



KUZBASSRAZREZUGOL

# Preserving traditions, multiplying opportunities



SUSTAINABILITY  
REPORT 2022





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## Statement of the General Director



Dear colleagues, stakeholders and partners,

Geopolitical situation in 2022 has had a significant impact on the development of the coal industry. We faced serious challenges and had to quickly restructure business processes that had been established over the years: we changed supply chains, and entered new international trade markets. Following the principles of sustainable development helped us to adapt to new conditions, maintain planned growth rates, financial stability, and the scope of social and environmental programs implementation.

In 2022, the strategy of the Coal Company "Kuzbassrazrezugol" JSC development for the period until 2030 was adopted. It identifies 5 priority areas that define the vector of our progress for the next 8 years. These include process improvement, responsible approach, reasonable investments, development of deposits and technologies, as well as increased profitability.

The Company's main asset is still our employees — over 16 thousand persons. Their well-being, comfort and safety are our priorities, so we take a systematic approach to creating a production culture and reducing workplace injuries. In 2022, we have allocated more than 1 billion rubles for health and industrial safety measures. We are testing and implementing innovative and digital solutions. Our goal is the improvement of our safety system.

When working with personnel, we primarily focus on respecting human rights, creating professional development opportunities, and improving working conditions. In 2022, we maintained all previously existing social support measures and extended work shadowing and vocational development programs.

Professional personnel is the driver of the Company development. In our vocational training programs, we pay attention to improvement of digital, managerial and personal competencies of our staff. In 2022, costs of the Company on employees' training increased almost 1.5 times as compared to the previous year and exceeded 39.6 million rubles.

Despite all the difficulties in 2022, the Company managed to provide employees with a significant increase in wages. At the end of the year, the average monthly wages increased by 47% and exceeded 110 thousand rubles. The Company has introduced a system of progressive bonuses for representatives of the main professions: members of excavator crews and technological vehicles drivers receive payments for exceeding planned targets.

Tools of the corporate business systems — "Problem Solving Board" and "Factory of Ideas" are being actively developed, and using them employees can propose their ideas for improvement of production processes. Authors of best proposals from the "Factory of Ideas" received a monetary remuneration in a total amount of over 2.9 million rubles in 2022.

As a responsible subsoil user, the Coal Company "Kuzbassrazrezugol" strives to minimize the impact of open-pit mining on the environment, on populated areas near coal enterprises, and on their residents. Costs for ensuring environmental safety and environmental protection in 2022 more than doubled as compared to 2021, and amounted to more than 644 million rubles. Our plans cover extension of the environmental program and the increase of its funding. Main funds are allocated to protection of water resources, atmospheric air, reforestation, waste management, and biodiversity preservation.

In 2022, we planted over 800 thousand trees in the territories of our operations in the Kemerovo Region. The mining-engineering recultivation plan was exceeded by more than a quarter: it was carried out on an over 125 hectares area. Biological recultivation covered 110 hectares, which is by 12% more than the planned volumes. Seedlings with closed root systems were planted on 30 hectares, the survival rate of which was close to 100%. Today, Kuzbassrazrezugol is the only coal-mining company in the region that uses this planting material on such a large scale.

The results achieved during the year clearly showed that the Company has chosen the right course for sustainable development. Despite external challenges, we are determined to adhere to the adopted strategy and achieve our goals in all areas of activity as efficiently as possible, fully fulfilling our obligations to our staff, the residents of the region, partners and authorities.

**Stanislav Matva**

General Director of Coal Company "Kuzbassrazrezugol", JSC





KUZBASSRAZREZUGOL

# Section I. Company Activities

About the Company

Corporate Values

Strategic Goals and Sustainable Development

Management System

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Risks Management

Interaction with Stakeholders

Legal Discipline and Anti-Corruption

Membership in Associations and Unions

Operational Transformation  
and Production Digitalization





## About the Company

GRI 2-12-6

The Coal Company “Kuzbassrazrezugol” is one of the leaders of coal mining in Russia. The Company ranks second in the country in terms of coal produced annually, and is the first in open-pit coal mining. The raw material base of coal deposits within the licensed areas of the Coal Company “Kuzbassrazrezugol” exceeds 4.3 billion tons.

The company has been operating in the coal industry during more than 58 years. On May 19, 1964, the specialized plant “Kuzbasskaryerugol” was created by the individual order of the RSFSR Council of Ministers. It united all open-pit coal mining in the Kuznetsk coal basin: the plant included 13 open-pit coal mines operating at that time in the Kemerovo Region, several under mines construction, and a number of auxiliary enterprises where about 14 thousand persons worked. From

that time, the official history of the Company began, however such activities were started much earlier.

In 1947, the first open-pit coal mine was founded in Kuzbass, the Krasnobrodskiy mine, from which the history of open-pit coal mining in the region began. Today the Company operates as a part of the Coal Company “Kuzbassrazrezugol”. In 1949, the second open-pit coal mine of Kuzbass, the Bachatskiy open-pit mine, was put into operation; nowadays, it is

also a part of the Company structure. Later, other open-pit coal mining enterprises were created.

Today, the Coal Company “Kuzbassrazrezugol” is the largest company for high-quality coal open-pit mining in Kuzbass. The Company’s assets include six open-pit coal mines, a borehole and 10 service enterprises. For almost 60 years, miners of the Coal Company “Kuzbassrazrezugol” have mined about 2 billion tons of coal.

## Corporate Values



### Safety and environment protection

We follow safety rules because human life and health come first. We try to reduce the burden on the environment and minimize environmental risks.



### Efficiency

We always strive to obtain maximum results with optimal use of resources.



### Customer-oriented approach

We satisfy the needs of internal and external customers through products and services quality.



### Respect

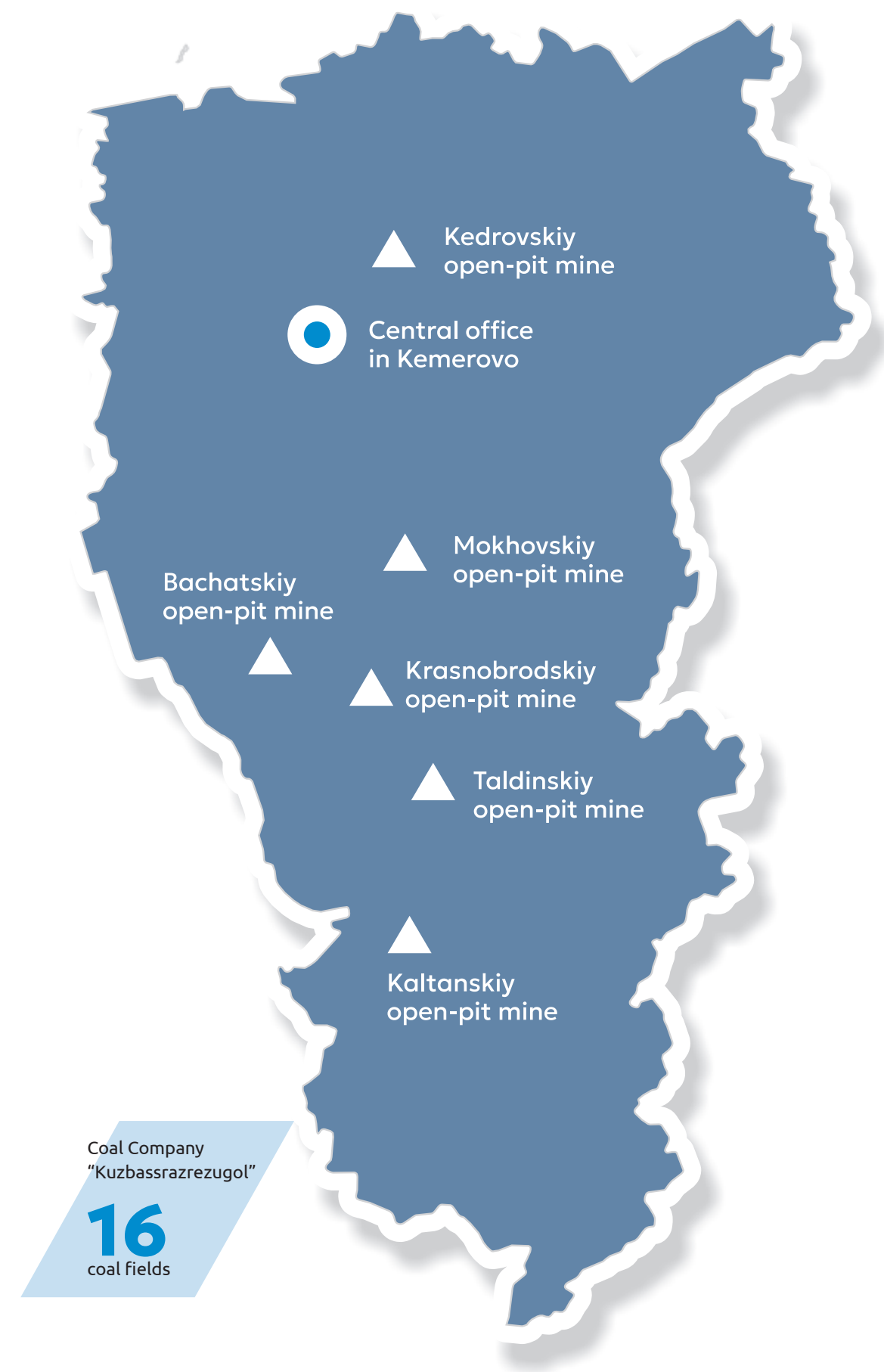
We interact constructively with colleagues, provide objective feedback, and get involved in the life of the enterprise.



### Development

We are continuously improving, looking for and implementing best practices to ensure the sustainable growth of the Company.

## Assets of the Coal Company “Kuzbassrazrezugol”





## Strategic Goals and Sustainable Development

GRI 2-22

In 2022, the Coal Company “Kuzbassrazrezugol” development strategy until 2030 was adopted. Every six months, the document is planned to be updated to assess the results already achieved, select solutions for newly emerging elements of macro parameters analysis, and assess their impact on achievement of the Company strategic goals. The Company’s strategy is aimed at ensuring long-term development and achieving strategic goals with consideration of environmental and social well-being of the region.

**The main objective** is to build most efficient and profitable Coal Mining and Processing Company.

**For this purpose, strategic goals have been defined in three areas:**

### 1. Profitability increase.

This covers three goals related to achievement of the Company certain financial results, including EBITDA and free cash flows.

**2. Optimization of products and assets portfolio.** Contains a goal to increase the share of high-margin coals in total commercial products of the Company.

### 3. Social and environmental responsibility.

Covers of two goals: reduction of the LTIFR injury rate by at least 2 times as compared to 2021, and also reduction of CO<sub>2</sub> emissions.

Focusing on five strategic priorities helps achieve strategic goals.

## THE COAL COMPANY “KUZBASSRAZREZUGOL” STRATEGIC PRIORITIES



### Improvement of processes

Improvement of operational processes and effective costs management for the purpose to increase productivity and reduce costs.



### Commitment

Strict compliance with safety rules, development of a safe work culture, implementation of environmental and social projects.



### Sound investments

Optimization of the investment program with concern of fields profitability and changes in production to maximize profits. Application of best practices in investment projects management to achieve planned effects.  
Investing in new technologies to reduce costs.



### Fields and technologies development

Working out most effective solutions for coal fields development, including those through the use of new technologies, development methods and minimization of development limiting factors.



### Income increase

Increased production, including an increase in the share of high-margin coal, which will ensure an increase in EBITDA and cash flow.

The Company has adopted an approach to achieve goals through strategic initiatives. This is a modern practice that helps to correctly place emphasis and direct the activities focus towards “quick wins”, that is, to achieve significant results at minimal costs. Each strategic initiative has a quantitative or qualitative effect aimed at restructuring the organizational and management structure and culture of the Company. Strategic initiatives contribute to implementation of sustainable development approaches in the Coal Company “Kuzbassrazrezugol” activities.

### The Coal Company “Kuzbassrazrezugol” strategic initiatives

Name of initiative	Essence of initiative	ESG aspects
<b>1. Operational improvements</b>	G E	Operational improvements at the Coal Company “Kuzbassrazrezugol” main production assets as a part of the transformation program. Initiatives to reduce costs, optimize repairs, eliminate the production chain bottlenecks, increase production volumes, etc.
<b>2. Management optimization</b>	G	Unification of the Company organizational structure, elimination of functions duplication, increasing business processes efficiency.
<b>3. The HR-function transformation</b>	G S	Transition from the administration function to the HR business partner. Achievement of the Company strategic goals by focusing on 3 main development areas: labor productivity, provision with personnel, customer-oriented approach.
<b>4. The ESG agenda management</b>	E S G	Forming an integrated approach to sustainable business development focused on environmental, social and corporate responsibility.
<b>5. The LTIFR reduction</b>	S	Reducing industrial injuries, creating an ideology of safe work practices and preventing incidents of industrial safety violations, increasing production control.
<b>6. Coal fields optimization</b>	G	Developing technical and economic proposals (TEP) to increase mining reserves profitability in operated areas.
<b>7. Integrated planning</b>	G	Creating an end-to-end integrated planning system to make most economically effective decisions on the production, logistics and coal sales.
<b>8. Rock mass transportation costs reduction</b>	G E	Reducing rock mass transportation costs through the use of alternative transportation techniques and fuel sources.

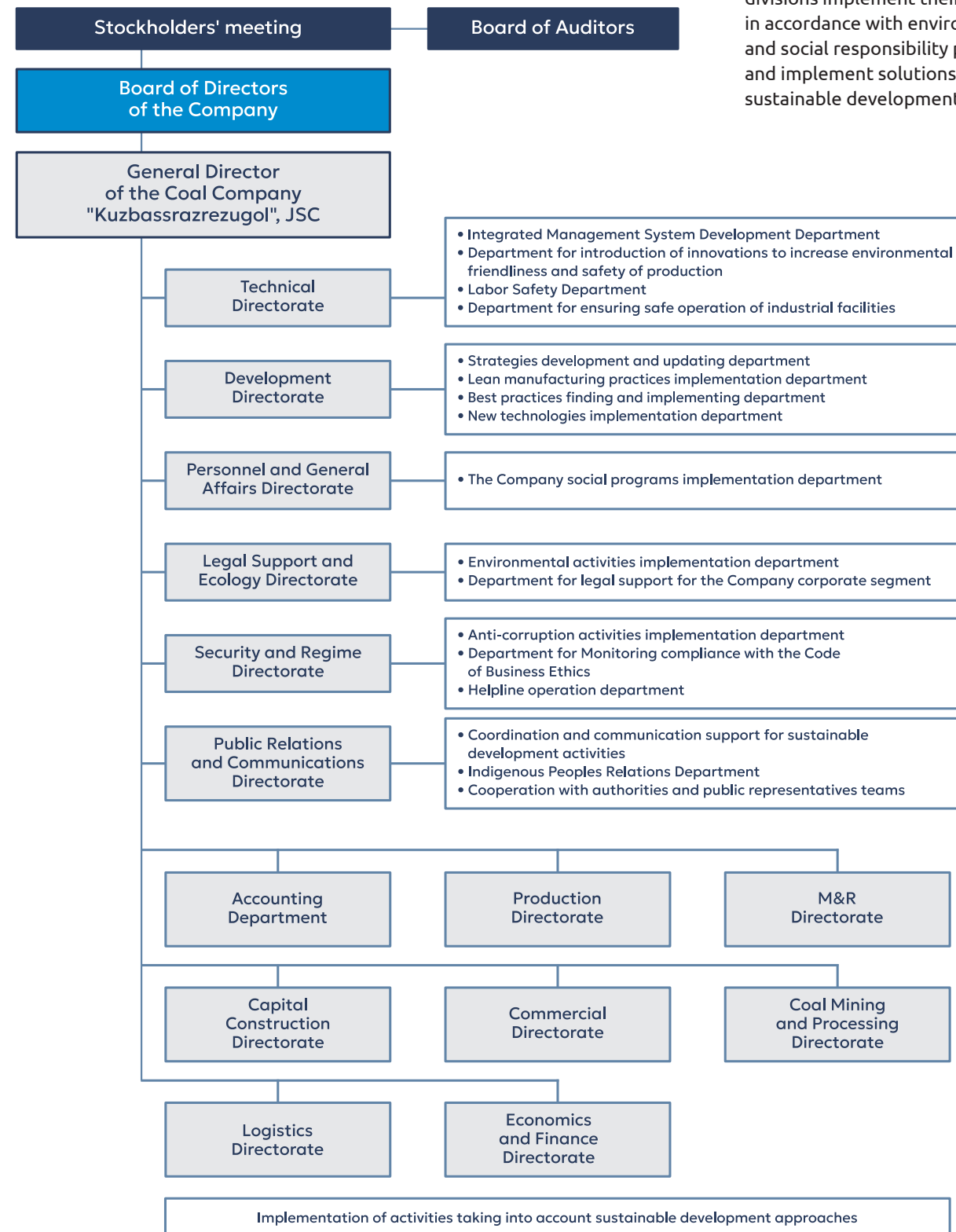


## Management System

GRI 2-9

Sustainable development is integrated into the Company management system.

### Management System Structure



Some of the Coal Company "Kuzbassrazrezugol" directorates are directly responsible for providing conditions concerning related to sustainable development strategic initiatives implementation. Other divisions implement their activities in accordance with environmental and social responsibility principles and implement solutions to promote sustainable development.

Since 2010, the Company has had an integrated management system confirmed by international certificates of compliance with ISO 9001:2015 (quality management system), ISO 14001:2015

(environmental management system), ISO 45001:2018 (occupational safety and health management system) and ISO 50001:2018 (energy management system) requirements.





## Production Activities

GRI 2-1 2-6

**The Coal Company “Kuzbassrazrezugol” is the largest coal mining enterprise in the Kemerovo Region — the Kuzbass. At present, the Company is developing 16 fields in Kuzbass. Raw material base is over 4.3 billion tons of coal.**

The Coal Company “Kuzbassrazrezugol” consistently ensures fulfillment of annual targets. In 2022, more than 10% of all-Russian and more than 20% of all-Kuzbass production will still fall to the share of the Company. The volume of

coal processing at the Company processing facilities amounted to almost 90%. The Coal Company “Kuzbassrazrezugol” is a high-tech enterprise. The company applies innovative solutions and advanced

technologies at every stage of the production cycle. This allows us to ensure high quality of products, increase production safety, reduce negative impacts on the environment, and at the same time to reduce costs.

## Production

**The Coal Company “Kuzbassrazrezugol” mines coal by using the open-pit method. Coal mining from open-pit works (open-pit mines) is more profitable and much safer than using underground mining (mines) techniques.**

Coal mine development begins with geological surveys and ends with the closure and reclamation

of the quarry. Several decades pass from the operation beginning to its completion.

## Main stages of open-pit coal mine development



### 1. GEOLOGICAL SURVEYS.

Geological exploration work is carried out to substantiate the industrial value of the deposit. In the field, exploration wells are drilled with a complex of geophysical studies, core sampling for the subsequent study of the structure of the deposit, the qualitative characteristics of coal and the physical and mechanical properties of the host rocks in laboratory conditions, as well as drilling hydrogeological wells to study the filtration properties of rocks and forecast water flows into future mining. In the office conditions, the calculation of coal reserves is carried out for passing the state examination and setting reserves on the balance sheet of the enterprise.



