

TACKLING CLIMATE CHANGE

CLIMATE RISK AND GHG EMISSION MANAGEMENT

Climate change governance

GRI 103-2

The metallurgical and mining industries are energy intensive and responsible for a large amount of greenhouse gas emissions. EVRAZ sees reducing the negative impact on climate change as an essential task and takes various measures to mitigate the adverse

consequences. The Group believes that businesses should pay more attention to climate issues.

The Board of Directors deals with climate change issues and controls the climate change risk management process. Climate-related issues are also considered by the Sustainability Committee of the Board of Directors.

The key achievement of the reporting year pertaining to increasing energy efficiency and managing climate-related risks is the establishment of the Sustainability Management Committee. Its function is to consider issues related to sustainable development, including climate agenda and carbon footprint reduction, setting GHG emissions targets, and management of climate risks.

Climate-related responsibilities at EVRAZ

RESPONSIBLE BODY

CLIMATE-RELATED RESPONSIBILITIES

Board of Directors (BoD)

- Exercises informed and strategic oversight over managing climate risks as part of the Group's risk landscape and set the climate risk appetite aligned with the Group's climate change strategy
- Navigates the climate change challenges and sets targets for governance, strategy, risk management, and environmental matters
- Meets regularly to further the Group's strategic objectives, establish priorities, set policy and review performance for various areas, including ESG and climate

Sustainability Committee (previously HSE Committee)

- Oversees group-level policies, processes and strategies designed to manage risks and opportunities related to health, safety, the environment, socio-economic issues, the supply chain and climate change
- Supports the BoD in identifying the required climate-related policies and initiatives, supervising their implementation, as well as determining the acceptable level of risk associated with climate change
- Meets on a quarterly basis and whenever required

Audit Committee

- Charged with oversight of the Internal Audit Directorate, risk management practices, including climate risks, and monitoring implementation of ESG programmes to reflect latest best practices
- With its terms of reference updated in 2021 to emphasise effective and appropriate co-ordination with the Sustainability Committee, the Audit Committee assists the BoD with reviewing governance, risk and control environment in the Company, including the matters of climate

RESPONSIBLE BODY	CLIMATE-RELATED RESPONSIBILITIES
Chief Executive Officer (CEO)	<ul style="list-style-type: none"> • Has an ultimate mandate over addressing climate change risks and challenges for the Group and keeps track of the risk management activities and sustainability programmes • Oversees development of the pathway to net-zero carbon and monitors performance regarding climate-related targets on the Group level, which are reported to the Sustainability Committee and the BoD after the CEO's approval
Sustainability Management Committee	<ul style="list-style-type: none"> • Oversees various climate change matters, including decarbonisation (with analysing available technology and its possible application), specific asset-oriented measures aimed at helping enterprises to achieve emissions quotas, and analysis of automated emissions accounting systems • Includes the CEO, the Vice Presidents for Corporate Strategy and Performance Management, HSE, Technologies Development, as well as representatives of the Risk Management Group. Heads of specific departments and production divisions may be invited to report key findings and insights that can factor in the committee's strategy • Monitors the Company's sustainability performance and reports its findings to the CEO • Meets at least once a month
Vice President, Corporate Strategy and Performance Management (CSPM)	<ul style="list-style-type: none"> • As the chair of the Sustainability Management Committee is charged with keeping its agenda in close alignment with the Group's strategy, including sustainability and climate issues, measuring and managing performance
Vice President, Health, Safety and Environment (HSE)	<ul style="list-style-type: none"> • Supervises health, safety and environmental issues
Vice President, Technologies Development	<ul style="list-style-type: none"> • Navigates the technology side of the net-zero transition
Director, Energy and Climate Management	<ul style="list-style-type: none"> • Represents the Company's interests in the field of climate regulation and is responsible for: <ul style="list-style-type: none"> • Participating in working groups under governmental bodies, industry associations, committees and commissions • Monitoring climate regulation and decarbonisation initiatives • Articulating the Company's position concerning climate-related issues • Implementing decarbonisation programmes and projects, developing an energy management system and overall eco-efficiency of the Group's production
Risk Management Group	<ul style="list-style-type: none"> • Consolidates all results and plays a key role in reviewing, assessing and monitoring climate-related risks and mitigation measures within the Group
HSE function and safety representatives for all EVRAZ operations	<ul style="list-style-type: none"> • Put the climate initiatives and programmes into practice making them part of the Company's day-to-day activities and monitor them at the operational level in compliance with the Company's general strategy and the Climate Action Plan • Report to the division directors and the management

