specify (Use of lower-emission sources of energy)

**Primary potential financial impact**

Increased revenues resulting from increased production capacity

**Company-specific description**

The opportunity (positive risk) arising from investments in renewable energy, which support combating greenhouse gas emissions – an image- and market-related opportunity with respect to the industry, i.e. the image of a company caring for the natural environment and striving for limiting the global climate change (green energy / green copper / green KGHM); a change in the customer's approach but also legislative changes in favor of the KGHM Polska Miedź S.A.'s attitude.

**Time horizon**

Medium-term

**Likelihood**

Please select

**Magnitude of impact**

Please select

**Are you able to provide a potential financial impact figure?**

Please select

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

**Cost to realize opportunity**

**Strategy to realize opportunity and explanation of cost calculation**

Care and due diligence in identification of expectations and requirements of the external stakeholders concerning the climate and environmental issues. Establishment of trade and business relationships with entities that declare care about environmental protection and comply with the regulations applicable in this regard.

**Comment**

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### C3. Business Strategy

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#### C3.1

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**(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?**

Yes

#### C3.1b

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**(C3.1b) Does your organization intend to publish a low-carbon transition plan in the next two years?**

	Intention to publish a low-carbon transition plan	Intention to include the transition plan as a scheduled resolution item at Annual General Meetings (AGMs)	Comment
Row 1	Yes, in the next two years	No, we do not intend to include it as a scheduled AGM resolution item	The Statutes of KGHM Polska Miedz S.A. do not require acceptance by the General Meeting. Such development plans are prepared by the Management Board, and presented for approval by the Supervisory Board. Although currently we do not have a transition plan per se, we have announced a variety of programs aimed at transitioning to a lower-emission model of operation, and these various plans are being constantly developed and expanded. Moreover, the new Climate Policy which we expect to announce by the end of this year will include details of the transition plan.

**C3.2**

**(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?**

Yes, qualitative

**C3.2a**

**(C3.2a) Provide details of your organization's use of climate-related scenario analysis.**

Climate-related scenarios and models applied	Details
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**C3.3**

**(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.**

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Evaluation in progress	KGHM is currently working on its climate policy. It is expected to be ready this year. KGHM is also updating its business strategy.
Supply chain and/or value chain	Evaluation in progress	KGHM is currently working on its climate policy. It is expected to be ready this year. KGHM is also updating its business strategy.
Investment in R&D	Evaluation in progress	KGHM is currently working on its climate policy. It is expected to be ready this year. KGHM is also updating its business strategy.
Operations	Evaluation in progress	KGHM is currently working on its climate policy. It is expected to be ready this year. KGHM is also updating its business strategy.

**C3.4**

**(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.**

	Financial planning elements that have been influenced	Description of influence
Row 1	Direct costs Capital expenditures Access to capital Assets Liabilities	Risks and opportunities related to climate change have impacted financial planning as follows: - Direct costs – included were costs of CO2 related charges; - CAPEX – implemented were conformatory investments with respect to environmental protection; - Access to capital – the possibility of access to new sources of financing ("green bonds") was obtained as part of the planned climate policy. All of the factors mentioned above indirectly influenced the forecasted level of assets and liabilities

**C3.4a**

**(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).**

**C4. Targets and performance**

**C4.1**

**(C4.1) Did you have an emissions target that was active in the reporting year?**

No target

C4.1c

(C4.1c) Explain why you did not have an emissions target, and forecast how your emissions will change over the next five years.

	Primary reason	Five-year forecast	Please explain
Row 1	We are planning to introduce a target in the next two years		

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 2 (location-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

Other, please specify

C5.2a

**(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

Direct emissions of carbon dioxide were determined in a manner consistent with Commission Regulation (EU) No. 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council (OJ EU. L. of 2012 No. 181 as amended).

Heat supplied from outside to KGHM divisions in 2019, for the purposes of production installations, came from the E-1 Lubin, E-2 Polkowice, E-3 Głogów and E-4 Legnica power plants of Energetyka and from the Gas-Steam Blocks in Polkowice and Głogów. In 2019 Zakłady Górnicze Lubin bought part of the used heat from WPEC Legnica S.A. - However, this is heat generated by the E-1 Lubin heat and power plant of Energetyka company, distributed only through the WPEC network, because the Central Heat Plant in Lubin, owned by WPEC in Legnica, was not exploited in 2019. The indices of unit CO2 emission accompanying the generation of heat energy in individual heat and power plants of ENERGETYKA company were determined on the basis of data on inventoried CO2 emissions and net amounts of electricity and heat generated.