### 2. IMPLEMENTATION OF THE FIELD DEVELOPMENT PROJECT.

After the reserves are placed on the balance sheet of the enterprise, the next step is to prepare a field (subsurface site) development project. The preparation of project documentation consists in the development of reasonable technical and technological solutions to ensure compliance with the conditions for the use of the site established in the subsoil use license, requirements for the rational use and protection of subsoil resources, environmental protection and industrial safety.



### 3. PRIMARY DEVELOPMENT.

Preparation of a new licensed area for mining operations (construction of necessary infrastructure facilities; performance of overburden mining in an amount sufficient to put the open-pit mine into operation in accordance with the design documentation).



### 4. OVERBURDEN MINING.

These include processes of rocks preparing for excavation, excavation and loading operations, transportation and dumping.

Rocks preparation for excavation is carried out by drilling and blasting method.

Due to the different mining and geological conditions of at the Coal Company “Kuzbassrazrezugol” fields, different mining methods and technologies can be used. This is primarily a transport development system using dump trucks. Partial application areas are hydraulic technologies (mining of quaternary sediments (clay) by using hydraulic mining) and a railway technology (transportation of overburden rocks and spoil rock bulks to dumps by rail). At flat coal-beds fields, the transport-free development system using walking excavators is used.

Transportation of overburden rocks to automotive technologies is carried out by quarry dump trucks with a carrying capacity of up to 360 tons.



### 5. COAL MINING.

After overburden mining, coal mining operations are carried out. Mining operations are carried out by using hydraulic and electric excavators, less often — by walking excavators (with a non-transport mining system). Mined coal is transported to coal warehouses and processing complexes for further processing, conversion and shipment to the customers.



### 6. COAL PROCESSING.

After mining, coal is sent to processing plants and to crushing and screening complexes where, as a result of processing and conversion, products with quality characteristics required by the customer are obtained. Most important characteristic of coal is its ash content. The lower it is, the more expensive the coal is. This parameter is determined immediately at open-pit mines in special laboratories. To improve quality characteristics, coal is processed at the Company processing facilities.



### 7. COAL TRANSPORTATION.

Mined and processed coal is delivered to the customer by rail and then — by sea. To facilitate loading and unloading operations and to avoid “caking” and freezing of coal, it is treated with a special solution.



### 8. OPEN-PIT MINE RECLUTIVATION.

After coal reserves mining, areas of disturbed by mining land surfaces (quarries and overburden dumps) are reclamation. The first stage is mining reclamation — quarry backfilling, spoil dumps slopes levelling. The second stage involves biological reclamation — restoration of the fertile vegetative layer of soil and planting of shrubs and trees.



## Products

GRI 2-6

The Coal Company “Kuzbassrazrezugol” mines almost all Kuzbass fields with a wide range of coal grades from short-flame to long-flame coals, producing a large range of sorted and processed coal.

The Company products include power-generating and coking coal. The Coal Company “Kuzbassrazrezugol” strives to supply not just raw materials, but a finished

high-quality products that meet customers’ demands. And more than half of the coal produced is sold for export.

**Main coal grades (in Russian transliteration) — “D” (long-flame coal), “DG” (parabittuminous coal), “GZhO” (gas fat lean coal), “SS” (low-caking coal), “T” (short-flame coal), “KO” (coking lean coal), “KS” (coke low-caking coal), “KSN” (coke low-caking low-metamorphosed coal).**

## Mined coal quality

Commercial coal (without rock and processing losses) is characterized by the following indicators:

Period	Ash content	Moisture content	Sulfur content	Volatiles output	Calorific value, kcal/kg		Heat equivalent of commercial coal
	A <sup>d</sup> , %	W <sup>r</sup> , %	S <sub>t</sub> <sup>d</sup> , %	V <sup>daf</sup> , %	Highest, Q <sub>s</sub> <sup>daf</sup>	Lowest, Q <sub>i</sub> <sup>r</sup>	
2022	11.9	8.9	0.3	29.5	8,141	6,280	0.897
2021	12.6	9.2	0.3	29.7	8,131	6,198	0.887
(+/-) 2022 vs 2021	-0.7	-0.3		-0.2	+10	+82	+0.010

Quality of mined coal by grades

Grade	Quality indicators						Heat equivalent
	A <sup>d</sup>	W <sup>r</sup>	S <sub>t</sub> <sup>d</sup>	V <sup>daf</sup>	Q <sub>s</sub> <sup>daf</sup>	Q <sub>i</sub> <sup>r</sup>	
	%	%	%	%	kcal/kg	kcal/kg	
Company	16.1	9.1	0.3	29.0	8,118	5,951	0.850
In products (including processing considerations)	11.9	8.9	0.3	29.5	8,141	6,280	0.897
“KS”, “KO”	13.2	7.2	0.4	26.2	8,432	6,548	0.935
“KSN”	12.5	7.0	0.2	25.5	8,421	6,625	0.946
“SS”	11.3	7.4	0.2	24.3	8,342	6,619	0.946
“T”	11.7	6.7	0.4	12.9	8,467	6,771	0.967
“G”, “GZhO”	11.2	8.5	0.4	37.5	8,064	6,284	0.898
“DG”	11.7	9.9	0.4	39.2	7,912	6,018	0.860
“D”	12.5	16.6	0.3	40.9	7,362	5,072	0.725
including oxidized ones	15.9	17.7	0.3	38.1	7,329	4,783	0.683

In 2022, the general share of processed coal at the Company own production capacities increased to 89.2% as compared to 2021 (87.3%). The ash content of commercial coal was reduced by 4.2% due to processing and conversion at the Company installations. Accordingly, the calorific value of commercial products for the working state of fuel has been increased by 329 kcal/kg.

The uniqueness of the Coal Company

“Kuzbassrazrezugol” coal products is their low content of sulfur, arsenic and chlorine, as well as the absence of background radiation, which is controlled by continuous monitoring. This allows to use the Company products in various industries.

Main buyers of the coal mined by the Coal Company “Kuzbassrazrezugol” are power-engineering, metallurgy, housing and public utility sector enterprises that use coal to produce

electricity and heat, or as a raw material component in production of industrial products (alumina, cement, etc.).

The company is aware of its high responsibility to its customers, and always strives to ensure for its products quality to meet international standards. Maintaining the quality level and its improvement is one of the Company activities priorities.



## Plan for 2023

In 2023, the Coal Company “Kuzbassrazrezugol” intends to maintain production volumes at the level of 2022, taking into account the global geopolitical situation, supply chains restructuring, as well as changes in global energy and coal markets.

The Coal Company “Kuzbassrazrezugol” plans its activities for 2023 in consideration of the following factors:

- Activities to be carried out in accordance with fields development projects agreed upon and approved in accordance with established procedures and issued license agreements.
- Availability and condition of basic mining and conveyor equipment.
- Control of mining and conveyor equipment planned for decommissioning in 2023, and timing of new equipment commissioning in 2023.
- Status of mining operations at the beginning of 2023 (prepared coal reserves availability, mining operations position of stripping and production fronts, amount of coal residues at warehouses, and a number of other mining factors).
- Involvement of third-party organizations in execution of preparing mining fronts, coal mining and rock mass transporting.
- Resource base correspondence to coal sales possibilities on the market.
- Compliance with safe mining operations parameters.



## Risks Management

GRI 3-3

During strategic planning, the Coal Company “Kuzbassrazrezugol” takes into account a group of risks that may affect the Company activities:

### Commercial risks

Risks associated with growing competition from Russian and foreign coal mining enterprises, decrease in the volume of coal production and sales as a result of alternative energy sources development. Also, commercial risks arise when coal products quality decreases and natural monopolies tariffs increase.

### Financial risks

These include a potential increase in business financing costs: short loan terms and high interest rates on bank loans, changes in interest rates. This group also includes risks of exchange rate changes, debtors failure to fulfill obligations to pay for the Company’s products, rising inflation rates, and taxation system imperfections.

### Social risks

This group of risks includes the risk of losing highly qualified personnel due to growing competition in the industry, as well as risks associated with industrial injuries and social benefits increase.

### Environmental risks

This group combines atmospheric air pollutants emissions risks, lands disturbance during production process, pollutants discharges into water bodies, and, as a result, an increase in environmental payments and administrative fines.

### Sanctions risks

These include the risk of worsening coal products market conditions, risks of falling prices and demand for coal products, increase at local and export markets competition, which will lead to a decrease in coal production and sales, and an increase in logistics costs due to export destinations redistribution.

### Energy risks

These risks are associated with equipment failure-prone condition and deviations from specific fuel and energy resources consumption standards to support production processes.

### Process risks

These include hazards for personnel associated with the processes.

These are risks of occupational diseases and injuries as a result of road accidents and other industrial incidents, as well as a possibility of contracting with viral infections while working in a team.

Realizing the above risks, the Coal Company “Kuzbassrazrezugol” takes measures to minimize potential impact of such risks and reduce the likelihood of their occurrence.

## Adaptation to Sanctions Risks

2022 became a period of a number of sanctions risks, so the Company had to adapt to new conditions quickly.

Since August 10, the embargo of the European Union countries on the purchase, import or transit transportation of Russian coal came into force. Despite concerns, this had no significant impact on the overall volume of exports, but led to a change in the main vector of Russian coal exports from European to Asian directions. The Coal Company “Kuzbassrazrezugol” rebuilt its supply chains with consideration of logistics

restrictions, and refocused on export of coal products to the Asia-Pacific Region countries. The redirection of Russian coal flows from Europe to Asia is limited only by logistics capabilities.

Sanctions also led to problems with mining equipment and spare parts supply. The company managed to stabilize situation, avoid long equipment downtime and ensure timely maintenance. The Coal Company

“Kuzbassrazrezugol” is exploring possibilities of working with new suppliers, using previously unused technologies and equipment to cope with potential problems under a new round of sanctions pressure.

## Interaction with Stakeholders

The procedure of the Coal Company “Kuzbassrazrezugol” interaction with stakeholders is defined by a special regulation “Interaction with Stakeholders in Integrated Management System” developed in accordance with MS ISO 9001, MS ISO 14001, MS ISO 50001 and MS ISO 45001 International requirements.

The Company stakeholders include a wide range of individuals and organizations that are associated with and influence the Company activities, including:

### the Company Employees

They participate in implementation of initiatives related to sustainable development, and obtain benefits of working in the company with high social and environmental responsibility. All responsibilities of the Coal Company “Kuzbassrazrezugol” to employees are reflected in the Collective Agreement, which is regularly extended. To ensure that every employee is aware of processes taking place in the Company, regular information meetings between workers and managers are held, and social media is used.

### the Authorities

Representatives of government bodies at all levels monitor the Company’s compliance with legislation and regulatory requirements, including those in the field of environment protection, and promote employment and development of territories where it operates. The agreement on social and economic cooperation between the Kemerovo Region government and the Coal Company “Kuzbassrazrezugol” is valid for 20 years. With assistance of government representatives, the Company engages citizens in open discussions of matters concerning new production facilities locations.

### Educational and Scientific Organizations

The Coal Company “Kuzbassrazrezugol” invests in programs of scientific organizations within the Company’s profile. To engage highly qualified specialists,

it organizes practical training and support of educational institutions graduates in finding a job, and sponsors scholarship programs.

### Suppliers and Contractors

Work with suppliers is under a special control of the Company. Interaction is based on the principles of awareness, fairness, efficiency and development. The Coal Company “Kuzbassrazrezugol” strives to interact openly, posts information about procurement on accessible electronic platforms, and rails against corruption. The Company has developed transparent and objective criteria for selecting and assessing suppliers, and created equal conditions for all interested business partners. Claims are handled collegially and objectively. The company is interested in a long-term and mutually beneficial cooperation based on sustainable development principles, respect of human rights, corporate code of ethics, labor and industrial safety requirements, and environmental standards. The Coal Company “Kuzbassrazrezugol” is ready for a long-term fruitful cooperation with those who also adhere to these principles.

### Clients and Customers

The Company strives to maintain high quality products for all customers and evenly develop sales markets. The Coal Company “Kuzbassrazrezugol” is open to a dialogue in the framework of meetings and conferences, and also promptly responds to customers’ requests on any issues regarding its products quality and supplies.

### Shareholders and Investors

The Company is working on the ESG business transformation and optimizing management processes, which as a result influences the

price and liquidity of its shares. Information on financial reporting and management of the ESG aspects is disclosed in accordance with international standards. Shareholders can obtain information about the Company activities at shareholder meetings, public events, in public sources, and also through personal communication.

### Analytical and Rating Agencies

The Coal Company “Kuzbassrazrezugol” provides information about its activities in the field of environmental protection and impacts in the region of its presence. The Company adheres to the principle of information transparency and holds meetings for interested parties, and also publishes information in open sources — on the official website and on corporate social networks.

### Main Tasks of Interaction

Main tasks in ensuring effective interaction with the Company internal and external stakeholders are:

- establishing and maintaining internal connections with the Company;
- preparing responses to requests from external and internal stakeholders, including customers’ complaints and claims;
- providing stakeholders with information on the Company’s integrated management system;
- monitoring and analyzing stakeholders’ requirements and control over fulfilment of the Company requirements by stakeholders.



## Legal Discipline and Anti-Corruption

GRI 2-15 2-26 207-1 12-11 12-16 12-17 12-19 12-20

The Coal Company “Kuzbassrazrezugol” attaches special importance to compliance with legislation and business ethical standards: it strives for honest and responsible practices in all aspects of its activities both within the Company and in interaction with partners, clients, business communities and residents of the region.

Business and ethical conduct principles are enshrined in the Corporate Ethics Code, which sets sustainable development vectors. The Company is committed to making the interaction ethical culture an integral part of the production environment. The Coal Company “Kuzbassrazrezugol” systematically acts to prevent any manifestations of corruption and strengthens the reputation of an honest and reliable partner in the eyes of clients, partners and employees. The Company strives to prevent any opportunities for corruption violations and conflicts of interest. Risks analysis is carried out on an annual basis, and anti-corruption measures are developed. Special attention is paid to risks associated with potential violations of legislation in the field of anti-corruption activities at interaction with contractors, government officials during procurement, business gifts exchange, representational expenses distribution, charitable projects implementation and in personnel selection and hiring.

### Main Anti-Corruption Activities:

- cooperation with government and law enforcement agencies;
- ensuring procurement procedures transparency;
- checking counterparts' reliability.

Information about all facts of the Company officials corrupt behavior is communicated to the General Director and the Business Activities Director. For reporting about

potential violations of the Anti-Corruption Policy, the Company operates a hotline; requests can be left anonymously.

### Conflict of Interests

The Company pays special attention to timely prevention, identification and resolution of interest conflicts. Measures to prevent the influence of personal interests of employees on business processes are reflected in the Anti-Corruption Policy and the Code of Corporate Ethics. In 2023, the Coal Company “Kuzbassrazrezugol” will continue to work on integration of anti-corruption procedures; internal regulations and relevant procedures in the field of anti-corruption will be approved in all branches of the Company.

### Human Rights

Observance of human rights remains the Company's priority in all aspects of its activities. The Coal Company “Kuzbassrazrezugol” takes into account international standards and principles, such as UN declarations and conventions of the International Labor Organization (ILO), as well as the Russian Law requirements. Issues of respect for human rights are reflected in main internal corporate documents. The Company strictly treats any form of discrimination and does not use forced or child labor. Each employee has equal opportunities to exercise labor rights, regardless of gender, origin, property, social and official status, age, place of residence, religion and political beliefs, as well as other factors not related to professional qualities. Each employee can apply for any position in the Company, including management.

### Antimonopoly Regulation

The Company adheres to principles of antimonopoly regulation and strives to prevent, identify and eliminate causes and conditions that may lead to antimonopoly violations.

### Main Tasks of Antimonopoly Regulation:

- forming among members of management bodies and employees of the Company a single understanding of the Company position on rejection of antimonopoly violations;
- reducing the risk of antimonopoly legislation violations by members of management bodies and employees of the Company;
- ensuring compliance of the Company activities with antimonopoly legislation requirements.

### Tax Policy

The Coal Company “Kuzbassrazrezugol” is the largest taxpayer in the Kemerovo Region and makes a significant contribution to generation of budget revenues of the Russian Federation and development of territories where it operates. In its activities, the Company strictly observes tax legislation norms and requirements.

## Membership in Associations and Unions

GRI 2-28 12-18

The main organization for all coal mining industry enterprises is the Russian Independent Trade Union of Coal Industry Workers (Rosugleprof). The Kemerovo Territorial Committee of the Rosugleprofsoyuz unites primary trade union organizations of coal companies in Kuzbass; the Coal Company “Kuzbassrazrezugol” is the headquarters of the Territorial Committee. Primary trade union organizations of Rosugleprof operate at all enterprises of the Company; 93.8% of the Coal Company “Kuzbassrazrezugol” employees are members of the trade union.

The Company is also a member of the All-Russian Industry Association of Coal Industry Employers and the Russian Union of Industrialists and Entrepreneurs, and a member of the Kemerovo Region Construction

Organizations Association at the Glavkuzbasstroy self-regulatory organization, and a member of the non-profit Mining Industrialists of Russia partnership. Membership in organizations helps

the Company to influence the industry development, work out uniform standards and rules together with partners, and join forces to work together.

## Operational Transformation and Production Digitalization

GRI 3-3

SDG 9, SDG 12

To achieve strategic leadership in the industry, the Coal Company “Kuzbassrazrezugol” strives to increase profitability, production efficiency, products quality and cost optimization. The Company is implementing the operational transformation process and systematically works on improvement of all production processes.

### Lean Production

The Coal Company “Kuzbassrazrezugol” adheres to lean production principles and strives to optimize all production processes: eliminates redundant operations, rationally uses resources, reduces losses and works at improvement of products quality, focusing on customers’ demands. The main objective of optimization is to increase coal mining and processing efficiency, minimize downtime, and increase maximum equipment productivity. Such approach helps to reduce costs, improve products quality and overall production efficiency. The Company has a system of internal trainers. These specialists have been trained in fundamentals of productivity improvement and can convey the meaning and tools of lean manufacturing to any employee. Employees are also trained on lean manufacturing programs on an ongoing basis; training is conducted by certified trainers. During 2022, the Company trained:

- 5.1 thousand employees under the “Paradigms” (barrier to change), “8 Types of Losses”, “Problem Solving Board” and “Factory of Ideas” programs;
- 1.8 thousand employees under the “Problem Solving Methodology” program;
- 2.7 thousand employees under the “Standardization” program (SOP, SMED, 5C).

Any employee can make a proposal to improve production processes; for this, the Company has adopted the “Problem Solving Board” and “Factory of Ideas” tools. Authors of the best ideas receive cash prizes. Since 2021, as a part of the transformation program, the Company has introduced one of the most important approaches to effective organization of workplaces — 5C. It implies sorting and systematizing all things and objects, maintaining order, standardizing and improving this process. The 5C tool has been implemented at processing plants, auto repair workshops, mechanical repair and tractor-bulldozer sections, and office premises. Such approach increases productivity and safety, reduces the number of equipment breakdowns, and minimizes injuries.