Climate-related risks and opportunities

GRI 201-2

The Group's management gives a high priority to climate risks. The Group determines relevant physical and transition

climate-related risks according to the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). EVRAZ annually evaluates climate-related risks to make the business more sustainable through the development and implementation of solutions aimed

at mitigating material risks. The assessment of climate risk materiality is based on the Group's approach, which includes a five-point scale of the impact and a five-point scale of the likelihood of the risks. To identify significant climate risks, the Group uses three scenarios:



EVRAZ considers the Paris-compliant scenario (corresponds to 2°C increase in the global average temperatures) as the primary scenario for assessing risk materiality and strategic planning. The Group identifies climate risks within short-, medium-, and long-term time horizons:



Transition risks are the most relevant for EVRAZ for the short- and medium-term time horizons. Regulatory risks were identified as the most critical ones for the short-term – they have very high or high materiality for all the scenarios used and a growing trend of risk exposure for the Group.

Climate-related risks

RISK	DESCRIPTION	KEY RISK MANAGEMENT INITIATIVES
Regulatory risks	Risks related to pricing of GHG emissions, implementing carbon taxes, introduction of national carbon regulation, changes in regulations to meet the Paris Agreement objectives, enhanced emissions-reporting obligations. These risks are constantly increasing, and the Group gives a high priority to them. Risks are relevant for the short-term horizon.	<ul style="list-style-type: none"> Scope 1, 2, 3 GHG emissions assessment Monitoring regulatory changes Setting internal carbon prices Disclosing climate-related information according to the TCFD requirements Decarbonisation initiatives and GHG reduction
Reputational risks	Rising expectations of investors from the Group can make EVRAZ endeavor to comply with them. Investors are interested in information disclosure about climate-related risks mitigation activities of EVRAZ and amounts of GHG emissions of the Group. Reputational risks are relevant for the medium-term horizon.	<ul style="list-style-type: none"> Interacting with investors Disclosing climate-related information
Technology risks	Risks related to the necessity to reduce carbon footprint of production to comply with requirements of consumers. The risks are relevant for the medium-term horizon.	<ul style="list-style-type: none"> Monitoring the new technologies and trends in this area Investing in R&D projects Implementing new technologies to reduce GHG emissions
Market risks	The risk is linked to the tendency of technical upgrades in the direction of less carbon-intensive products; a decline in raw materials demand for production processes; an increase in electricity and thermal energy costs in Russia. The risks are relevant for the medium-term horizon.	<ul style="list-style-type: none"> Monitoring the new market opportunities Seeking to adopt novel technologies to implement decarbonization and resource- and energy-efficiency projects
Physical risks	Physical risks include weather changes and natural disasters, which can lead to equipment breakdowns. Risks are relevant for the long-term horizon and have low materiality for the base climate change scenario.	<ul style="list-style-type: none"> Monitoring the condition of facilities and equipment Considering physical risks in investment process

Read more about climate-related risks and opportunities in the Annual Report & Accounts 2021 on pages 92–96.

The Group has plans for 2022 to conduct a quantitative risk assessment that will provide a better understanding of the financial impact of climate-related risks on EVRAZ's financial stability and performance.

In addition to climate risks, the Group analyses the opportunities emerging because of climate change. EVRAZ considers the following directions as the most relevant opportunities:

In the reporting year, EVRAZ improved its CDP rating (Carbon Disclosure Project) to C by increasing information disclosure quality and improving climate-related risk assessment.

Improving resource efficiency by enhanced use of scrap metal and secondary energy sources, introduction of closed-loop water systems.

Changes in energy sources by transitioning to less carbon intensive and more efficient energy sources, increasing of renewable energy in EVRAZ' energy mix.

Improving resilience by using scenario analyses, assessing climate-related risks, participating in partnership programmes for the development of low-carbon solutions.

Identifying opportunities in new markets and new products related to the low-carbon economy transition and climate change adaptation and mitigation.

EVRAZ seeks to fulfil these opportunities and takes them into account while developing the decarbonisation pathway.

Decarbonisation pathway

SASB EM-MM-110a.2

In 2021, EVRAZ updated its decarbonisation target in keeping greenhouse gas emissions at the level not higher than 2 tonnes of CO₂ equivalent per ton of crude steel, which was initially set in 2017, due to achieving it well in advance. The new target is to reach a 20% reduction in specific GHG emissions

from steelmaking operations (Scope 1, 2) by 2030 compared to 2019. This value will allow the Group to make its contribution to the Paris Agreement (PA) pledges sounded by the parties.