Most of the electricity consumed was purchased centrally, through the Head Office of KGHM (83.8%). Small amounts of electricity (approx. 3%) used to power peripheral facilities were purchased by branches directly from various suppliers. About 13.1% of the electricity consumed came from the Gas-Steam Blocks. The emission factors for energy purchased from individual suppliers and the weighted average factor for energy purchased centrally by the Procurement Department of KGHM, excluding energy supplied by Energetyka sp. z o.o., are presented in the relevant table.

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## C6. Emissions data

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### C6.1

**(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?**

**Reporting year**

**Gross global Scope 1 emissions (metric tons CO2e)**

1413129.312

**Start date**

January 1 2020

**End date**

December 31 2020

**Comment**

Data for KGHM Polska Miedź S.A.

**Past year 1**

**Gross global Scope 1 emissions (metric tons CO2e)**

1527183.376

**Start date**

January 1 2019

**End date**

December 31 2019

**Comment**

Data for KGHM Polska Miedź S.A.

**Past year 2**

**Gross global Scope 1 emissions (metric tons CO2e)**

1334506.622

**Start date**

January 1 2018

**End date**

December 31 2018

**Comment**

Data for KGHM Polska Miedź S.A.

**Past year 3**

**Gross global Scope 1 emissions (metric tons CO2e)**

1296175.832

**Start date**

January 1 2017

**End date**

December 31 2017

**Comment**

Data for KGHM Polska Miedź S.A.

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### C6.2

**(C6.2) Describe your organization's approach to reporting Scope 2 emissions.**

**Row 1**

**Scope 2, location-based**

We are reporting a Scope 2, location-based figure

**Scope 2, market-based**

**Comment**

Data for KGHM Polska Miedz S.A.

**C6.3**

---

**(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?**

**Reporting year**

**Scope 2, location-based**

1890292.225

**Scope 2, market-based (if applicable)**

<Not Applicable>

**Start date**

January 1 2020

**End date**

December 31 2020

**Comment**

Data for KGHM Polska Miedz S.A.

**Past year 1**

**Scope 2, location-based**

1947113.327

**Scope 2, market-based (if applicable)**

<Not Applicable>

**Start date**

January 1 2019

**End date**

December 31 2019

**Comment**

Data for KGHM Polska Miedz S.A.

**Past year 2**

**Scope 2, location-based**

1985510.955

**Scope 2, market-based (if applicable)**

<Not Applicable>

**Start date**

January 1 2018

**End date**

December 31 2018

**Comment**

Data for KGHM Polska Miedz S.A.

**Past year 3**

**Scope 2, location-based**

2019721.178

**Scope 2, market-based (if applicable)**

<Not Applicable>

**Start date**

January 1 2017

**End date**

December 31 2017

**Comment**

Data for KGHM Polska Miedz S.A.

**C6.4**

---

**(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?**

No

## C6.5

---

**(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.**

### **Purchased goods and services**

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

870697

**Emissions calculation methodology**

Calculation based on Greenhouse Gas Protocol Scope 3 Standard, using specific regional emission factors for primary raw materials from LCA databases, and hybrid physical/financial model for other materials.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

**Please explain**

### **Capital goods**

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

94690

**Emissions calculation methodology**

Calculation based on Greenhouse Gas Protocol Scope 3 Standard, using monetary-based emission factors.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

**Please explain**

### **Fuel-and-energy-related activities (not included in Scope 1 or 2)**

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

58543.005

**Emissions calculation methodology**

Calculation based on Greenhouse Gas Protocol Scope 3 Standard, using physical emission factors.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

**Please explain**

### **Upstream transportation and distribution**

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

43276.412

**Emissions calculation methodology**

Calculation based on Greenhouse Gas Protocol Scope 3 Standard, using physical emission factors.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

**Please explain**

### **Waste generated in operations**

**Evaluation status**

Not relevant, calculated

**Metric tonnes CO2e**

**Emissions calculation methodology**

Calculation based on Greenhouse Gas Protocol Scope 3 Standard, using physical emission factors.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

**Please explain**



**Business travel****Evaluation status**

Not relevant, calculated

**Metric tonnes CO2e**

289.7

**Emissions calculation methodology**

Calculation based on Greenhouse Gas Protocol Scope 3 Standard. Using physical emission factors and reported data from service providers.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners****Please explain****Employee commuting****Evaluation status**

Not relevant, calculated

**Metric tonnes CO2e****Emissions calculation methodology**

Calculation based on Greenhouse Gas Protocol Scope 3 Standard. Using physical emission factors and average distances and modal splits.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners****Please explain****Upstream leased assets****Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

There are no significant upstream leased assets to be accounted for.