### Auxiliary Equipment Upgrading

To minimize production losses, starting from 2021, the Coal Company “Kuzbassrazrezugol” is implementing an auxiliary equipment upgrading at all branches. Over the course of 5 years, the Company will purchase about 300 units of modern equipment, including tractors, handlers, and drilling rigs. The auxiliary equipment depot will be renewed by two thirds and modernized. First machines from this new program — modern industrial tractors K-703 — are already working at the Bachatskiy, Krasnobrodskiy and Taldinskiy open-pit mines.

### Results of the transformation program in 2022:

**3,859** implemented ideas,  
**6,479** solved problems,  
**16.1 billion** rubles of economic effect.

## Digital projects

Production digitalization plan of the Coal Company “Kuzbassrazrezugol” includes about 300 projects to be implemented by 2025. They are aimed at increasing efficiency, safety and productivity.

### 3D Geological Models

One of the most important production digitalization projects was the creation of three-dimensional geological models of open-pit coal mines. This is a detailed 3D layout that integrates all geological exploration data. The digital model shows coal beds, dumps, mines and promising development zones. It allows to determine coal quality indicators and plan works where it is economically profitable. This helps the Company to be mobile, and quickly adapt to market needs. In 2022, two digital models of open-pit mines were developed. Completion of all fields geological structures digitization is planned by the end of 2025.

### High-precision ground penetrating radars for monitoring slopes and spoil dumps surface stability

For the geological model to operate in real time, it is equipped with ground penetrating radars. They scan the surface of the open-pit mines and create a displacement map. These devices make it possible to detect deformations with an accuracy of 0.3 mm and instantly transmit this information; it goes to the dispatcher, and if a potentially dangerous situation occurs, an alarm is triggered. The system makes mining safer and allows to keep the situation under constant control.

### Systems for monitoring sides and spoil dumps surface stability

To ensure production safety and prevent emergency situations, the Company has developed and successfully implemented 15 automated systems for monitoring open-pit side slopes and spoil dumps surface stability based on displacement sensors. Each system consists of two wells with a depth of

40 to 100 m. Pairs of displacement sensors are installed in the mines at same depth: extensometers monitor vertical displacement of rocks, inclinometers monitor horizontal displacement. Additionally, at each point there is a water level sensor, and also pressure sensors — piezometers. They monitor groundwater level in the adjacent rock mass, spoil dumps and dams of hydraulic structures, and also determine excess pressure. Remote monitoring of open-pit mine sides and spoil dumps stability is carried out in real time, and makes it possible to obtain information about the beginning of deep displacements in the rock mass long before such deformations appear on the surface. Data from sensors is transmitted to the Coal Company “Kuzbassrazrezugol” server via a GSM channel, promptly processed and compared with safety criteria. When critical values are exceeded, the dispatcher receives a signal and takes action.

To monitor the condition of mine sides and spoil dumps, the Company uses another advanced technology — robotic tacheometers. They automatically measure deformations at observation stations mounted on mine sides, spoil dumps and other objects, and in real time record the change in position of each point at the moment of deformation in order to eliminate emergency situations.

### Hydrogeographic systems

Hydrogeographic systems remotely survey bottoms of hydraulic dumps and any other water bodies — flooded pits, sludge ponds and tailings dumps. A hydrographic bot automatically takes depth measurements along a given route and analyzes the state of bottom down to compacted soils, helping to determine the exact volume of water in the reservoir. This is especially important at flooding

periods, and helps to predict and prevent dangerous situations. On the basis of collected information, the Company has created 3D models of reservoirs bottoms.

### The Mining and Conveyor Complex (MCC) Production Control

Implementation of an automated production control system is one of the main directions in the Company’s digital transformation. The MCC ACS “Karyer” helps to carry out operational monitoring of mining and conveyor equipment movement and its technical condition, as well as the scheduled tasks implementation. All equipment operating at an open pit: drilling rigs, excavators, mining dump trucks — is connected into a single network and provided with on-board control equipment. It monitors location, load, fuel level in the tank, tire pressure and other parameters. This has helped to eliminate unproductive expenditures, idle runs, unnecessary movement of equipment and, as a result, increased coal enterprises productivity. In 2022, the economic effect from the MCC production control system implementation in the Company amounted to over 4 billion rubles.

### Facilities positioning program

This innovative technology provides operational control over blasting operations. The dispatcher monitors in real time the location of the process equipment and of employees in the blasting area. This helps to prevent people and equipment from entering the danger zone.

### 1C: MRO Equipment Repairs and Maintenance Management

To reduce the number of equipment downtime due to unscheduled failures, the Company switched to a



new system of equipment repairs and maintenance management.

The new scheme for organizing repairs relieves mechanics, allows for timely repair works diagnosis and preparation, while introduction of digital tools helps to collect data about defects, scheduled repair works, and to monitor their implementation. Implementation of the new structure has reduced emergency shutdowns by improving repair/maintenance management. Due to this new approach to repairs, it became possible to achieve an increase in the technical readiness ratio (TCR) for excavators by 5.9%, and for processing plants — by 4.2% as compared to 2021.

#### Automated Electronic Medical Examination System (EMES)

The EMES makes it possible to quickly carry out mass medical examinations of employees before the beginning of a shift to assess their state of health and readiness for work. With one complex, up to five people can be examined within 1–2 minutes. The EMES automatically, without the participation of medical professional, measures body temperature, pulse, blood pressure, and also makes an alcohol test.

The main objective of the technology is to increase the level of safety at work and preserve the health of miners. Introduction of EMES began in 2017; nowadays, the Company branches use 32 EMES complexes with 161 seating positions. In 2022, based on pre-shift medical examinations results, digital equipment allowed to identify more than 4.5 thousand cases of deviations in the health status of employees.

#### “Drilling Rigs Positioning” Digital Initiative

The technology provides positioning accuracy and full control over the drilling process through the use of GPS navigators. The operator’s task is to perform drilling accurately in compliance with the specified coordinates. Sensors determine the strength of rocks. This makes it possible to increase drilling equipment productivity, reduce unit costs, and optimize the number of explosives to ensure the desired

#### The resulting effect of MCC ACS “Karyer” implementation:

- increase in dump trucks carrying capacity load factor;
- higher control over useful time of excavators and dump trucks operation;
- dump trucks average speed increase.

characteristics of the rock mass after blasting.

#### Innovative blasting technology

One of the digitalization program significant initiatives is the electronic system for initiating drilling and blasting operations. It allows to perform blasting, significantly reducing explosions magnitude, with a minimal impact on the environment, people and structures. This new technology, due to delay-action sequential wells blasting, allows for a more flexible and accurate deceleration time programming at blasting. In this case, seismic impact indicators are so minimal that they may not even be recorded by seismic stations. Such approach also significantly reduces emissions of pollutants into the atmosphere.

#### Development and implementation of Russian software for production processes management of processing facilities

In January 2022, the Coal Company “Kuzbassrazrezugol” began a project of developing and implementing the MES (Manufacturing Execution System) for the production process management system at three processing plants. This is a specialized software that helps synchronize, coordinate, analyze and optimize products output within the production process. The project will be completed in 2024 and then replicated to other coal processing sites.

The MES will allow to unify reporting forms and business processes, control production plans, improve quality and speed of making management decisions, and reduce unscheduled equipment shutdowns and downtime.

#### Introduction of a microprocessor centralization system

Digitalization also covers transportation processes. The Company has implemented the microprocessor centralization system (train movement control) CTRL@ LOCK 200 at the Tekhnologicheskaya station of the Bachatskiy open-pit mine branch. Switching to new traffic control systems took place at the end of November 2022. The purpose of this new system was to simplify the formation of routes and organize maneuvering during coal removal process. All information about the situation and condition of railway automatics is displayed on the operator’s monitor in real time, and ensures safe and uninterrupted trains movement.

In less than two years, the enterprise built a two-story building for the electrical centralization (EC) station and replaced equipment: track switches and two guarded crossings. Three automated workstations for the station duty personnel and electricians were also installed. At the new EC stations, track switches control equipment, traffic lights and tracks have been provided.

**The Coal Company “Kuzbassrazrezugol” shares its developments for widespread use in the coal industry. The company cooperates with the best available technologies bank and offers solutions with proven effectiveness.**







KUZBASSRAZREZUGOL

## Section II. Social responsibility

Labor practices

Health and Safety

Training

Support of territories





## Labor practices

GRI 12-15

SDG 8, SDG 5, SDG 10

The Coal Company “Kuzbassrazrezugol” is one of the largest employers in the Kemerovo Region. The Company pays great attention to human resources policy, with a priority of respecting human rights and creating best employment conditions for employees among the sector companies. Opportunities for improvement of their professional and creative potential are improved every year.

## Personnel Management Responsibilities

The Coal Company “Kuzbassrazrezugol” carries out personnel management activities in accordance with the Labor Law. Personnel management policy of the Company is based on the following principles:

1. Complying with legal requirements and strategic goals of the Company.
2. Creation of conditions for maximum fulfillment of labour and creative potential of each employee.
3. Maintaining a balance among experienced and young employees, continuity and connection between generations.
4. Creating safe working conditions at workplaces.
5. Systematicity, consistency and continuity of personnel management.
6. Observing human rights.
7. Increasing personnel involvement.

In order to fulfil these principles, the Company sets the following objectives:

1. Providing the Company with a sufficient number of qualified personnel for trouble-free operation and strategic goals achievement.
2. Forecasting and planning requirements in personnel, formation of an effective personnel reserve.
3. Increasing personnel operations efficiency through introduction of management technologies, rationalization of organizational structures, and the Company staffing.
4. Advanced training of employees, training and retraining of personnel, including training in new areas of activities.
5. Effective rotation processes management, creating a personnel reserve.
6. Ensuring professional and career growth of employees.
7. Improving the employees' remuneration and incentives system.
8. Creating and maintaining a favorable moral and psychological climate.

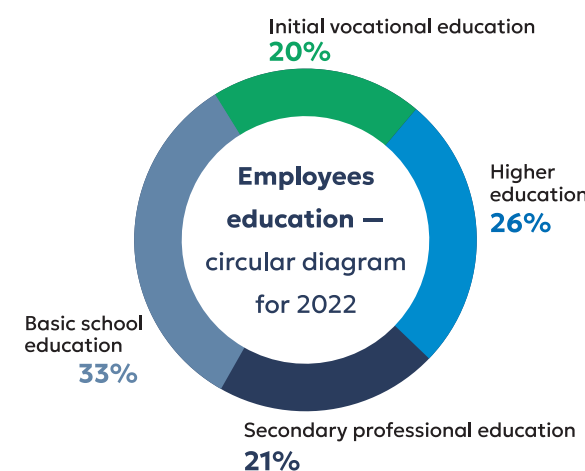
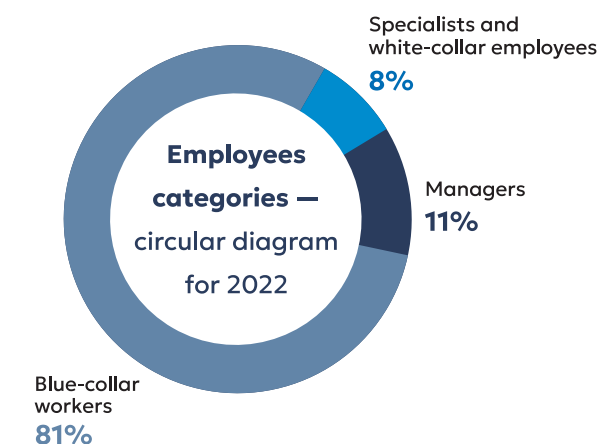
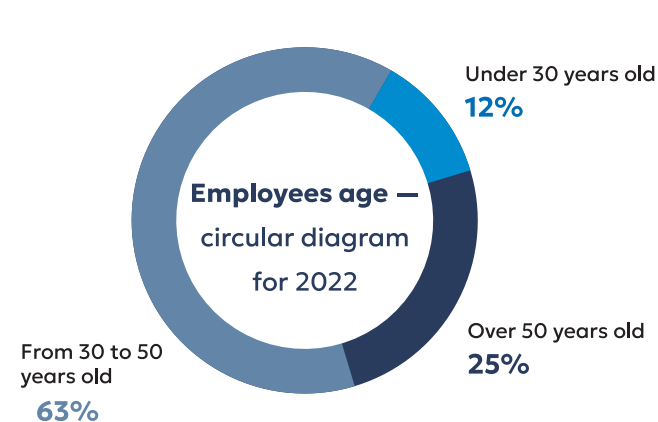
## Results of Production Activities

GRI 2-7

The Coal Company “Kuzbassrazrezugol” employs more than 16 thousand persons: 20% of them are managers and white-collar employees, and about 80% are blue-collar workers.

### Number of the Company's employees

	2017	2018	2019	2020	2021	2022
BY AGE CRITERIA						
Under 30 years old	16%	15%	13%	12%	12%	12%
From 30 to 50 years old	57%	58%	61%	62%	63%	63%
Over 50 years old	27%	27%	26%	26%	25%	25%
BY CATEGORIES						
Blue-collar workers	82%	82%	82%	81%	81%	81%
Specialists and white-collar employees	8%	8%	8%	8%	8%	8%
Managers	10%	10%	10%	11%	11%	11%
BY EDUCATION LEVEL						
Higher education	26%	26%	26%	26%	26%	26%
Initial vocational education	22%	22%	22%	21%	20%	20%
Basic school education	33%	33%	32%	33%	33%	33%
Secondary professional education	19%	19%	20%	19%	20%	21%

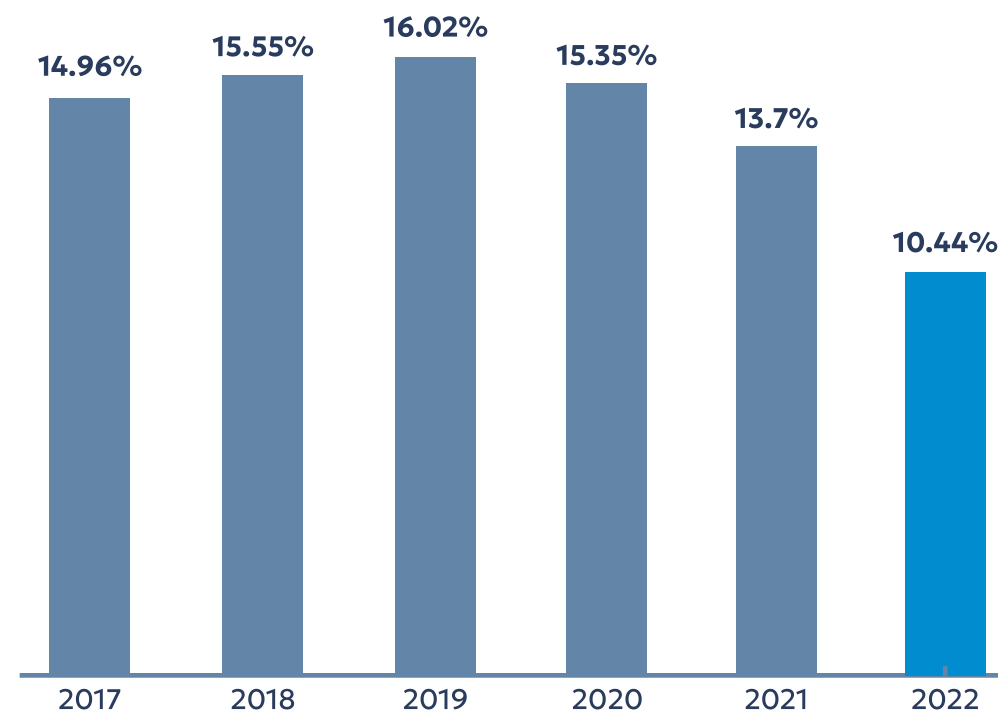


**In 2022, the number of employees in the Company increased due to the engagement of personnel to permanent and temporary jobs on a rotational basis and due to transfer of employees among the Company subsidiaries. Nonresident employees were engaged from the Altai Territory and the Altai Republic.**

Labor turnover at the end of 2022 was 10.44%, which was 3.3% lower than in 2021.

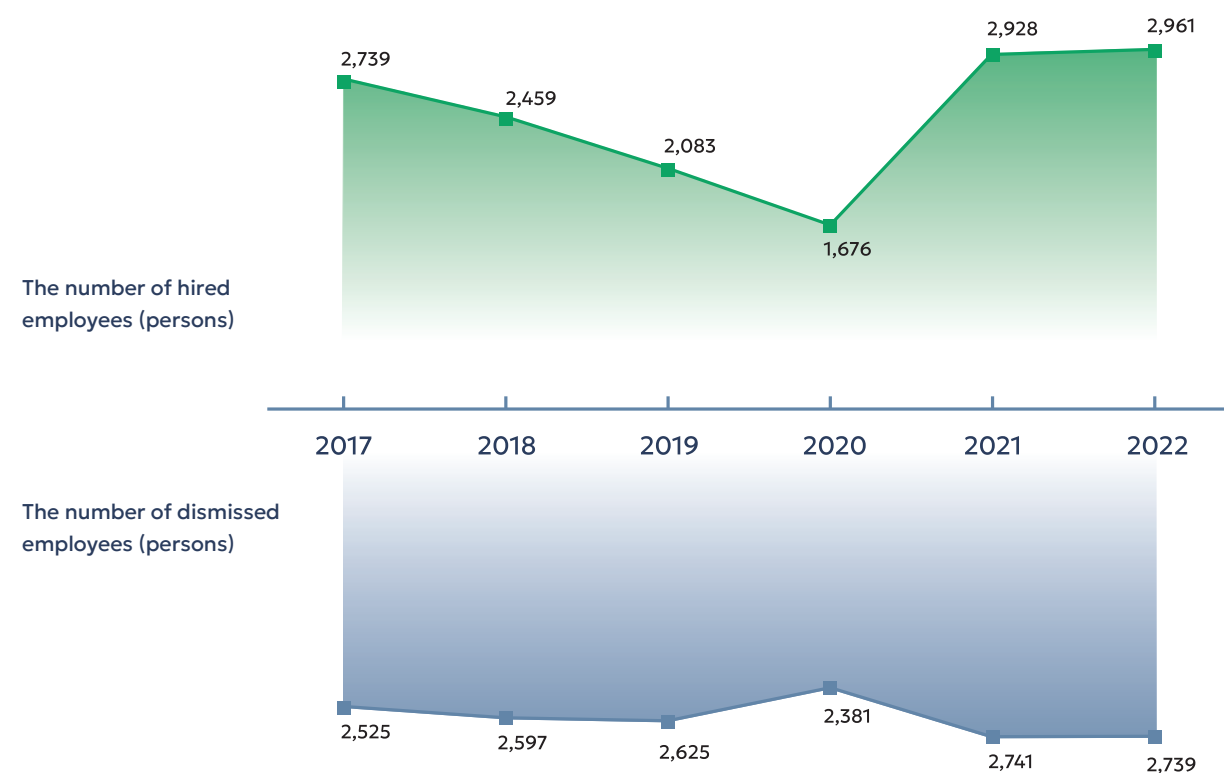
GRI 401-1

Staff turnover in the Coal Company "Kuzbassrazrezugol" for the 2017–2022 period.