EVRAZ is developing a decarbonisation roadmap, as well as a preliminary decarbonisation plan for EVRAZ ZSMK and EVRAZ NTMK to be achieved by 2060. The decarbonisation pathway will be integrated into daily operations

of EVRAZ to achieve the established emission reduction goals, to mitigate climate-related risks and avoid the negative consequences.

The Group identified the following key areas of focus for three periods by implementing activities that will help EVRAZ to supply steel with reduced CO₂ level:

2022–2025

- To monitor regulatory changes for the effective development of decarbonisation strategy
- To generate renewable energy on-site
- To consume low-carbon energy
- To improve energy efficiency by 18% by 2025 (vs the 2018 level)
- To use waste as coal and coke substitutes

2025–2035

- To examine the possibilities of equipment modernisation, increasing alternative energy usage, implementation of direct reduced iron (DRI) technology
- To increase use of scrap and electric arc furnaces (EAF)

AFTER 2035

- To use DRI if possible
- To use hydrogen in the Blast Furnace-Basic Oxygen Furnace (BF-BOF) route
- Smart carbon usage
- To use carbon capture, utilisation/storage technology (CCUS)

In short-term horizon, the Group gives priority to minimising greenhouse gas emissions through increasing energy efficiency. Specialists are preparing additional measures to modernise technological processes for reducing our carbon footprint in the medium- and long-term horizons. The most aspiring courses of action are technologies for capturing and storing carbon dioxide and the application of recycling blast furnace gases.


EVRAZ joins with customers and other large companies to pursue decarbonisation goals. For instance, the Group signed a memorandum with Russia's largest carrier for the production and use of rail products made of steel with a reduced carbon footprint. During the production of this steel, CO₂ emissions per ton of steel will be 75% lower compared to conventional route. According to the agreement, the delivery of new rail products may begin in 2023.

In collaboration with a major oil company, EVRAZ will evaluate the possibilities of using technologies for capturing and subsequent utilisation or storage of CO₂, as well as assess the potential of converting the Group's metallurgical plants from hydrocarbon fuel to methane-hydrogen mixtures. Hydrogen is considered as a promising source of energy.

Some projects in area of climate-related goals achievement have already been started. These initiatives are integrated into the business strategy and daily operations of EVRAZ:

- **Setting internal carbon prices.**
In 2021, the Group made a forecast of an average carbon price based on the prices in the EU to use this value in a decision-making process on internal investment projects as an additional criterion. It allows to look at all projects from different angle and plan budget and operations more accurately, considering all pros and cons. EVRAZ has plans to disclose information upon this metric in future disclosures

- **Energy efficiency.** The Group implements projects both in generation of own energy and in effective consumption of energy resources
- **Renewable energy use.** EVRAZ considers entering contracts with low-carbon suppliers (Nuclear power plants, Hydroelectric power plants (HPPs)), the development of its own generation using renewable energy sources (Solar/wind power plants, Micro HPPs). In addition, the possibility of using alternative fuel with a lower carbon footprint at the existing EVRAZ combined heat and power plants (CHPPs) is being studied. Currently, the Group's efforts are focused on concluding long-term contracts. In 2021, EVRAZ signed a contract with Rosatom for the supply of low-carbon energy from nuclear power station for EVRAZ NTMK and EVRAZ KGOK, making it possible to reduce CO₂ emissions from purchased electricity of these enterprises
- **Circularity of resources.** The Group is in search of ways to prolong the lifecycle of raw materials and recycle waste from the own production, for example, by involvement of carbon-containing industrial and domestic waste in the coking charge

[Read more about EVRAZ' decarbonisation pathway in Annual report & accounts 2021  on page 63–65]

GHG emission reduction performance

The Group discloses data about its greenhouse gas emissions in tCO₂e (tonnes of carbon dioxide equivalent). In 2021 there was an upgrade in the methodology regarding Global warming potentials used – they were taken from IPCC Fifth assessment report (AR5), instead of potentials from the Fourth assessment report (AR4). The quality of data used for calculations in the reporting year was improved in terms of excluding double-counting and uncertainties in material flows values.

EVRAZ uses methodology for Scope 1 and 2 GHG emissions calculation in compliance with the GHG Protocol Corporate Accounting and Reporting Standard requirements and the 2006 IPCC Guidelines for National greenhouse gas inventories.

Scope 2 GHG emissions were calculated using location-based method and emission factors specifically developed for the country, if available, or otherwise factors provided by UK Defra or given in National Inventory Reports. For enterprises in the Russian Federation the values of Scope 2 emissions factors were taken from official source of Russian energy exchange as the most relevant for this region than the information from the study report "Development of the electricity carbon emission factors for Russia" by EBRD & Lahmeyer, which was used before.