**Downstream transportation and distribution****Evaluation status**

Not evaluated

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain****Processing of sold products****Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

KGHM is a producer of base materials. Due to the nature of our products and the innumerable variants of processing and end-of-life treatment, it is impossible to make valid assumptions about the related emissions. It is therefore regarded as not relevant based on the criteria established by the Greenhouse Gas Protocol Standard.

## Use of sold products

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

KGHM is a producer of base materials that do not cause any direct use phase emissions.

## End of life treatment of sold products

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

KGHM is a producer of base materials. Due to the nature of our products and the innumerable variants of processing and end-of-life treatment, it is impossible to make valid assumptions about the related emissions. It is therefore regarded as not relevant based on the criteria established by the Greenhouse Gas Protocol Standard.

## Downstream leased assets

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

There are no significant downstream leased assets to be accounted for.

## Franchises

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

There are no franchises to be accounted for.

## Investments

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

There are no significant investments that are not already covered in the other scopes and categories.

**Other (upstream)**

**Evaluation status**

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

**Other (downstream)**

**Evaluation status**

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

<Not Applicable>

**Please explain**

**C6.7**

---

**(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?**

No

**C6.10**

---

**(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**

**Intensity figure**

0.000764858

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)**

3303422

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

4319000000

**Scope 2 figure used**

Location-based

**% change from previous year**

9.5

**Direction of change**

Decreased

**Reason for change**

Reduction of total emission.

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**C7. Emissions breakdowns**

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**C7.1**

---

**(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?**

Yes

**C7.1a**

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**(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).**

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	1384629.5	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	57	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	26208.1	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	1586.38	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	531.02	IPCC Fourth Assessment Report (AR4 - 100 year)

## C7.2

**(C7.2) Break down your total gross global Scope 1 emissions by country/region.**

Country/Region	Scope 1 emissions (metric tons CO2e)
Poland	1413129

## C7.3

**(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

- By business division
- By facility
- By activity

### C7.3a

**(C7.3a) Break down your total gross global Scope 1 emissions by business division.**

Business division	Scope 1 emissions (metric ton CO2e)
KGHM Polska Miedz S.A.	1413129.312

### C7.3b

**(C7.3b) Break down your total gross global Scope 1 emissions by business facility.**

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Rudna Mine Division	65869.694	51.51646	16.14642
Polkowice-Sieroszowice Mine Division	49431.586	51.554139	16.158548
Concentrators Division	33641.8	51.487868	16.065927
Tailings Division	1862.814	51.511461	16.24489
Legnica Smelter and Refinery Division	36570.838	51.189243	16.121198
Glogów Smelter and Refinery Division	932177.51	51.688651	15.978235
Cedynia Wire Rod Division	16189.716	51.573574	16.346828
Gas-Steam Blocks	251445.598	51.408879	16.196755

### C7.3c

**(C7.3c) Break down your total gross global Scope 1 emissions by business activity.**

Activity	Scope 1 emissions (metric tons CO2e)
Mining	176745.65
Metallurgy	984938.064
Energy Production	251445.598

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities		<Not Applicable>	
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

## C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Poland	189292.225			

## C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

- By business division
- By facility
- By activity

### C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
KGHM Polska Miedz S.A.	189292.225	

### C7.6b

(C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Rudna Mine Division	303871.606	
Polkowice-Sieroszowice Mine Division	241411.586	
Lubin Mine Division	140947.45	
Concentrators Division	382622.573	
Tailings Division	66562.997	
Legnica Smelter and Refinery Division	320509.545	
Glogów Smelter and Refinery Division	414725.206	
Cedynia Wire Rod Division	15082.858	
Gas-Steam Blocks	4558.926	