Key personnel movement indicators:

GRI 401-1



## Wages and Financial Incentives System

GRI 2-19, 2-20

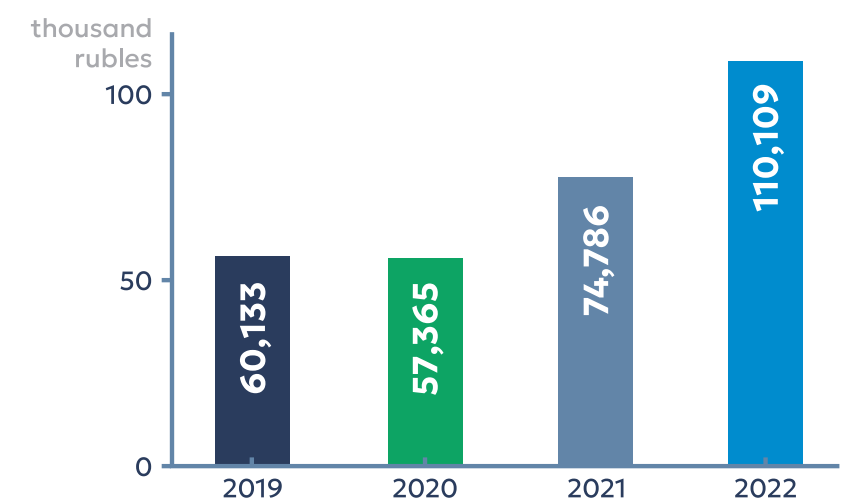
One of the key achievements of the Coal Company "Kuzbassrazrezugol" in 2022 is a significant increase in wages. By the end of the year, monthly wages increased by 47%. This continues the Company's long-term trend of annual wages indexation.

**+47%**

wages growth in 2022

Wage rate is increased depending on the economic situation. In 2022, for all of the Coal Company "Kuzbassrazrezugol"'s employees it was indexed twice: by 5% from January 1 and by 5% from May 1. The Company has introduced a system of progressive bonuses for main professions — excavating teams and technological vehicles drivers. For each percentage of exceeding planned targets, an additional bonus of 2.5% has been awarded. Due to a new financial incentive system, employees could influence the amount of their wage. Under the transformation program, each employee can receive additional remuneration for proposals to improve production processes: these are submitted through the "Factory of Ideas" corporate business system tool. In 2022, the total amount of bonuses for authors of proposals implemented in operations amounted to almost 3 million rubles.

Average wage in the Company, rubles





## Personnel Involvement

GRI 403-6

The Company pays great attention to increasing its employees involvement. The Coal Company "Kuzbassrazrezugol" annually performs surveys, measures and analyzes satisfaction with working conditions and the general atmosphere in the Company. The first survey concerning the level of the Company employees' involvement was carried out in 2021. The 2022 survey results showed an increase in the involvement index by 6.9%.

To increase the employees' interest in results of their work, as well as the satisfaction and loyalty of personnel, the Company has developed comprehensive plans taking into account the wishes of employees. In 2022, the plan contained 59 measures to improve working conditions, including:

- repair and re-equipment of accommodation and industrial premises;
- launching additional service buses to transport employees to work places and modernizing the passenger vehicles depot;
- repair of air conditioners on diesel and electric locomotives;
- revision of safety footwear and personal protective equipment, and purchase of products with improved characteristics;
- comprehensive informing employees about changes in the Company, benefits, payroll and career opportunities;
- organizing corporate cultural events and the "Best in Profession" competitions.

**For 2023, the Coal Company "Kuzbassrazrezugol" plans 149 measures to improve conditions for employees in increasing the overall level of job satisfactions in the Company.**

## Employees Social Support Programs

GRI 2-30, 12-18

The Coal Company "Kuzbassrazrezugol" social policy is organized in a systematical manner, based on the Collective Agreement, which provides for about 70 different areas of the Company's employees and members of their families support. Costs of its implementation in 2022 amounted to almost 1.7 billion rubles.

# >70

measures of social support for employees and their families

# 1.7 billion

rubles of social investments in 2022

## VHI Program

GRI 403-6

An important form of social support of the Coal Company "Kuzbassrazrezugol"'s employees is voluntary health insurance (VHI). All employees of the Company are provided with insurance policies.

The current VHI program available in the Company provides for:

- outpatient services;
- emergency medical care on the RF territory;
- remote (telemedicine) online consultations.

**Employees can also acquire an extended voluntary health insurance program for themselves and their family members at a reduced price.**

## Loyalty programs

GRI 203-2

In 2022, the Coal Company "Kuzbassrazrezugol" and the Gazpromneft entered into an agreement to issue fuel cards for the Company's employees, which would provide a 10% discount on fuel. For the convenience of settlement, the amount of purchases at the end of the month shall be withheld from wages.

In 2023, the Company plans to launch a social project that will enable miners and members of their families to receive discounts at trade and

service enterprises in Kuzbass upon presentation of special corporate cards.

## Housing Program

GRI 203-2

Under the corporate housing program, the Company provides employees with loans for purchasing real estate in the amount of up to 70% of the real estate cost. The loan is issued at 5% per annum. Since 2007 to 2022, preferential loans were issued to 889 employees of the Company, of which 24 loans — in 2022.





## Sporting and Mass Participation Events

GRI 203-2

Employees of the Company are regular participants in sporting events. This introduces them to a healthy lifestyle and builds up team spirit. Over a thousand of the Company's employees annually participate in sports tournaments and pass Fit for Labor and Defense standards.

The main sporting event is the annual corporate sports and athletic contest. In 2022, it was held for the 22nd time and brought together more than 400 employees of the Company. They were competing in nine disciplines: skiing, basketball, volleyball, table tennis, chess, mini-football, kettlebell lifting, tug-of-war, and swimming. For the fifth year in a row, the title of the Company's strongest team was won by the Taldinskiy open-pit coal mine athletes. Miners of the Kedrovskiy open-pit coal mine took

the second place, and athletes of the Mokhovskiy open-pit coal mine became bronze medalists. The best were also determined in each kind of sport. Sportsmen of the Coal Company "Kuzbassrazrezugol" participate in regional and all-Russian competitions and marathons. So, in April 2022, the Coal Company "Kuzbassrazrezugol" team took the third place at the regional stage of the All-Russian Physical Culture and Sports Complex Festival "Fit for Labor and Defense"

(GTO) among labor teams. Almost 400 employees of the Coal Company "Kuzbassrazrezugol" took part in the summer corporate festival "KRUG". Teams from the subsidiaries and management boards of the Company competed in sports and gaming relay races, music and culinary competitions. The main goal of sports and cultural events is to unite employees, form a friendly collective and a cohesive team.



## The Miner's Day

GRI 203-2

The main corporate holiday of the Coal Company "Kuzbassrazrezugol" is the Miner's Day. In 2022, on this occasion, the Company's employees received more than 600 departmental, regional and corporate awards.

Traditionally, in August, on the eve of this professional holiday, the Company sums up the mining year results, acknowledging best labor collectives and teams. Based on the results of the 2021–2022 mining year, these were:

- among the subsidiaries — the Krasnobrodskiy open-pit coal mine, in the "Mountain Section" nomination: the site No. 1–9 of the Bachatskiy open-pit coal mine subsidiary;

- in the "Best Motor Vehicle Column" category — the technological motor vehicle No. 2 of the Taldinskiy open-pit coal mine subsidiary;
- among the Company's processing plants — the Krasnobrodskaya-Koksovaya coal-preparation plant (the Krasnobrodskiy open-pit coal mine).

The Coal Company "Kuzbassrazrezugol" traditionally

awards winners and runners-up with valuable gifts. This year they received 10 cars. The Company's festive events ended on August 27 in the Krasnobrodskiy urban settlement where in honor of the 75th anniversary of the "firstborn" of the open-pit coal mining in Kuzbass — the Krasnobrodskiy open-pit coal mine — the Company organized a holiday with retro cars exhibitions and master classes. The main present was a concert of Russian pop stars.





## Employees' Families Support

GRI 203-2

In 2022, almost 12 thousand children of the Coal Company "Kuzbassrazrezugol"'s employees received the corporate New Year presents. For these purposes, the Company has allocated about 13.7 million rubles, this is 59% (5.1 million rubles) more than in 2021.

In 2022, more than 800 children of employees spent their holidays in sanatoria in the Kemerovo Region and Altai Territory. About 300 more children together with their parents took health improvement courses at the Company's corporate sanatoria. The Coal Company "Kuzbassrazrezugol" allocated almost 40 million rubles for the children's health improvement campaign. The Company covers 80–90% of the cost of purchasing vouchers for children,

and privileged categories of families receive these free of charge. Employees' families with many children are also provided with financial assistance to prepare their children for school. In 2022, payments per one child were doubled and amounted to 5 thousand rubles. In total, 10.6 million rubles were allocated for these purposes. The Coal Company "Kuzbassrazrezugol" supports families of deceased miners. The

Company provides them with financial assistance and support: in 2022, almost 2.7 million rubles were allocated for these purposes. The Company organized health care in sanatoria for widows of deceased miners, payments of one-time financial assistance for the Miner's Day, also provides financial assistance for treatment, pays for children's education and monthly allowances.

## Support for veterans

GRI 203-2

The Company provides a wide range of benefits for veterans. The pensioners' support program includes corporate supplement payments to pensions, compensation for housing heating costs, free and discounted vouchers for recreation and treatment in sanatoria and health centers in Kuzbass Region and Siberia, and also — a single-time targeted financial assistance. Annual expenses for social support of this category amount to about 300 million rubles.





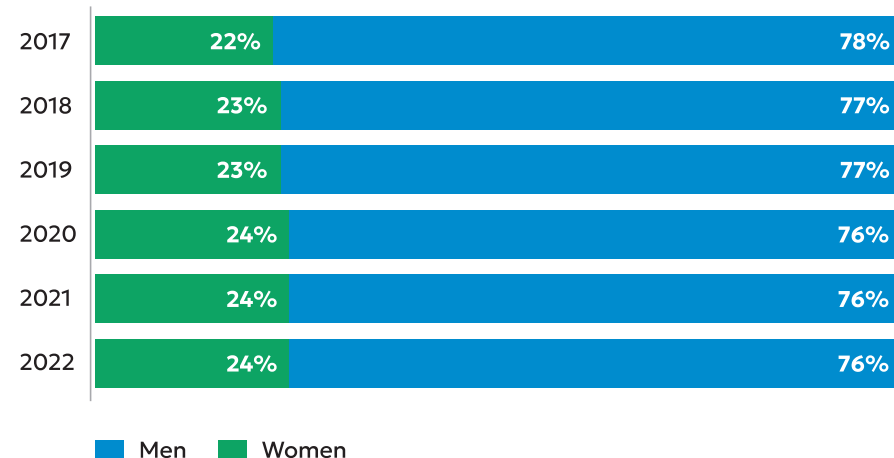
## Support for women

GRI 405-1 12-19

The Company prohibits any discrimination in terms of setting and changing employee wages depending on their gender and age.

The share of women in the overall personnel structure of the Coal Company "Kuzbassrazrezugol" is 24%, which is higher than the industry average (18.7%). The low share of women in the industry is due to the nature of mining industry, physically demanding hard work and hazardous production conditions.

Share of men and women in the personnel structure of Kuzbassrazrezugol for the 2017–2022 period

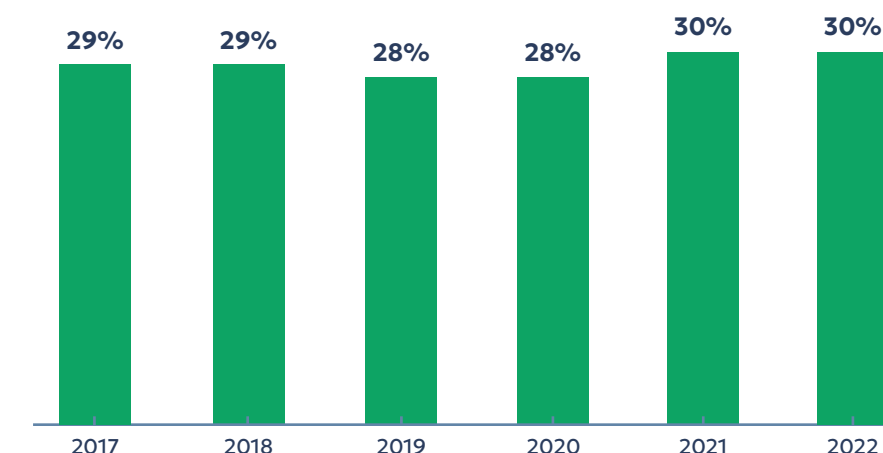


Men Women



The Company supports women in their professional self-actualization. Among the Coal Company "Kuzbassrazrezugol" managers, the share of women is 31%. This is comparable to the European average in business where the share of women at leadership positions has amounted to 34.8%.

Share of women in the management board of the Coal Company "Kuzbassrazrezugol" for the 2017–2022 period.



The Coal Company "Kuzbassrazrezugol" takes mandatory measures in accordance with the law to ensure social protection of women:

- does not allow women to be engaged in heavy physical works connected with lifting and manually moving heavy objects the weight of which exceeds the established standards;
- provides pregnant women the opportunity to switch to easier works if they have a medical certificate;
- pays monthly allowances of 3,050 rubles to women on maternity leave for up to three years;
- on the 1st of September provides women with children (grades 1 to 4) with one day of rest with full pay;
- prohibits sending pregnant women on business trips, involving them in overtime works, night works, as well as on weekends and non-working holidays (but for cases when there is the woman's written consent and there are no medical contraindications);
- does not allow termination of an employment contract by the employer's initiative with pregnant women, but for cases of the enterprise liquidation, as well as with women with children under three years old, and with single mothers with children under 18 years old.

## Observance of Labor Rights

GRI 2-6, 2-28 12-18

93.8% of the Company's employees are members of the trade union, 100% of employees are covered by the Collective Agreement. This Agreement reflects obligations of the parties, control and responsibility for provisions implementation, regulates labor relations, working hours and leave procedures, and social guarantees for employees.

Each subsidiary has established Labor Dispute Commissions and trade unions that consider direct complaints. In the event of collective complaints, Company managers shall meet with the working staff to discuss the problem. Violations of labor rights can be

reported by the corporate helpline. The appeals are reviewed by the Director for Security and Regime and then by the responsible persons of branches and specialized directorates. In 2022, the confidential hotline received 41 messages from citizens and legal entities. Of

these, 15 were complaints about violations of employees' labor rights, information on 4 of them was confirmed, and response measures were taken to protect the rights of employees.



## Health and Safety

SDG 3, SDG 8

### Commitments for working conditions and safety improvement

GRI 403-1 403-2 403-3 403-5 12-14

The purpose of the Coal Company "Kuzbassrazrezugol" health and safety (H&S) management system is to ensure employees' safety at coal mining, processing, and production facilities operating.

Health and safety issues in the Company are regulated by provisions of the Russian legislation, international norms and standards, as well as by the occupational safety management internal Policy. The Coal Company "Kuzbassrazrezugol" interacts with the RF Ministry of Health, the RF Ministry of Labor and Population Social Protection, with Rostekhnadzor, local governments, and other control and supervisory authorities.

Since 2010, the Company has been certified according to standards of quality management, environmental management, and health and safety management systems. In 2022, the certification audit was completed, which confirmed the compliance of the occupational safety management system in force at the Coal Company "Kuzbassrazrezugol" with ISO 45001:2018 international standard requirements — "Occupational Safety and Health Management System. Requirements and Recommendations for Use".

In accordance with the corporate Policy in the field of quality, ecology and labor protection, the Company undertakes the following obligations:

- to comply with requirements of labor protection, industrial and fire safety legislation;
- to improve the occupational safety management system, built in accordance with the ISO 45001 standard requirements, and involve people in its maintenance;
- to ensure safe working conditions, prevent injuries and emergencies by implementing occupational health and safety objectives;
- to analyze potential hazards and reduce the injury rate risks and employees occupational diseases.

The Coal Company "Kuzbassrazrezugol" annually invests in ensuring safe working conditions. In 2022, over 1 billion rubles were allocated for labor protection and industrial safety measures. The Company adheres to the risk-based approach and strives to prevent dangerous situations, and therefore funds are allocated primarily to organization of preventive measures, including personnel training. To reduce potential danger from harmful and hazardous factors, the Company has analyzed all production processes. A register of significant hazards and unacceptable risks for the 2022–2024 period has been developed. It helps to prevent emergencies, reduce the number of incidents and create a safe working environment for all employees. The Kuzbassrazrezugol MC Management Board has created commissions for industrial safety certification and a commission for testing labor protection knowledge at subsidiaries, the Avtotrans Stand-Alone Business Unit, and the Management Board of the Company. Work is underway to establish in-house industrial safety certification commissions at the branches. Ensuring industrial safety is one of the key guarantors of the Company sustainable development.

## Occupational injuries

GRI 403-9 403-5

One of the Coal Company "Kuzbassrazrezugol" strategic objectives is to prevent the occupational injuries. In 2022, 13 cases of occupational injuries occurred at the Company enterprises, which is almost 1.5 times less than the year before.

The number of cases of occupational injuries by subsidiaries and the stand-alone business unit:

- minor injuries – 9;
- severe injury – 3;
- fatal injury – 1.

without the issued work order indicating the sequence of actions and security measures, without coordination with the supervising officials;

- improper use of personal protective equipment by the victims.

The main causes of injury:

- using dangerous methods and techniques by employees in course of work performance;
- violating by the victims requirements of the rules and instructions on labour protection;
- performing by employees operations that are not related to the issued work order,

By 2025, the Coal Company "Kuzbassrazrezugol" plans to reduce the industrial injury indicator by half, compared to 2021, when 21 workers were injured. For achieving this goal, the Company takes actions in two areas:

- technical modernization of production to make it safer;
- raising the level of production culture, for eliminating influence

In order to reduce the occupational injury rate, the Company has implemented the system of training employees and testing their knowledge. In 2022, this training was completed by 85.5% of employees: this is more than 15 thousand people.

of the human factor. All industrial incidents and accidents are investigated, for the purpose of identifying the causes, and preventing such situations.

## Transport safety

GRI 403-6

Modern high-performance machinery contributes to improving labor protection, industrial safety and reducing environmental impact.

The Company has been carrying out large-scale modernization of the main mining: almost half of the fleet of mining dump trucks and a third of the fleet of bulldozers and graders have been updated. In total, since 2021, the Company has acquired 278 mining dump trucks, 51 bulldozers and graders, over 25 hydraulic excavators, over 300 vehicles, including passenger vehicles, as well as machinery for equipment repair and

installation, technological ways and railways repair and maintenance. The Coal Company "Kuzbassrazrezugol" uses transport not only in the main production process, but also for transportation of its employees. In 2021–2022, the Company acquired 66 new buses. They are equipped with seat belts, air conditioning and heating systems, reclining chairs with armrests, USB connectors for charging mobile devices.

In 2023, it is planned to receive over 100 units of mining vehicles, including 90 mining dump trucks with their lifting capacity from 55 to 220 metric tons. Employees will be trained in defensive driving.

To ensure comfortable and safe delivery of employees to work, the fleet of passenger vehicles is being renewed.

## Employee health protection

GRI 403-10

The Coal Company “Kuzbassrazrezugol” implements the comprehensive program aimed at employees’ health protection and occupational disease prevention. Following the results of special assessment of working conditions, the vast majority of workplaces are classified as Class II (acceptable working conditions).