The Group has calculated Scope 3 GHG emissions for 2020. The calculations were performed using the methodology of Corporate Value Chain (Scope 3) Standard, GHG Protocol Technical Guidance for Calculating Scope 3 Emissions (Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard).

In 2021, the Group managed to reduce GHG emissions by 3.1% due to lower steel production at EVRAZ ZSMK, decrease of methane emissions at some coal mines, equipment modernisation and a successful energy efficiency policy. The steel segment (Steel segment and Steel, North America segment) accounted for the largest GHG emissions (68% of EVRAZ's total GHG emissions). Because of methane utilisation, low-carbon energy purchase, increase in energy efficiency, the Group reduced Scope 1&2 GHG emissions by 1.35 million tCO₂e in 2021 compared to 2020.

EVRAZ' GHG emissions structure, 2019–2021, million tCO₂e
GRI 305-5, GRI 305-1, 305-2, SASB EM-MM-110a.1

	2019	2020	2021
Direct (Scope 1) ¹	40.76	41.21	40.17
<i>Consisting of:</i>			
CO ₂	28.22	28.06	27.55
CH ₄	12.48	13.09	12.57
N ₂ O	0.06	0.05	0.06
PFC and HFC	0.00002	0.00012	0.00003
SF ₆	—	—	—
NF ₃	—	—	—
Indirect (Scope 2)	2.38	2.27	1.96
TOTAL GHG EMISSIONS	43.14	43.48	42.13

SASB EM-MM-110a.2

One of the prospective lines of work for the Group is the reduction of methane emissions released into the environment during coal mining operations. As part of its Environmental Strategy until 2030, EVRAZ has set a goal of utilising 75% of methane

emitted in the process of degassing by 2030 with 2019 as a baseline year. Due to the high flammability and explosiveness of methane the Group carries out the degassing for the purpose of safety. In this respect, EVRAZ strives to implement

promising new technologies to reduce emitted methane's impact on the climate and to make the mining process safer and more environmentally friendly.

CASE STUDY

METHANE UTILIZATION UNITS AT MINES

The Group started utilising methane at Alardinskaya and Erunakovskaya-VIII mines. The first four utilisation units were installed and put into operation in 2021. EVRAZ constructed the chain of degassing wells combined with utilisation units.

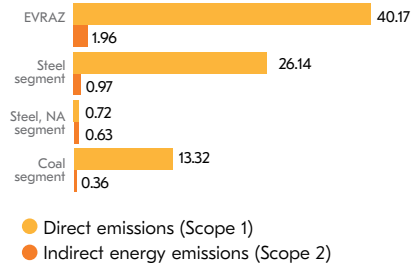
Each unit can utilise up to 50 cubic meters of methane-air mixture per minute. Currently unit's capacity is about 12 cubic meters of methane per minute. EVRAZ plans to increase the capacity in the future.

The Group intends to put into operation a gas boiler, which will use methane as fuel. The thermal energy will heat the air supplied to the mine workings. If it proves successful, the experience will be extended to other facilities. Uskovskaya and Raspadskaya mines are also included in the methane utilisation programme.

1. Scope 1 data includes emissions in tonnes of carbon dioxide equivalent from the combustion of fuel and from other sources that are owned or controlled by the Group.

EVRAZ' GHG emissions by segment in 2021¹, million tCO₂e

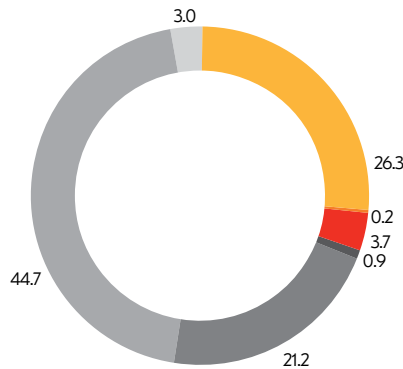
GRI 305-1, 305-2, SASB EM-MM-110a.1



GRI 305-3

EVRAZ' Scope 3 GHG emissions for 2020 were 22.8 million tCO₂e. The largest share belongs to categories «10. Processing of sold products» and «1. Purchased goods and services».