### C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Mining	1135415.69	
Metallurgy	750317.609	
Energy Production	4558.926	

**(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization’s total gross global Scope 2 emissions by sector production activity in metric tons CO2e.**

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities			
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

**C7.9**

**(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?**

Decreased

**C7.9a**

**(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.**

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption		<Not Applicable>		
Other emissions reduction activities		<Not Applicable>		
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output		<Not Applicable>		
Change in methodology		<Not Applicable>		
Change in boundary		<Not Applicable>		
Change in physical operating conditions		<Not Applicable>		
Unidentified	170876	Decreased	4.9	
Other		<Not Applicable>		

**C7.9b**

**(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?**

Location-based

**C8. Energy**

**C8.1**

**(C8.1) What percentage of your total operational spend in the reporting year was on energy?**

More than 5% but less than or equal to 10%

**C8.2**

**(C8.2) Select which energy-related activities your organization has undertaken.**

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

**C8.2a**

**(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.**

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	2578089	2578089
Consumption of purchased or acquired electricity	<Not Applicable>	0	2328528.78	2328528.78
Consumption of purchased or acquired heat	<Not Applicable>	0	121507.5	121507.5
Consumption of purchased or acquired steam	<Not Applicable>	0	154107.22	154107.22
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>		<Not Applicable>	0
Total energy consumption	<Not Applicable>		5182232.5	5182232.5

**C-MM8.2a**

**(C-MM8.2a) Report your organization's energy consumption totals (excluding feedstocks) for metals and mining production activities in MWh.**

	Heating value	Total MWh
Consumption of fuel (excluding feedstocks)	LHV (lower heating value)	2578089
Consumption of purchased or acquired electricity	<Not Applicable>	2328528.77
Consumption of purchased or acquired heat	<Not Applicable>	121507.5
Consumption of purchased or acquired steam	<Not Applicable>	154107.2
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	
Total energy consumption	<Not Applicable>	5182232.5

**C8.2b**

**(C8.2b) Select the applications of your organization's consumption of fuel.**

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Please select
Consumption of fuel for the generation of heat	Please select
Consumption of fuel for the generation of steam	Please select
Consumption of fuel for the generation of cooling	Please select
Consumption of fuel for co-generation or tri-generation	Please select

**C8.2c**

**(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

**C8.2d**

**(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.**

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	567597.13	567597.14		
Heat	409539.17	15427.77		
Steam	540980.28	522088.89		
Cooling				

C-MM8.2d

(C-MM8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed for metals and mining production activities.

	Total gross generation (MWh) inside metals and mining sector boundary	Generation that is consumed (MWh) inside metals and mining sector boundary
Electricity	567597.14	567597.14
Heat	409539.17	15427.78
Steam	540980.28	522088.89
Cooling		

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C-MM9.3a

(C-MM9.3a) Provide details on the commodities relevant to the mining production activities of your organization.

C-MM9.3b

(C-MM9.3b) Provide details on the commodities relevant to the metals production activities of your organization.

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Please select	

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

C10.1a



(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Not applicable

**Attach the statement**

**Page/ section reference**

**Relevant standard**

European Union Emissions Trading System (EU ETS)

**Proportion of reported emissions verified (%)**

86

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## C10.2

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(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, but we are actively considering verifying within the next two years

## C11. Carbon pricing

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### C11.1

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(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

### C11.1a

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(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

EU ETS

### C11.1b

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(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS

% of Scope 2 emissions covered by the ETS

Period start date

Period end date

Allowances allocated

Allowances purchased

Verified Scope 1 emissions in metric tons CO<sub>2</sub>e

Verified Scope 2 emissions in metric tons CO<sub>2</sub>e

Details of ownership

Comment

### C11.1d

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(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

## C11.2

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(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

C11.3

(C11.3) Does your organization use an internal price on carbon?

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers

Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

We are currently preparing a Climate Policy which will address many of the issues which have not been covered in this year's response (such as CO2 reduction goals, senior management responsibilities, supply chain actions etc.). We expect to announce this policy by the end of this year (2021) and so will be able to substantially upgrade the amount of information provided to CDP in future.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Director, Investor Relations	Other, please specify

Submit your response

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**In which language are you submitting your response?**

English

**Please confirm how your response should be handled by CDP**

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors Customers	Public

**Please confirm below**

I have read and accept the applicable Terms