Employees regularly undergo all types of medical examinations: mandatory preliminary examinations, periodic scheduled examinations, pre-shift and post-shift examinations (for employees engaged in work in harmful and (or) dangerous working conditions). The electronic system of medical examinations (ESME) has been introduced at the coal mines. In 2022, the Company registered 18 cases of occupational diseases, which is 28% less than in 2021.

### The most common types of occupational diseases:

- hand-arm vibration syndrome — 61.1%;
- musculoskeletal system diseases — 27.8%;
- hearing disorders — 11.1%.

For minimizing the impact of harmful production factors on its employees, the Company buys equipment with anti-vibration chairs, with increased dust and noise mitigation. Employees are also provided with means of individual and collective protection. The Coal Company “Kuzbassrazrezugol” was the first among the mining enterprises in the Kemerovo Region to massively give its employees corset belts, which significantly reduced the indicators of temporary disability in musculoskeletal system diseases. Another novelty tested in the Company, and then adopted at other enterprises of the industry, is the self-darkening mask “SpeedGlass” for electric and gas welders. There are plans to provide its employees suffering from visual impairment with protective glasses with the corrective effect. The glasses will be issued to

those who are engaged in precise work in harmful production. The Company organizes permanent health resort treatment for employees both in its own corporate sanatoria in the Kuzbass territory and in other health-improving institutions of the Russian Federation. In 2023, it is planned to launch the “Healthy Meals” project. Employees of coal enterprises will be able to receive subsidies for set meal during each work shift, for purchasing cooked meals. Those who work in remote areas and cannot attend the canteen will receive set meals in vacuum packaging.

## Digital safety solutions

In 2022, the Coal Company “Kuzbassrazrezugol” introduced the IT system for monitoring the mining dump truck drivers’ fatigue “OKO-Mining”, developed by the Company’s request. The aim of the project is to prevent accidents related to drivers’ loss of concentration.

The dump trucks are equipped with cameras, optical sensors, a vibrating motor and an audible alarm unit. The equipment reads the driver’s gaze movement while the vehicle is moving at a speed of over 10 km/h, and signals in case of loss of concentration. The system is connected to the dispatch station. The dispatcher can monitor the data from cameras in the dump truck cab

and outside of it in real time. The system helps detect drivers’ fatigue, reduced concentration, drowsiness, as well as the use of mobile devices when driving. After launching the system, the overall level of drivers’ discipline has essentially increased. This significantly reduces risks of emergencies.



## Multifunctional Safety System (MFSS)

The Multifunctional Safety System (MFSS) is being created at the Company’s coal mining assets for remote monitoring of all safety-critical mining parameters.

For this purpose, digital twins of coal mines are being developed on the basis of a three-dimensional geological model. Operational and high-precision data are collected using digital equipment: radars, borehole sensors, quadcopters, GPS systems, mobile laser scanning

systems and the hydrographic complex. The system analyses the information and warns of danger. The 3D model has been ready for the Taldinskiy open-pit coal mine; in 2023, the Coal Company “Kuzbassrazrezugol” plans to digitize the Bachatskiy and Krasnobrodskiy

open-pit coal mines. Next year, the MFSS is planned to be introduced at 10 production facilities of the Company, including processing plants, for the purpose of ensuring safe and trouble-free production.

## Provision of personal protective equipment and overalls

In 2022, the Coal Company “Kuzbassrazrezugol”’s enterprises switched to the new model of issuing overalls and personal protective equipment (PPE) to employees. This function is outsourced to specialized organizations to streamline and speed up the process.

5 new modular overalls centres have been created next to the administrative and household facilities of the open-pit coal mines. They are equipped with large warehouses, fitting rooms and containers for collecting overalls with expired shelf life. For the employees’ convenience, 5 additional PPE issue points have been organized in the territories of the Company’s enterprises: in the cities of Kaltan, Prokopyevsk, Novokuznetsk, Kemerovo and Belovo.





## Training

GRI 404-1 404-2

SDG 4

**Increasing efficiency and profitability of coal mining is possible only by the efforts of the team of professionals with high-level skills.**

It is important that the Company's employees are technically competent specialists, and simultaneously have so-called "soft" skills of teamwork, planning, system thinking, were responsible for the result, and take the initiative.

When organizing training for its employees, the Coal Company "Kuzbassrazrezugol" takes into account the following factors:

- 1. Production is becoming increasingly high-tech.**  
For improving its production, the Company uses increasingly

complex technical solutions. To do this, specialists need deep knowledge, developed engineering thinking, the ability to think systematically and long-term.

### 2. The staff expands.

The Coal Company "Kuzbassrazrezugol" is developing new areas of deposits and attracting new specialists to work. The communication and co-ordination process shall be well established in order for the Company to operate effectively.

### 3. The labor market changes.

Due to demographic changes, the number of applicants decreases. In this situation, the Company has been building the system of additional theoretical and practical training, so that employees could be ready to implement any task..

## The Company's commitments

GRI 404-1 404-2 404-3

**The Company organizes employee training in various programs at the Company's corporate Training Centre and third-party educational organizations. The key area of focus is improving the digital, managerial and personal competences of personnel, including those of managers at various levels.**

The Company's Training Centre provides training under additional education programs, as well as vocational training for training, retraining and professional development of its employees. Trainers are experienced and qualified specialists of the Company. In 2022, over 19.8 thousand persons were trained at the Training Centre of the Coal Company "Kuzbassrazrezugol", including 7.7 thousand persons under vocational training programs and 12.1 thousand persons under additional education programs. The training completely covers the need

for specialists in working professions for the Company and its branches, and partially — for subsidiaries and dependent companies. The important task of corporate training is improving managerial skills of managers. In 2022, over 50 employees of the management team received new skills. The corporate training system is being improved. The training formats are selected at the services' requests and the production tasks: these are professional training, advanced training, seminars, trainings, distance courses, participation in forums, etc. In line with the transformation

program, training in lean manufacturing, project work, efficient production management, training of planners and reliability engineers from among maintenance personnel, as well as the Procurement Academy program is being carried out. The employees master digital technologies and mining software. The Company's expenses for staff training in 2022 amounted to 39.6 million rubles, on average it is over 2.5 thousand rubles per employee.

### Average number of training hours

Name	2021	2022	Change, compared 2022 to 2021, %
Average number of training hours per employee (per year)	37	42	+13

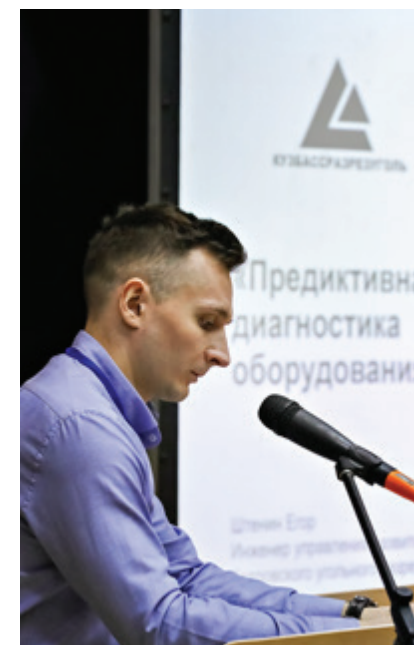
### Training of the Company's employees

Name	2021	2022	Change, compared 2022 to 2021, %
Number of employees trained, persons	20,163	34,467	+71
Average number of hours of compulsory training per employee (per year), h	16	16	-
Average number of hours of optional training per employee (per year), h	38	43	+13
Total investment in training, thousand rubles	28,210	39,663	+41
The amount of investments in one employee's training (per year), thousand rubles	2,162	2,532	+17

## Work with young people

GRI 203-1 203-2

**In the context of the demographic crisis and the outflow of people from the region, the Company attaches special importance to working with young people. For involving talented young personnel in the Company, the Coal Company "Kuzbassrazrezugol" is engaged in career guidance, organizes production practices, excursions to coal enterprises for schoolchildren and students.**



For young professionals to be employed in the Company after receiving higher or secondary vocational education, there is a set of support measures. Relocation allowance is paid, living expenses are compensated, preferential housing loans are provided. Since 2012, the Youth Council public organization of the Coal Company "Kuzbassrazrezugol" has been operating. It consists of 195 people. The mission of the Youth Council is to improve the Company's competitiveness and promote the development of employees' creative and professional potential by uniting young specialists and their effective work.

The Council pays special attention to science and innovative developments. Members of the Council take part in competitions and forums where they present their developments, as well as organize such events themselves on the Company's base. So, in 2023, the IV regional contest of engineering and technical projects of working youth of Kuzbass "Days of Technologies" will be held at the site of the Coal Company "Kuzbassrazrezugol". The participants will present their innovative projects in ecology, efficiency improvement and digitalization of production.



## Cooperation with educational institutions

GRI 203-1 203-2

The Coal Company “Kuzbassrazrezugol” cooperates with Kemerovo State University (KemSU), Kuzbass State Technical University (KuzSTU), Siberian State Industrial University (SibSIU) and with 16 technical schools and colleges of Kuzbass. Systematic career guidance work is also carried out jointly with schools. The Company supports talented schoolchildren and students, helps to implement their technical ideas, proving in practice its status of reliable employer.

KuzSTU trains engineering personnel in the specialties in demand in the Company. Employees of the coal company read lectures for students, are members of state attestation commissions, share their applied skills in course of production practices. The Coal Company “Kuzbassrazrezugol” helps the university develop science

and material-and-technical base, organizes meetings of students with graduates of the University who hold senior positions in the Company. The Company is interested in the graduates’ high-quality training; therefore it helps KuzSTU improve the material-and-technical base. In 2023, at the Mining Institute

of KuzSTU, a modern classroom modernized with participation of the Coal Company “Kuzbassrazrezugol” and its Kuzbassrazrezugol-Vzryvprom subsidiary will open. In the classroom, students trained in specialty “Mining” will study the technology of blasting operations in mining.

## Adaptation and career growth

Since 2022, the Coal Company “Kuzbassrazrezugol” has a program for the adaptation of new employees.

To help employees adapt during employment or transfer to a new place of work, and to help students successfully complete their internships, the Company assigns them a mentor from among the most experienced employees. For training and supervising internship of young specialists, the Coal Company “Kuzbassrazrezugol”’s mentors receive additional payment. In 2022, 3.6 million rubles were allocated for these purposes.

To determine the growth area and the need for employee training in 2023–2024, the Company is going to develop models of competences. This will help determine the area of each employee’s professional growth.



## State professional standards

Since 2019, the Coal Company “Kuzbassrazrezugol” has been developing professional standards for open-pit mining. For this purpose, the working group headed by the Company was created on the basis of the All-Russian Industrial Association of Coal Industry Employers (AOOORUP).

In total, the industry working group under the Company’s leadership formed five state professional standards (SPS):

- “Bulldozer driver in mining” entered into force on September 1, 2020;
- “Vehicle driver engaged in the process” entered into force on September 1, 2022;
- “Drilling rig operator in open-pit mining” and “Conveyor operator at coal mining enterprises” will enter into force on September 1, 2023;
- “Excavator operator in mining” will enter into force on September 1, 2023.

All the professional standards have been specially developed for Russian open-pit coal mining enterprises. On the basis of the new SPS for open-pit mining, uniform qualification requirements for employees of all enterprises of the industry will be formed, and educational programs for training in the system of higher and secondary vocational education will be updated.



## Support of territories

SDG 10, SDG 11

The enterprises of the Coal Company “Kuzbassrazrezugol” are city-forming ones in their territories of operation.

The Company strives to have a productive dialogue with employees, local residents and authorities, create comfortable working conditions, provide social benefits, and develop social infrastructure on the ground.

All this facilitates increasing the quality of people’s lives. The Company is aware of its responsibility for sustainable development of the region as a whole and contributes to this area.

in overhauls of Lyceum No. 22 in the urban settlement Bachatskiy, Burlakov secondary school in the settlement Tikhonovka, in the repair of the gym in Gymnasium No. 32 in Novokuznetsk. In 2022, with the Company’s financial support, tourist routes were developed in the State Natural Botanical Reserve of Regional Significance “Lutshchevo village slopping hills” (Prokopyevskiy Municipal District), and the Regional

Natural Monument “Artyshta” (Belovskiy Municipal District). The project has been implemented jointly with scientists of the Kuzbass Botanical Garden of the Federal Research Centre for Coal and Coal Chemistry of the Siberian Branch of the RAS, with the support of Kuzbass Government. The total expenses of the Coal Company “Kuzbassrazrezugol” for charity in 2022 amounted to 618 million rubles.

**For implementation of social projects in 2021 and 2022, the Coal Company “Kuzbassrazrezugol” was awarded the title of “Benefactor of the Year” following the results of the competition with the same name held by the Administration of Kemerovo**

## Commitments to support and develop the region of operation

GRI 203-1 203-2 413-1 12-8

Agreement on social and economic cooperation with the Government of the Kemerovo Region — Kuzbass

In 2001, the Coal Company “Kuzbassrazrezugol” became the first in the region to conclude the agreement on social and economic cooperation with regional authorities. For more than 20 years, the document has been annually extended and is the guarantor of the Company’s stability and responsibility to the region and its residents.

**Under the agreement, the Coal Company “Kuzbassrazrezugol” takes commitments:**

- to employees — on the preservation and creation of jobs, wages, social guarantees and indexation of wages in accordance with the Collective Agreement;

- to the Kuzbass Government — on the delivery of charitable coal and coal for municipal and household needs.

The Company strives to take into account state, public and corporate interests in its work.

## Social policy and charity

GRI 203-1 203-2 12-9

One of the main principles of the Coal Company “Kuzbassrazrezugol”’s social policy is taking care not only of its employees, but also of all residents of the Kemerovo Region. The Company’s approach to social and charitable initiatives contributes to sustainable development of the coal industry in the Kuzbass, and influences the quality of life in the region.

The Company recognizes importance of involving all stakeholders in development of social programs. Open dialogues, public hearings, work with experts and partners make it possible to determine priorities and efficiently implement social investments. This results in creating

the comfortable urban environment and emerging new growth points. The Coal Company “Kuzbassrazrezugol” annually supports social projects in the territories, including landscaping park areas, repairing roads, schools and residential buildings, constructing

sports facilities. In 2022 alone, almost 338 million rubles were allocated for these purposes, in framework of charity, including more than 35 million rubles for development of urban infrastructure, construction and repair of roads. The Company invested over 180 million rubles

## Areas of charitable support of the Coal Company “Kuzbassrazrezugol”



## Organization of sanitary protection zones

GRI 12-10 12-13

The sanitary protection zone (SPZ) of an enterprise is a buffer area between the industrial facility and the regulated territory: residential buildings, dachas, recreational areas, public spaces. It is necessary to protect residents of nearby territories from the negative impact of industrial facilities.

The Coal Company "Kuzbassrazrezugol" regularly monitors the environment condition, examines quality of atmospheric air, soil and water. The Company provides the results of these studies to adjust location of the sanitary protection zones.

By the end of 2021, 7 SPZs were arranged next to the Company's coal

enterprises and production facilities. The remaining 9 areas were registered in 2022. The coordinates of all SPZs of the Company are entered in the Uniform State Register of Legal Entities, and shown on the public cadastral map. Kuzbassrazrezugol openly informs about its plans, and assesses in advance whether its future activities will affect residents of

nearby settlements. Over the period from 2019 to 2022, more than 60 public discussions were held as part of the environmental impact assessment. All the observations and suggestions made by citizens have been taken into account.



## Interaction with Indigenous Minorities

GRI 12-11

Facilities of the Coal Company "Kuzbassrazrezugol"'s Bachatskiy open-pit coal mine branch are located in the area of residence and traditional economic activity of the indigenous minority — the teleutes. In Russia, the total number of teleutes is about 2.5 thousand persons, including about 1 thousand of them living in the Kuzbass, in close proximity to the Bachatskiy open-pit coal mine.

In order to organize effective cooperation with the representatives of small indigenous minorities, the Interface Plan was developed in 2020. It complies with requirements and recommendations of international documents (declarations,

conventions, standards and principles), international financial and other organizations (IFC, EBRD, Bettercoal, etc.), methodological and guidance documents and is 3 years long. The Coal Company "Kuzbassrazrezugol" supports

preserving the unique Teleute culture: it holds national holidays and competitions. In 2022, with the Company's support, the Kemerovo Region championship in Kuresh wrestling, the national teleute holiday "Ildin-kun" took place.







KUZBASSRAZREZUGOL

## Section III. Environment protection activities

Environmental management

Water-resource and water-conservation protection

Waste management

Atmospheric air protection

Greenhouse gas emission management

Energy efficiency

Recultivation and biodiversity





## Environmental management

GRI 3-3 12-22

The Coal Company “Kuzbassrazrezugol” is focused on efficient operation and sustainable development. The main strategic objectives of the Company are to continue innovation of production facilities, and introduction of advanced technology, for reducing the negative impact on the environment.

The Company’s comprehensive environmental protection program is focused on strict compliance with environmental safety standards at all stages of production, and application of the best available technology. In cases when, for objective reasons, the negative impact on nature cannot be neutralized in full, the Coal Company “Kuzbassrazrezugol” compensates for its activity impact.

Environmental management is carried out using the environmental management system certified according to the International Standard ISO 14001:2015. The environmental management system is part of the integrated management system. This ensures alignment of the environmental policy with other aspects of the activity at all levels of the corporate governance.

The basic document of the environmental management system is the Policy in the field of Quality, Environment and Labor Protection. It contains the Company’s commitments and development areas related to environmental protection. The Coal Company “Kuzbassrazrezugol” undertakes the following commitments:

- to continuously improve the integrated management system by perfecting processes, environmental performance and workplace safety;
- to prevent environmental pollution by carefully monitoring and continuously reducing the impact of environmental aspects of the enterprise;

- to ensure the rational use of natural resources when developing coal deposits;
- to recultivate the lands disturbed by mining operations;
- to take care of biodiversity conservation;
- to provide the employees’ annual professional development and competence growth in the field of environment protection;
- to improve the energy efficiency of production processes.

The Policy in the field of Quality, Environment and Labor Protection establishes principles of environmental protection of the Coal Company “Kuzbassrazrezugol”:

1. improving the environmental safety of the Company’s activity;
2. reducing gradually negative impact on the environment;
3. improving efficiency of using natural resources and energy sources.

The possible negative environmental impact of the activities of the Coal Company “Kuzbassrazrezugol” is associated with the following aspects:

- coal and rock mass extraction;
- emissions of pollutants into the atmosphere;

- land use in production activities;
- production and consumption waste generation;
- wastewater discharge and the risk of contaminated wastewater getting into the environment;
- risk of spillage of fuel and lubricants, waste oil and other substances.

The environmental management system is aimed at efficiently controlling these aspects, and eliminating environmental risks. At the current stage of technology development, coal mining and enrichment are related to the environmental disruption risk, including emissions of pollutants into the atmosphere, pollution of soil and water resources, noise exposure, and production and consumption waste generation.

## Register of significant environmental aspects

### OPEN-PIT MINING



Performance of surveying-geological and drilling-and-blasting supporting operations

**Environmental pollution:**

- risk of surface-water and soil pollution;
- pollutant emission resulting from blasting operations.



Rock mass preparation and extraction

**Landscape disturbance, depletion of natural resources:**

- formation of unclaimed disturbed lands.



Open-pit coal mining

**Depletion of natural resources:**

- coal extraction.