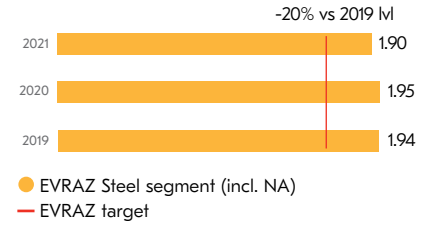
EVRAZ's Scope 3 GHG emissions by emission category in 2020, %



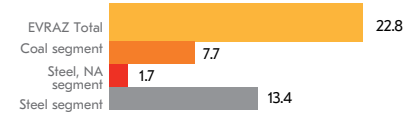
- 1. Purchased goods and services
- 2. Capital goods
- 3. Fuel- and energy- related activities not included in Scope 1 or Scope 2
- 4. Upstream transportation and distribution
- 9. Downstream transportation and distribution
- 10. Processing of Sold Products
- 12. End-of-life treatment of sold products

GHG emissions intensity (Scope 1, 2) from the steel segment, tCO₂e per t of crude steel²

GRI 305-4



EVRAZ's Scope 3 GHG emissions by segment, million tCO₂e



1. Here and below: EVRAZ does not have any production facilities in the UK, only an office. Data for the UK office as well as data for offices located in Russia and North America were not included in the graphs, since the volumes of consumed power are not material in terms of overall energy consumption within the Group.
2. Tonnes of CO₂ equivalent (Scope 1 and 2 GHG emissions) divided by tonnes of crude steel. Only steelmaking enterprises are included into the calculation.

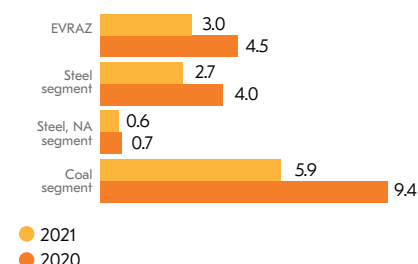
EVRAZ carbon intensity (Scope 1, 2) from the steel segment³, tCO₂e per tcs

GRI 305-4

INDICATOR	2019	2020	2021
<i>Scope 1 carbon intensity</i>			
per t of crude steel and sold pig iron	1.80	1.80	1.75
per t of crude steel	1.85	1.87	1.82
<i>Scope 2 carbon intensity</i>			
per t of crude steel and sold pig iron	0.09	0.08	0.07
per t of crude steel	0.09	0.08	0.08
<i>Scope 1+2 carbon intensity</i>			
per t of crude steel and sold pig iron	1.88	1.88	1.83
per t of crude steel	1.94	1.95	1.90

EVRAZ's GHG emissions per net revenue in 2021 vs. 2020, kgCO₂e/US\$

GRI 305-4



This year it was decided to disclose one more intensity figure that better reflects performance of the steel segment and takes into account volumes of pig iron produced by steel mills and sold to 3rd parties.

BOOSTING ENERGY EFFICIENCY

GRI 103-2

Boosting energy efficiency is a key focus of the Group's decarbonisation efforts. Energy effective technologies require fewer resources and produce less greenhouse gas emissions. EVRAZ uses modern technologies and modernises equipment to improve energy efficiency and cut the emissions and operational costs.

EVRAZ has a comprehensive system of energy consumption and energy efficiency management. The energy management system of the Urals and Siberia Divisions' enterprises is certified for compliance with the international standard ISO 50001:2018 by an independent company Bureau Veritas. The Group regularly conducts internal audits of the energy management system of plants and production workshops using a uniform methodology developed based on the requirements and recommendations of the ISO 50001 standard. Internal audits allow enterprises

to prepare for external supervisory and recertification audits in compliance with ISO 50001.

The Group seeks to improve the efficiency of its energy management structure and maximise the involvement of employees from both the energy shops (energy generation and distribution) and the production shops (energy consumption). The Urals and Siberia Divisions are characterised by the presence of the Energy Managers. The Group has a position of Energy Efficiency Business Process Development Manager. Teams of experts in the energy management system trained according to the ISO 50001 standard have been formed at EVRAZ ZSMK and EVRAZ NTMK, the most energy-intensive enterprises of the Group with a combined share of energy consumption exceeding 85%. Those teams monitor energy consumption to minimise energy intensity and reduce energy costs. In 2021, EVRAZ transferred responsibility

for energy management from the Group level to the Division Vice Presidents. This is expected to improve the efficiency of on-site energy management. There are plans to develop and approve appropriate energy consumption KPIs for the Vice Presidents in the future.

In 2021 EVRAZ developed a set of internal documents in energy saving and energy efficiency:

- The Group drafted a special standard for energy-efficient design of production facilities and will launch the process of its implementation in 2022.
- In 2021, the Group developed and approved a policy for the use of energy-efficient power distribution transformers. The policy contains energy efficiency criteria to be considered by EVRAZ's enterprises when purchasing transformers.

3. Includes Steel segment and Steel, North America segment.