Coal and rock mass transportation, reclamation leveling

**Atmospheric air pollution:**

- emission of pollutants from the operation of internal combustion engines.



Open-pit fields reclamation, operation of drainage installations

**Surface water-body pollution:**

- discharging wastewater through the system of sumps, accumulators and settling tanks into water bodies.



Dumping

**Environmental pollution:**

- risk of contaminated storm water entering the environment;
- dust emissions from dusty surfaces.

**Land withdrawal for temporary storage:**

- overburden formation.

### COAL PROCESSING AND ENRICHMENT



Enrichment at processing plants

**Land withdrawal for waste disposal, environmental pollution:**

- solid production waste generation (enrichment rock).

**Atmospheric air pollution:**

- pollutant emissions into the atmospheric air, noise pollution.

### REPAIR AND MAINTENANCE OF MACHINERY, BUILDINGS, AND KEY ASSETS



Repair, maintenance, operation of mine dump trucks at the specialized base

**Land withdrawal for temporary accumulation of waste:**

- production waste generation (used railroad ties, scrap metal, tires).

**Atmospheric air pollution:**

- pollutant emissions into the atmospheric air.

### TRANSPORTATION, ACCEPTANCE, STORAGE AND DELIVERY (SALE) OF INVENTORY ITEMS



Fuel and lubricant storage and use

**Soil and wastewater pollution with fuel and lubricants, and petroleum products:**

- risk of fuel, petroleum product and oil spillage.

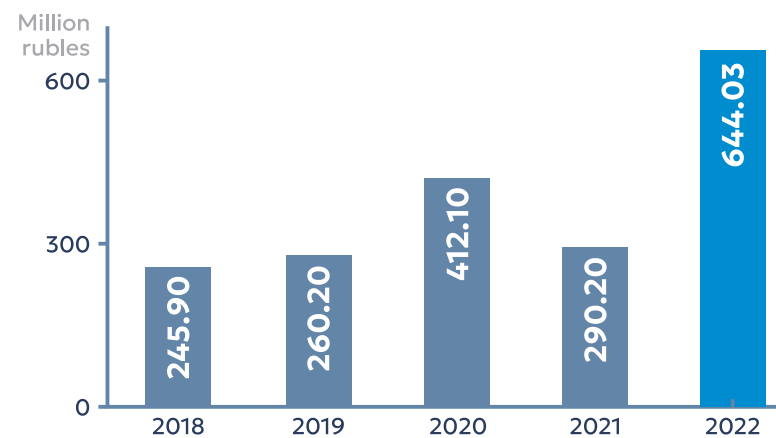
The Coal Company "Kuzbassrazrezugol" operates 90 hazardous production facilities of hazard class II, III and IV, as well as 5 hydraulic structures. Every year, the Company insures them against possible damage that may be caused to the environment in the event of an emergency.

The approach to ensuring environmental safety extends to the Company's supply chain. Both counterparts and contractors shall comply with the requirements in the field of environmental protection and industrial safety.

## Financing of the environment protection program

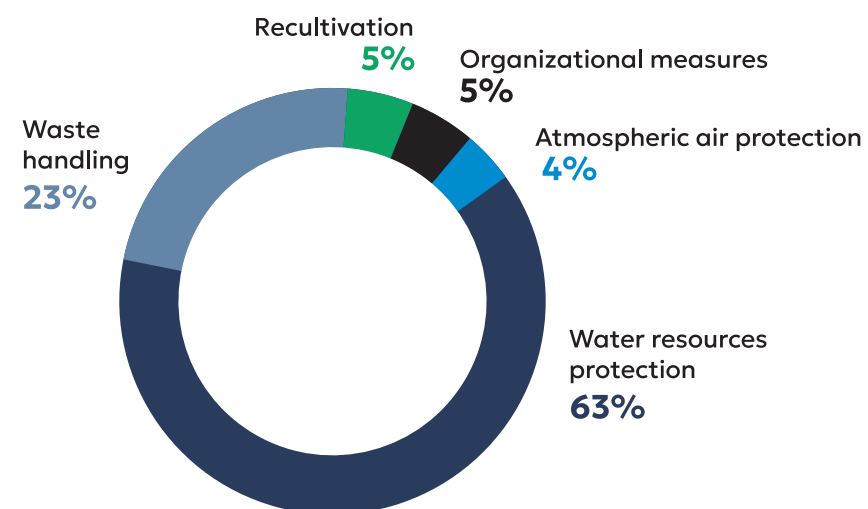
The expenses for implementing the environment protection program, ensuring environmental safety and environmental protection have a long-term upward trend: in 2022, these expenses have more than doubled, compared to 2021, and are planned to increase by 2023.

*The amount of expenses for organization of environment protection activities in 2022*



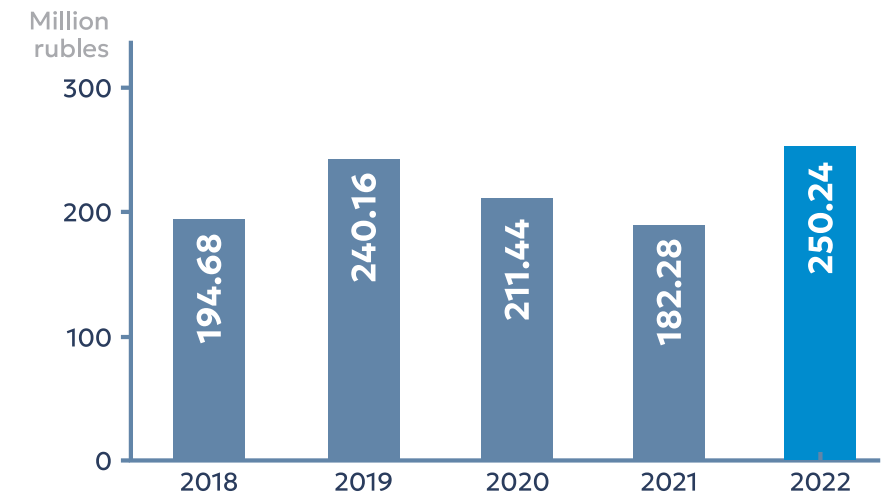
More than half of the expenses were spent on implementation of water-conservation projects. In 2022, over 29 million rubles were allocated for implementation of production control programs, development of environment protection documentation, obtaining permits, and training employees.

*The structure of expenses for organization of environment protection activities in 2022*



Significant part of environment protection expenses is the payment for Negative Environmental Impact (NEI). The amount of environmental payments increased by 37%, compared to the previous year.

*The amount of environmental payments for 2018–2022.*



Overall increase in payments is due to waste generation growth because of mining operation depth expansion. Herewith, the share of using overburden for laying in internal

dumps has also increased. Environment protection programs of previous years, targeted at preserving quality of atmospheric air and water resources have yielded

results: these payments decreased by 24.8% and 13.3%, respectively, in proportion to environmental impact reduction.

### Environmental payments

Payments for NEI, thousand rubles	2021	2022	Change
Total	182,276.80	250,239.07	+37.28%
For pollutant emissions into the atmosphere by stationary sources	5,228.58	3,932.08	–24.80%
For pollutant discharges into water bodies	904.88	784.69	–13.28%
For production and consumption waste placement	176,143.34	245,522.30	+39.39%

In 2022, there was no fine for violating environmental legislation to be imposed on the Company.



## Innovative environmental developments

**For reducing the environmental burden, the Company, in close collaboration with scientific organizations, develops and implements innovative solutions and the best available technology.**

In 2022, the Coal Company “Kuzbassrazrezugol” became a participant in three projects of Russia’s first comprehensive scientific and technical program of the full innovation cycle “Clean Coal — Green Kuzbass”.

The projects of the program are aimed at creating advanced solutions in coal mining, which will help improve environmental conditions in the Kuzbass, and improve safety of mining. Duration of the program is 5 years (2022–2026). At the preparatory stage of the program, research and development work is carried out. By 2026, the proven effective developments will be widely used at Kuzbass coal enterprises. The projects to be developed by the

Company together with scientists assume the integrated approach, and are aimed at creating efficient technology in three key areas of environment protection activities performed by the Coal Company “Kuzbassrazrezugol”:

### Atmospheric air protection

The project “Development and implementation of the technology for environmentally balanced mining based on digital transformation of drilling and blasting destruction processes at the Kemerovo Region — Kuzbass open-pit mines” makes it possible to minimize seismic impact and significantly reduce emissions of harmful substances into the atmosphere.

### Water resources protection

The project “Innovative technology of quarry and surface wastewater treatment intended for enterprises” is aimed at ensuring the water-resource quality by using the complex multicomponent system containing modified sorbents for extracting organic and inorganic impurities.

### Recultivation and biodiversity conservation

The project “Ecological test site of world-class recultivation and remediation technologies” will help to find the best way of recovering lands disturbed by coal mining.

## Involvement of employees in environmental activities

**It is important for the Company that each employee shares the approach of sustainable development and shows environmental responsibility in their work and everyday life. At the Coal Company “Kuzbassrazrezugol”, careful and responsible employees’ attitude to the environment is formed due to their active participation in various environmental campaigns.**

### Waste paper collection

The Coal Company “Kuzbassrazrezugol” won the regional environmental campaign for collecting waste paper “Paper Boom 42” for the third time in a row. The Company’s employees collected about 22 metric tons of paper and handed it over for recycling, which will help save more than 220 trees from being cut down. In total, over 750 trees were saved during the environmental campaign. Since 2019, at the Coal Company “Kuzbassrazrezugol”, the single waste-paper collection day has been held regularly.

### Plastic caps collection

Since 2020, the Company’s employees have been supporting another environmental charity campaign “Do Good”: they collect another type of recyclable materials — plastic caps. In 2021–2022, almost 160 kg of caps were collected and transferred for recycling.

### Landscaping and tree planting

The Coal Company “Kuzbassrazrezugol” regularly supports All-Russian, regional and municipal campaigns on landscaping territories. Over 2 thousand trees and shrubs turned green in the Kuzbass

in 2022, thanks to participation of the Company’s employees in environmental campaigns. Every year the Company takes part in the “Garden of Memory” International Campaign, planting young trees in memory of participants of the Great Patriotic War. Employees of all the Company’s enterprises, together with their children, take part in the campaign. In 2022, during the “Garden of Memory” campaign, 1,650 trees and shrubs were planted in the Kemerovo Region: maple, larch, bird cherry, Manchurian walnut, spruce, pine, rowan, ninebark, rosehip.





## Water resources protection and water conservation

GRI 12-7

SDG 6

The Kemerovo Region has the essential water resources potential, however surface and underground waters need to be treated with care and used rationally.

The Coal Company "Kuzbassrazrezugol" is one of the largest water consumers in the region. The Company's activities are connected with both intaking

insignificant volumes of natural water, and discharging underground natural waters into the rivers of the region, for the purpose of draining open-pit mines.

## Water resources protection commitment

Rational water consumption, together with ensuring water resources purity, is one of key areas of the Company's environmental activities.

Objectives of environmental measures for water resources protection:

1. Prevention of negative impact on water bodies. To do this, even when designing production sites, the Company takes into account the natural river flows and, if necessary, carefully redirects the watercourses.
2. Reduction of water pollution during industrial activities. The Company assesses risks at all stages of the production process, obtains permits for wastewater discharges, plans and implements organizational and technical actions, monitors the wastewater quality, submits necessary reports, and determines measures for improving the work.

The Company strictly complies with the requirements of the legislation:

- Each discharge point is registered in accordance with the established procedure: the resolution on granting part of the water body for use and

the permission for wastewater discharge have been obtained.

- Indicators of pollutants in wastewater do not exceed maximum permissible concentrations.

The Coal Company "Kuzbassrazrezugol" constantly searches for new solutions for technical modernization of treatment facilities to improve wastewater treatment.

The Company reduces volumes of water consumption and pollutant content in the drains of water bodies at all stages of the production process, using resource saving solutions and treatment systems:

### Designing production sites.

The Company designs solutions in compliance with all necessary legal requirements. Despite the objective nature intensity of the production process, the Coal Company "Kuzbassrazrezugol" looks for ways of minimizing disturbance of the river catchment areas, and, if impossible, plans the necessary compensatory measures for preserving the natural balance.

### Preparation of rock: blasting operations.

When using innovative blasting technology, pollutant emissions into the atmosphere and, accordingly, the amount of pollution entering water bodies reduce.

### Open-pit mining: open-pit fields reclamation, operation of drainage installations.

During the mining process, it is necessary to remove or redirect natural waters from the quarry area, for the purpose of providing access to coal seams. To do this, the Company uses special drainage systems. Wastewater is removed through pipelines (sumps) and passes through treatment facilities before being discharged into water bodies.

### Ensuring production processes: risk of fuel and lubricant spillage.

The areas where the oil is changed are equipped with special devices for preventing spillage.

### Dumping: risk of storm water entering the environment.

Hydrogeological and climatic terrain features are taken into account during the development. Dumps are placed

and provided with drainage systems so as to exclude water accumulation, and the drainage systems redirect surface flows for further treatment.

Besides, the Company carries out seasonal maintenance work. The Central Flood Control Commission of the Coal Company "Kuzbassrazrezugol" ensures safe and steady operation of branches in conditions of possible spring flooding. Each branch develops

the emergency prevention and response plans, creates reserves of necessary funds to be used in case of accidents.

Every year, the Commission examines the hydraulic structures of the open-pit mines. During the period of flooding, round-the-clock duty and monitoring of the water level in sedimentation tanks, condition of the dams, drainage structures, as well as instrumentation and controls are organized.

## Outputs

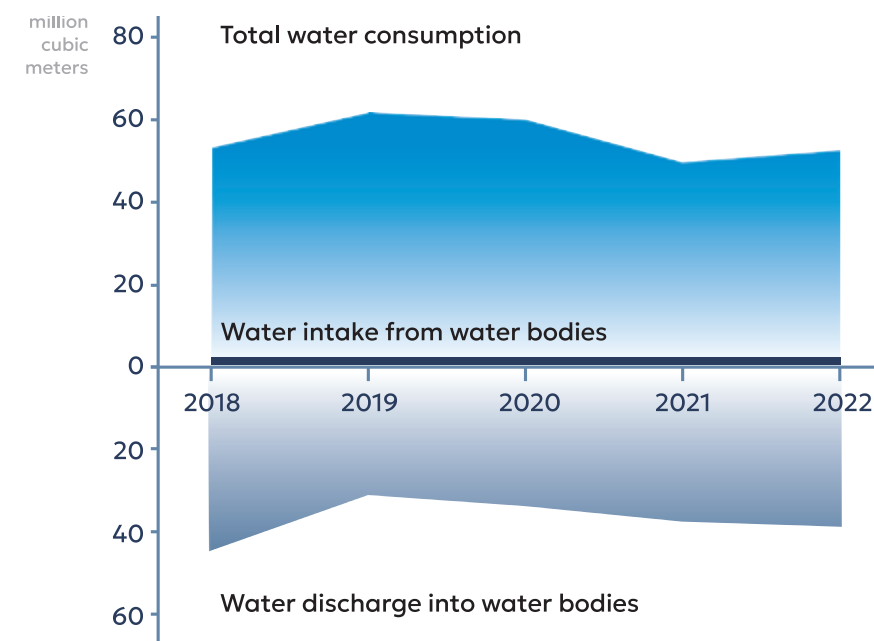
GRI 303-1 303-2 303-3 303-4 303-5

At the facilities of the Coal Company "Kuzbassrazrezugol", there are 2 water intakes and 28 wastewater outlets.

In 2022, water consumption slightly increased, compared to the previous

year, though decreased in general over the past few years.

### Water consumption and water disposal balance



protection zones. The Coal Company "Kuzbassrazrezugol" does not use sensitive or state-protected water resources, as well as avoids reserves particularly valuable for local communities and ecosystems.

Recycled and reclaimed water supply grows in volume:  
2021 — 32.742 million m<sup>3</sup> / 2022 — 34.077 million m<sup>3</sup>

The share of reclaimed water slightly decreases — by 1%:  
2021 — 65% / 2022 — 64%.

Water consumption for own needs decreased by more than 30% over the year:  
2021 — 18.032 million m<sup>3</sup> / 2022 — 12.602 million m<sup>3</sup>

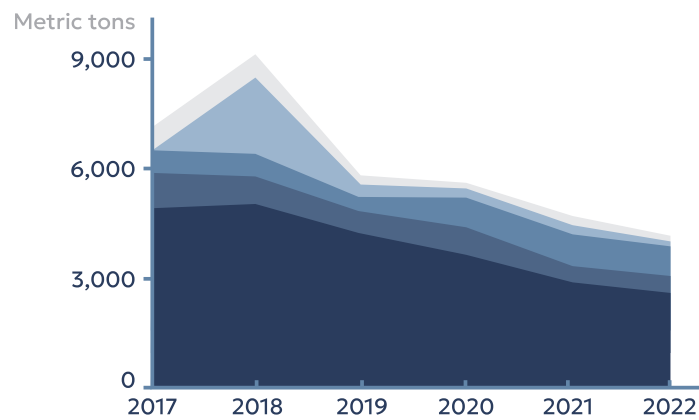
The total volume of pollutants discharged into surface water bodies decreases: by over 10%, compared to 2021, and by over 26%, compared to 2019.

According to the water disposal and water consumption schemes, the Company's production sites discharge quarry, surface, household and industrial wastewater into water bodies. Before entering the water body, the wastewater is treated. In 2022, wastewater discharge slightly increased in total, compared

to 2021 (by 0.1%), due to growth in volume of underground water inflow into the mines.

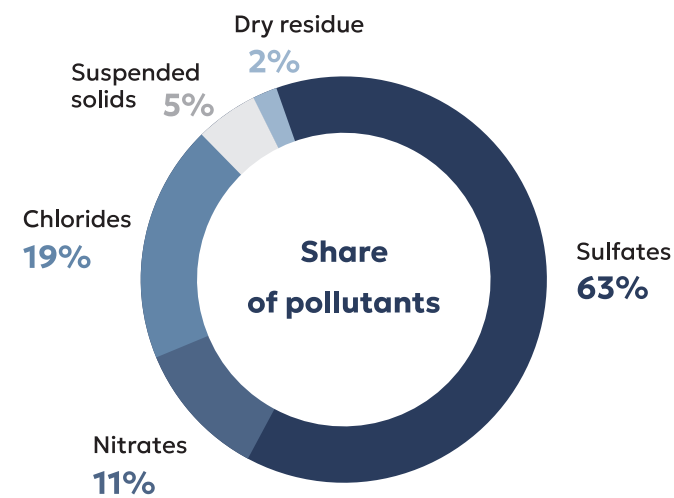
The Company's water intake does not influence sources of public water supply: the facilities locate neither near drinking water intakes, nor outside sanitary



**Pollution content**

Suspended solids  
 Dry residue  
 Chlorides  
 Nitrates  
 Sulfates

By composition, the largest share of pollutants are sulfates (about 63%), chlorides and nitrates by 19% and 11%, respectively; impurities of suspended solids and dry residue do not exceed 10%.



Ensuring the high-quality environment is integral part of the environmental commitment to be undertaken by the Company as part of its Development Strategy. The main initiatives that will address water conservation issues will include continuous improvement of wastewater management by maximizing water resource reclamation and reverse water supply to recycling cycles, improving efficiency of treatment of wastewater discharged into water bodies.

**Tactical tasks for 2023:**

1. Development of draft standards of permissible discharges for Taldinskiy and Krasnobrodskiy open-pit mines.
2. Modernization of wastewater treatment facilities before discharging the water into the Inya River.
3. Design of treatment facilities before water discharge into the Chesnokovka River.
4. Design and construction of storm water treatment facilities, which run from the "Taldinskoye Field" industrial site.

**Reference projects**

The Company cares not only about water resources purity, but also helps preserve their biodiversity. In 2022, almost 150,000 whitefish fry were released into the Tom River, which were specially bred by the Tomsk Scientific and Production Fish Breeding Complex.

Stocking is one of the methods of compensation and restoration of aquatic biological resources impacted by coal mining. Natural reproduction of fish is not enough, so artificial recovery of the fish population is required for preserving ecological balance and biological diversity.

The muksun and nelma fingerlings were released into the Tom River, where optimal conditions for their rearing and successful adaptation to the environment were created. This approach allows the fry to easily adapt to new habitats and subsequently go to spawn in rivers of the Kuzbass.

Employees of the Coal Company "Kuzbassrazrezugol" also took part in the annual event on cleaning the shores of water bodies from garbage as part of the All-Russian campaign "Water of Russia". This is part of the Federal Project "Conservation of unique water bodies" included in the

National Project "Ecology". Specialists from the Company's Administration and the Kedrovskiy open-pit mine branch restored order on the bank of the Chesnokovka River in the

Kemerovo Municipal District. During the campaign, employees of the Coal Company "Kuzbassrazrezugol" cleaned over 50 thousand m<sup>2</sup> of the territory.



## Waste management

GRI 12-6

SDG 12

### Safe waste management commitment

In the process of production activities of the Coal Company

"Kuzbassrazrezugol", waste of various type is generated.

### Main types of waste

Approximate share, %	Main types of wastes	Disposal measures	Hazard class
77	Overburden and enrichment waste	Are placed in the mined-out spaces, used in road construction and reclamation.	V
22	Overburden is placed in external dumps	Is placed in external dumps.	V
Less than 1	Conveyor belts, ferrous and non-ferrous metal scrap	Are transferred for processing to third-party specialized enterprises.	V
Less than 1	Used tires, cleaning rags, municipal waste, etc.	Are transferred to specialized enterprises for disposal and placement, partially disposed using own forces.	IV, III
	Waste oils, acid-free batteries, waste filters	Are transferred to specialized enterprises for disposal.	
Less than 1	Mercury and fluorescent lamps	Are transferred to specialized enterprises for neutralization.	I

About 99% of the total volume is overburden, which is safe waste (class V), it is placed on dumps of the quarries. In fact, the Company uses this type of waste for reclamation and recovery of the environment. Remaining types of the waste together make up less than 1% of the total volume.

### The Coal Company "Kuzbassrazrezugol" undertakes safe waste management commitments:

- to comply with requirements of the current legislation regarding accounting and timely paying for negative impact;
- to provide all its branches with necessary permits;

- to take measures for reducing waste generation;
- to arrange interim waste accumulation sites for mitigating the environmental burden;
- to ensure the waste disposal at their own facilities;
- to transfer the waste for disposal and neutralization to the licensed organizations.

As for the waste, different from municipal solid waste, the Company enters into contracts with specialized organizations selected on competitive basis. At the stage of the tender, due diligence of counterparties is carried out. The verified contractors have required

sites, equipment, qualified personnel and resources to effectively treat and dispose of the volumes of waste generated by the Company.

## Outputs

GRI 306-1 306-2 306-3 306-4 306-5

### The generation of almost all types of hazardous waste decreased in 2022, compared with 2021:

**CLASS I: -78%** due to the replacement of fluorescent lamps with LED lamps;  
**CLASS II: -24%** due to reduction of write-off of used batteries. Waste of the second class is neutralized at the own licensed site;

**CLASS III: +3%** due to an increase in the scope of construction and repair works;

**CLASS IV: -27%** due to proper waste streams management.

The generation of **CLASS V** waste increased due to an increase of overburden mining: **+28.09%**.

### Waste generation

Branch	Waste generation, tons					
	total	of which by hazard class				
		I	II	III	IV	V
Kedrovskiy open-pit mine	96,009,249.910	0.000	2.225	1,029.611	865.220	96,007,352.854
Mokhovskiy open-pit mine	73,536,146.803	0.009	1.187	203.401	342.432	73,535,599.774
Bachatskiy open-pit mine	172,563,261.532	0.907	1.165	755.455	890.811	172,561,613.194
Krasnobrodskiy open-pit mine	219,645,856.548	0.022	3.462	828.266	1,614.358	219,643,410.440
Taldinskiy open-pit mine	259,914,771.104	0.034	2.991	745.379	1,360.462	259,912,662.238
Kaltanskiy open-pit mine	154,650,246.369	0.062	2.674	335.258	917.343	154,648,991.032
<b>TOTAL</b>	<b>976,319,532.266</b>	<b>1.034</b>	<b>13.704</b>	<b>3,897.370</b>	<b>5,990.626</b>	<b>976,309,629.532</b>

### The amount of transferred waste increased in 2022, compared with 2021:

transferred to other organizations for disposal, neutralization, placement **+38.2%**;

disposed of (used) in captive production **+46.1%**;

placed at own waste storage sites **+8.1%**.

The main reason for the increase in the amount of waste is the increase in the scope of overburden mining. The Coal Company "Kuzbassrazrezugol" obtained 9 new licenses for subsurface use in 2022.

### Waste movement

Waste movement, metric tons	2018	2019	2020	2021	2022
<b>Generated</b>	874,903,528.303	913,199,023.910	812,836,080.000	762,245,955.744	976,319,532.266
<b>Transferred to other organizations for disposal, neutralization</b>	36,409.454	34,595.490	31,491.889	31,435.355	43,460.950
<b>Disposed</b>	291,910,327.136	284,684,064.370	270,581,916.420	296,769,580.057	433,464,376.550
<b>Placed at waste storage sites</b>	531,441,652.308	710,792,238.854	581,209,028.728	536,774,948.308	580,485,586.470

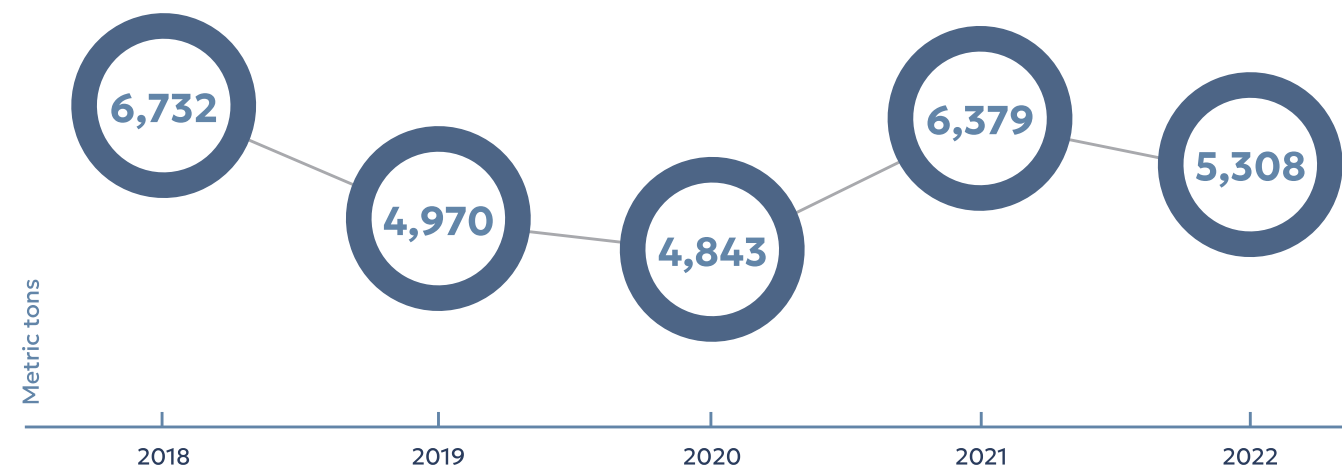


## Reference projects

### Disposal of giant tires

Used giant tires are the second type of waste in terms of volume after overburden. The Coal Company "Kuzbassrazrezugol" implemented a system of extended manufacturer responsibility, and contracts were concluded with specialized organizations that are engaged in the acceptance and subsequent disposal of these tires. The company maintains strict control at all stages of the work of contractors.

*The amount of giant tires disposal*



Used truck tires are classified as low-hazard class IV waste. However, rubber takes more than a hundred years to decompose in the natural environment, during which time it releases around 150 substances harmful to humans and the environment. Landfills made of tires are a fire-hazardous site. Up to 270 kg of soot and 450 kg of toxic gases are released into the atmosphere in the result of burning of a ton of rubber. The burial of used giant tires is prohibited in accordance with the current legislation, so the Company ensures 100% recycling of all generated waste of this type. The tires service life depends on many factors and averages 50–100 thousand km of mileage. Replacement costs are one of the significant items of the Company's expenses. In 2022, it was possible to reduce the frequency of tire replacement through the use of information systems, careful monitoring of mileage and optimization of routes. When

handling waste, it is important to take measures to reduce their generation.

The Company also pays attention to the safe accumulation and storage of waste. Used giant tires are stored at the sites for up to 11 months, then contractors take them out for further disposal. The Company arranges special site for temporary storage of used tires to minimize the environmental hazard.

In 2019, a new site for the storage of used tires with an area of almost 3 thousand square meters was built at the Vakhrushevskoye Field of the Krasnobrodskiy open-pit mine branch. The territory is equipped with waterproof reinforced concrete pavement, protection from atmospheric precipitation, sewage disposal system, as well as fencing and lighting. Tires are covered with a special rubberized canopy, which allows collecting and directing natural precipitation to drainage trays, from where they are diverted to wastewater treatment plants. The

completely clean water is then used for production needs. Storing tires in this way is completely safe.

The Coal Company "Kuzbassrazrezugol" plans to gradually upgrade all giant tires layout sites of the Company's branches. At the moment, the construction of a similar site at Kedrovskiy open-pit mine is being completed.

Further, the Coal Company "Kuzbassrazrezugol" transfers giant tires to specialized organizations that have a license for disposal and the necessary modern equipment for waste processing. Industrial processing points are located close to Bachatskiy and Taldinskiy open-pit mines, so the transportation of waste does not require the involvement of additional resources.

As a result of processing by low-temperature pyrolysis, liquid pyrolysis (furnace fuel), carbon black and metal

cord (scrap metal) are produced from tires. Tires can also be processed into rubber chips, which then is used for manufacturing safe surfacing for playgrounds and sports grounds, materials for road construction, used in the oil industry, for the production of new rubber products.

The company disposes of all used tires, spending up to 15 mln RUB a year for these purposes. Environmental damage is minimized in this case.



## Atmospheric air protection

GRI 12-4

Minimizing the potential impact of production processes on the quality of atmospheric air is one of the key areas of the integrated environmental program of the Coal Company "Kuzbassrazrezugol".

Kuzbass is included in the "Clean Air" federal project of the "Ecology" national project. The main task is to improve the air quality, reduce emissions of pollutants by more than

20%. The Company's atmospheric air protection actions contribute to the national development goal "Comfortable and Safe Environment for Life".

## Emission reduction commitments

The atmospheric air protection is managed in the Coal Company "Kuzbassrazrezugol" within the framework of the environmental management system and includes risk assessment, obtaining emission permits (draft maximum permissible emissions, MPE), planning and implementation of measures, air quality monitoring, reporting and development of measures for performance improvement.

The Company undertakes to comply with legal regulations:

- To provide necessary permits for each production site.
- As part of the implementation of the above measures in 2022, draft MPEs were developed and emission permits were obtained for Kedrovskiy open-pit mine and Bachatskiy open-pit mine. Draft MPEs were corrected, new limits were approved and permits were obtained for the subdivision where the number of sources of emissions changed.
- To ensure the compliance of atmospheric air quality parameters at the borders of sanitary protection zones of the Company's production sites with hygienic standards.
- Laboratory tests are carried out in accordance with the program of production environmental control. Instrumental and laboratory monitoring is performed by accredited laboratories: sanitary and

preventive laboratories of branches of the Coal Company "Kuzbassrazrezugol" and third-party laboratories.

In 2022, no exceedances of maximum permissible concentrations of pollutants in the atmospheric air were detected at any of the branches of the Coal Company "Kuzbassrazrezugol".

The company reduces emissions of pollutants into the atmosphere at all stages of the production process through upgrading and the use of new technological solutions:

### Preparation of rock: blasting operations.

The innovative technology of blasting reduces the seismic load and the amount of pollutants released into the atmosphere.

### Coal and rock mass transportation: emissions from machinery engines.

Along with fuel economy, more modern engines and route optimization result in lower exhaust emissions.

### Processing: coal enrichment in plants.

The use of cyclones, dust collectors, aspiration systems and ash collectors allows cleaning waste gases with an efficiency of 90–95%. A systematic work is also carried out to prevent fugitive sources of emissions: for example, coal and rock transfer units are sealed.

### Transportation and dumping: emissions from dusty surfaces.

For dust control the Company sprays water on haul roads, dumps and faces and uses a new technology of long-term dust suppression at coal mines using proprietary fixant solutions.

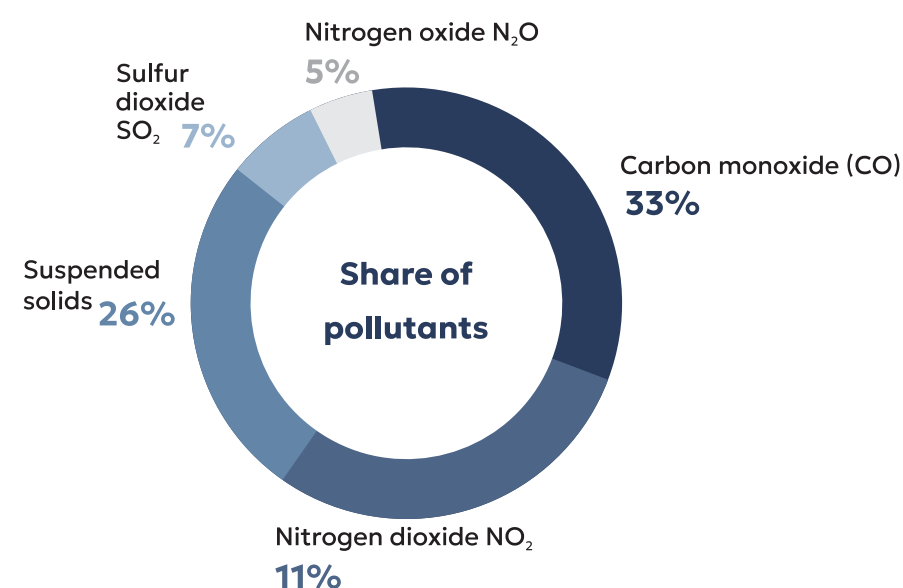
### Production process support: fuel combustion in boiler houses.

Operating modes are regulated and gas cleaning systems are used to reduce the amount of emissions. Every year, the Coal Company "Kuzbassrazrezugol" implements a set of measures to stabilize emissions of pollutants.

## Outputs

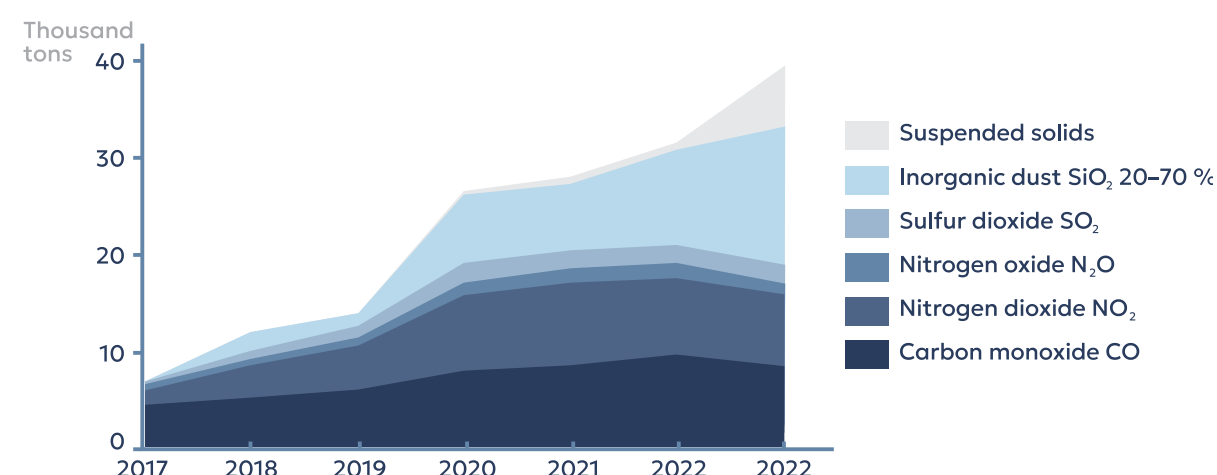
GRI 12-4 305-7

Inorganic dust is released in case of an open-pit mining that contains silicon oxide content of 20–70%; carbon monoxide (CO); nitrogen dioxide (NO<sub>2</sub>); nitrogen oxide (NO); sulfur dioxide (SO<sub>2</sub>) is released into the atmosphere.



The main contributors to the weight of pollutant emissions into the atmospheric air are Taldinskiy open-pit mine, Bachatskiy open-pit mine, Kedrovskiy open-pit mine, emitting 9,187 tons, 8,626 tons and 7,368 tons, respectively. The pollutants are released from the sources of the Coal Company "Kuzbassrazrezugol" in accordance with emission permits within the established limits which is measured by instrumental and calculation methods based on the results of their inventory.

Emissions of pollutants, thousand tons



Emissions of pollutants into the atmosphere in 2022 amount to 39,786 thousand tons, which is 2.92 thousand tons (7.8%) more than in 2021.

It is important to note that the amount of pollutant emissions depends on the number of sources and the volume of coal mining. An increase of emissions

does not mean an increase of the actual negative impact on atmospheric air. The overall negative dynamics is associated with objective reasons:

1. An increase in data accuracy. Draft MPEs were developed and agreed in accordance with the new methodological requirements. In previously

developed projects (2007–2013), some sources were missing, their emissions were calculated incorrectly, different types of particles contained in emissions were not differentiated. The approach to limiting unorganized sources and metering emissions from motor transport has changed.



2. In 2022, draft MPEs were developed for the Kedrovskiy and Bachatskiy open-pit mines — this is where an increase is observed.

The scope of overburden mining (removal of rock overlying coal) increased in 2022. This caused increased generation of dust and

suspended solids at the Taldinskiy, Krasnobrodskiy and Kaltanskiy open-pit mines.

In 2022, all branches of the Company continued to work to ensure the quality of atmospheric air:

- suppression of endogenous fires at the open-pit mines,
- repairs, audits, cleaning of dust-collecting equipment in boiler

- houses,
- dust suppression on haul roads and water stemming of boreholes during blasting operations.

Current work and the use of new environmental technologies help to reduce emissions and, ensures 90% reduction of the weight of emissions from a number of sources.

## Reference projects

### Dust suppression technologies

In 2022, the Company carried out large-scale tests of a new method of long-term dust suppression at Bachatskiy open-pit mine branch.

Traditionally, haul roads of coal enterprises are treated with water to reduce dusting. In dry and hot weather, it quickly evaporates, and the effect of such treatment will last up to 2–3 hours. When using a preventive reagent, this time increases to eight hours. The technology allows achieving an indirect effect: the watering machine mileage is reduced, which implies the reduction of the exhaust emissions of their engines.

The dust suppressor has no color, odor, and is safe for the environment and human health. The reagent consists of solutions of calcium, magnesium and sodium chloride salts with the addition of natural polymers and surfactants. A specially selected concentration of components tightly binds dust particles, preventing them from rising in the wind and the movement of heavy mining equipment for a long time. This not only helps to reduce emissions into the atmosphere, but also improves

the quality of working conditions for employees.

The substance is produced by KRU-Vzryvprom, LLC, which is a Company's subsidiary. In-house production allows promptly supplying coal mines with the necessary amount of dust suppressing composition — this is about 200 tons of reagent per day.

In 2023, industrial application of the product is planned on haul roads of all branches of the Company.



### Dust and noise protection screen

The Coal Company “Kuzbassrazrezugol” has built a protective soundproof screen in Vakhrushevskaya processing plant of the Krasnobrodskiy open-pit mine (Vakhrushevskoye Field) in 2019. The length of the installed dust and noise protection screen is 174.5 m, the height is 10 m.

The protective screen reduces the potential acoustic impact of the company's facilities on the nearest housing area. The design solutions were based on the results of the studies carried out by specialists

of Scientific Research Institute of Occupational Safety in Metallurgy, JSC. A comprehensive survey was carried out as part of this work with measurements at various modes of operation of machinery and

equipment at the processing plant's industrial site, and the optimal location of the protective structure and its parameters were determined.

### Electronic blasting systems

Ten years ago, the method of short-delayed blasting of borehole charges using non-electric initiation systems with pyrotechnic retarders was widely used for blasting operations. This method did not provide a precise control over the blasting of each hole: more holes in a series can be blasted than originally planned in case of a synchronous blasting. This also affected the amount of dust formed from the explosion.

The Coal Company “Kuzbassrazrezugol” uses the electronic explosion initiation system “Nefrit” for ultra-precise blasting. “Nefrit” detonators can explode in the system after any programmed

time interval in the range from 0 to 30 seconds, also with an accuracy of 1 ms. The implementation of this explosion initiation system ensures accurate and reliable synchronization of alternately triggered holes.

This makes it possible to optimize the costs of blasting, as well as significantly reduces the seismic load and the pollutant emissions.

### Prospective projects

The Coal Company “Kuzbassrazrezugol” is considering the use of gas-diesel fuel open pit equipment to reduce pollutant emissions to the atmosphere from mobile sources.

This will help to reduce the coal mining costs (engine life will increase by 1.5 times, engine oil consumption will decrease by 30–40%), increase the competitiveness of products by reducing the value of fuel and energy component in its cost. The environmental situation will improve: the release of harmful and toxic substances in case of gas combustion is an order of magnitude lower compared to conventional fuel sources. Feedstock will be produced by degassing coal seams before their development.



## Greenhouse gas emission management

GRI 12-1 12-2

SDG 13

The Coal Company "Kuzbassrazrezugol", as a responsible natural resource user, understanding the possible impact, implements mechanisms for managing and minimizing greenhouse gas emissions.

Coal mining includes development of coal deposits, transportation and processing of coal. These processes require a significant amount of energy for the operation of machinery, which the enterprise, in turn, also receives from fossil sources. Despite the fact that carbon dioxide is not regulated by environmental

legislation as a pollutant, it is also emitted into the atmosphere as a result of the complete combustion of fuel being one of the greenhouse gases. According to one theory, certain amounts of greenhouse gas emissions can provoke the so-called greenhouse effect and influence the climate change in the long term. At

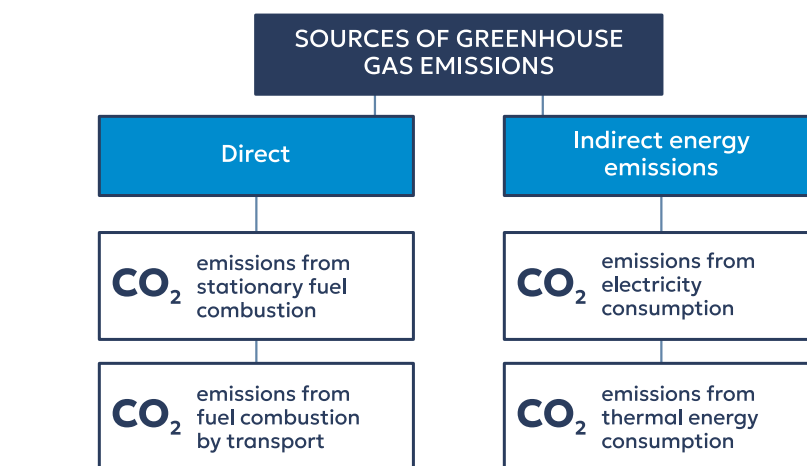
the same time, the vast majority of greenhouse gas emissions are not related to anthropogenic impact: they are produced by volcanic activity, swamps, wildfires, etc.

## Emission reduction commitments

In 2019, the Russian Federation ratified the Paris Climate Agreement. Federal Law No. 296-FZ dated July 02, 2021 "On Limiting Greenhouse Gas Emissions" was adopted for definition of practical measures for the implementation of this agreement. Despite the ratification of the agreement, the regulatory framework of the Russian Federation in this area is under development.

In compliance with the existing legislative requirements, the Coal Company "Kuzbassrazrezugol" completed an inventory and quantification of emissions of direct and indirect energy greenhouse gases associated with coal mining and enrichment activities. The Company considers greenhouse gas emissions to be among the significant environmental aspects and manages them within the framework of an environmental management system.

The Coal Company "Kuzbassrazrezugol" currently focuses on management of Scope 1 and 2 emissions. Process vehicles account for 70% of total emissions; burning coal in captive boiler houses accounts for about 10% of the total emissions; indirect energy emissions account for 20%.



**Indirect energy emissions** — include CO<sub>2</sub> emissions, generated as a result of company consumption of electric and thermal energy received from external generating facilities.

**Stationary fuel combustion emissions** — include CO<sub>2</sub> emissions into the atmosphere resulting from the combustion of all types of fuel for the generation of thermal and/or electrical energy.

**Emissions from fuel combustion by transport** — include CO<sub>2</sub> emissions from the combustion of gasoline and diesel fuel for domestic passenger and cargo carriage by transport and other modes of transport.

The Company implements innovative technologies and applies modern methods for managing coal mining and processing to effectively control and reduce greenhouse gas emissions. The Coal Company "Kuzbassrazrezugol" also strengthens energy efficiency measures to reduce the negative impact on the climate. The Company applies the following measures to reduce direct and indirect greenhouse gas emissions:

### Reduction of direct greenhouse gas emissions

- reduction of emissions from open pit vehicles (adjustment and maintenance of engine fuel equipment in good condition, improvement of vehicle fuel efficiency, optimization of the operating time of open pit vehicles);
- prevention and extinguishing of fires of rock-disposal dumps (planning measures to isolate exposed areas of dumps and reduce the possibility of accumulation of thermal energy by coal and overburden containing coal);
- efficient planning of the location of the company's facilities, the arrangement of forest protection strips for the absorption of greenhouse gases from the atmosphere bottom layer.

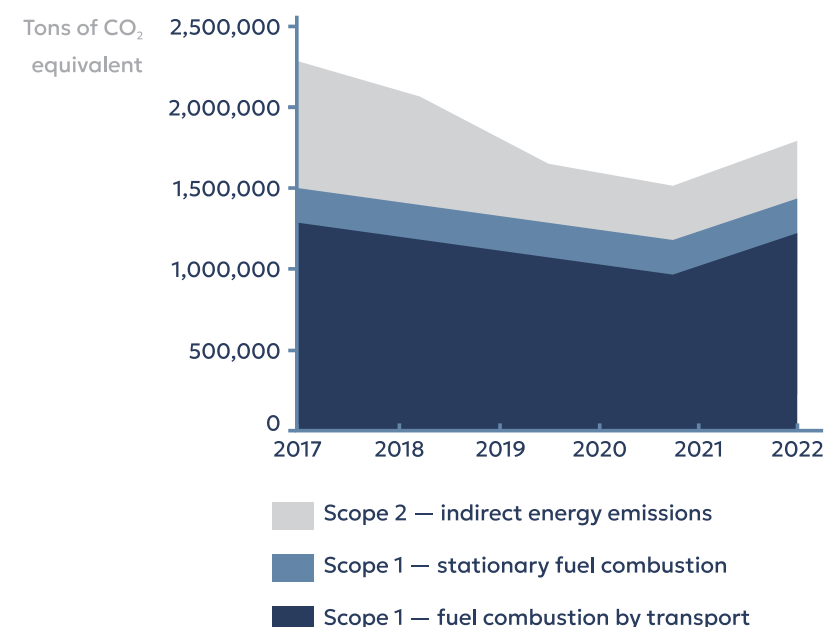
### Reduction of indirect energy emissions of greenhouse gases

- continuous monitoring of energy consumption, analysis of energy efficiency and improvement of energy efficiency of processes;
- installation of modern energy-efficient lighting systems in administrative buildings and production sites;
- replacement of office equipment with energy-efficient models with class A, A+;
- replacement of equipment electric drives with frequency converters (55 kW);
- replacement of low-voltage packaged devices on the open-pit mining equipment with more modern ones;
- partial replacement of diesel fuel with liquefied natural gas for the operation of open-pit machinery engines.

## Outputs

GRI 305-1 305-2 305-3 305-4

Gross greenhouse gas emissions decreased by 22% since 2018.



The Coal Company "Kuzbassrazrezugol" aims to significantly reduce emissions in the long term until 2030, for which it implements Energy Saving and Energy Efficiency Improvement Programs, as well as carries out measures to reduce greenhouse gas emissions.



# Energy efficiency

SDG 7

## Energy efficiency commitments

The Coal Company “Kuzbassrazrezugol” implements its energy policy in accordance with ISO 50001:2018. The energy management system helps to improve energy consumption management, helps to reduce the cost of fuel and energy resources and increase financial efficiency. The energy management system also makes it possible to reduce the negative impact on the environment by reducing emissions of greenhouse gases and pollutants into the atmosphere.

The Company approved Energy Policy, in which undertakes obligations for the systematic management of energy consumption and energy efficiency improvement of all aspects of production:

1. Consistently reduce production costs, including the rational and efficient use of fuel and energy resources.
2. Regularly set forth energy conservation goals and indicators, and ensure that necessary resources are available to achieve these goals.
3. Comply with all applicable legal and other requirements relating to the Company activities.

4. Procure products, equipment and services taking into consideration energy efficiency.
5. Provide for design of new facilities, modernization and reconstruction of existing production facilities taking into consideration energy efficiency.
6. Continuously improve the competence of personnel in the field of energy efficiency.
7. Ensure openness and accessibility of information for stakeholders.

Every year the Coal Company “Kuzbassrazrezugol” implements the program of measures to improve energy efficiency. In 2022, its implementation allowed the Company to achieve significant savings in energy resources and financial costs. The Coal Company “Kuzbassrazrezugol” personnel participates in implementation of program activities. According to current regulations of the Company, up to 40% of the resulting economic effect is used to stimulate employees involved in development and implementation of energy-saving initiatives.

## Outputs

GRI 302-1 302-2 302-3

The main type of energy resources that the Company purchases from resource supplying organizations is motor fuel for quarry equipment operation. It amounts to 79.78% of total consumption and 89.5% of total costs for fuel and energy resources.

The structure of consumption of fuel and energy resources has not changed over the past three years, since the nature of the Company’s production activities remains the same.

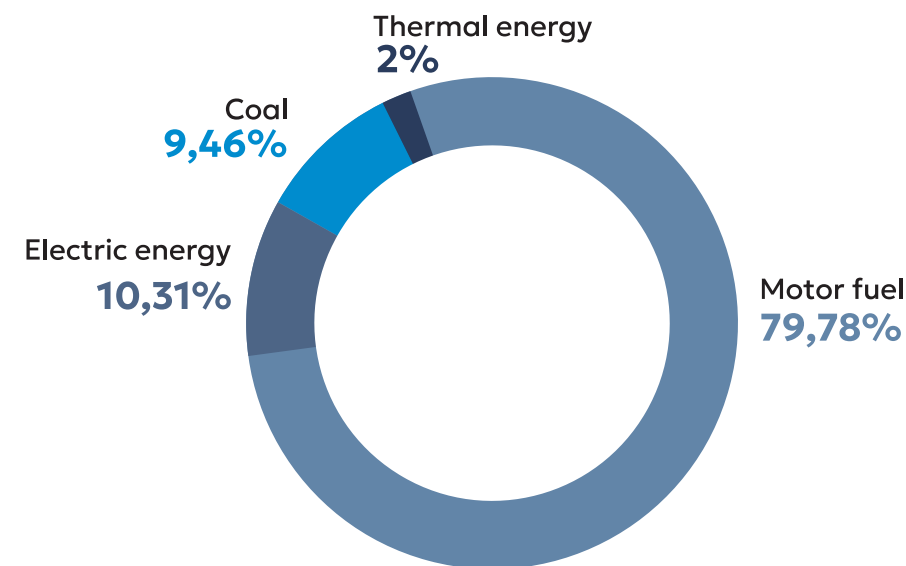
### External sources:

- Electrical energy
- Hot water and heating for remote buildings

### Internal sources:

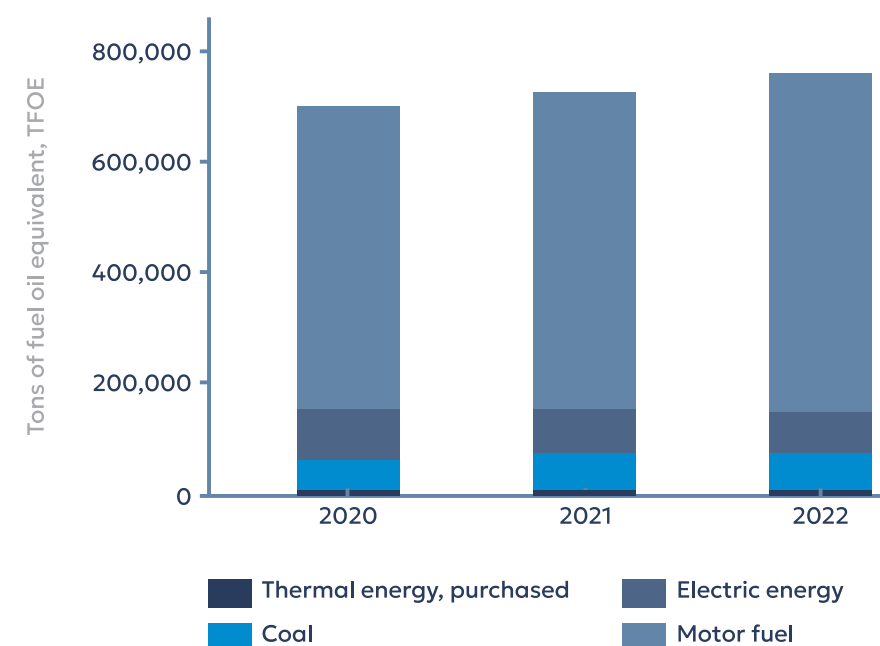
- Boiler and furnace fuel (coal)
- Hot water and steam

### Structure of energy resources consumption



For 2023, as part of its energy policy, the Company will continue to consistently reduce production costs through the rational use of energy resources. To define priority areas, the Coal Company “Kuzbassrazrezugol” compiles and regularly updates registers of main energy consumers. The Motor Fuel Consumption Register contains information on characteristics of excavators, drilling rigs, bulldozers, and other equipment. In the Electricity Consumption Register, production facilities of the Company are listed.

### Structure of energy resources use



In 2023, the Company plans to regulate motor fuel consumption for each branch. In addition, at selection of new equipment, preference will be given to economical models. Organizational activities aimed at engaging and motivating employees for more active participation in energy saving practices are also planned.

In 2023, the Coal Company “Kuzbassrazrezugol” will continue to work on improving the Automated Monitoring System for Operation of Mining and Conveyor Equipment “Karyer” (MCE ACS), developing the Automated Information and Measuring System of Commercial Electric Power Metering (AIMSCEPM), as well as work on creation and implementation of the Automated Technical Electricity Metering System (ATEMS) in the Company branches. In 2023, it is planned to introduce a new methodology for rationing electricity consumption in the Coal Company “Kuzbassrazrezugol” branches, where the automated technical metering system is used. The new technique has already been successfully tested in the Kedrovskiy open-pit mine branch.

Total energy consumption increased by 6.8% as compared to 2021, mainly due to increased motor fuel consumption. However, the activities of the annual energy efficiency improvement program, completed by 90.2%, brought the Company planned annual savings of over 100 million rubles.

The Company uses legislative opportunities to obtain tax benefits for organizations by using energy-efficient equipment or technologies from a special list. Owing to their use, the Coal Company “Kuzbassrazrezugol” received more than 20 million rubles in tax benefits and plans to increase these figures in the future.

## Reference projects

### Equipment upgrading

**Measures to improve energy efficiency are primarily aimed at main “consumers” of energy resources: excavators, mining dump trucks, drilling rigs. It is the use of a new modern energy-efficient equipment that is the most significant factor in energy saving projects.**

The Company actively monitors the condition and efficiency of use of mining transport equipment, and is implementing the large-scale program in its history to modernize production facilities: in recent years, the Coal Company “Kuzbassrazrezugol” has upgraded about 20% of its equipment. One of the main technical characteristics of equipment procured by the Company is its energy efficiency — especially for electrically driven excavators. At present, the Coal Company “Kuzbassrazrezugol” excavation equipment depot is mainly represented by modern excavators, whose specific energy consumption has almost halved as compared to the previous generation of machines, and amounts to 0.5–0.6 kW·h/m<sup>3</sup> of rock mass. This has a positive effect on the Company’s energy balance.

Ensuring reliable and efficient power supply is the second important aspect of the project. To drive an electric-powered excavator from one site to another,

it is necessary to lay a power line along the entire route. Construction of one kilometer of overhead power line takes about a week. In this regard, the Company acquired the “Peregon-1800” mobile complex, designed to drive all types of electric excavators. The mobile complex makes it possible to drive an excavator from one mining site to another seven times faster than with the traditional method, while the financial costs of such equipment transfer are reduced threefold. “Peregon-1800” is connected to an excavator during one hour and works autonomously; to operate the complex, two persons are engaged.

As part of the energy conservation program, the Coal Company “Kuzbassrazrezugol” is working on an initiative to introduce variable speed drive systems. Such a drive shall use only the required amount of electrical energy to operate a mechanism or an engine, unlike traditional drives where part of the energy passes into a reactive form or is lost.

The use of variable frequency drives is now common in low voltage installations, such as 380 V systems, where they are used for low power auxiliary mechanisms. For higher power applications, such as 6 kV drives, VFDs have not yet been developed. Also, this technology has not yet been applied in high-voltage systems — for example, for pumps and dredgers with a power of 1,000 to 2,500 kW at a 6 kV voltage.

The Coal Company “Kuzbassrazrezugol” is actively studying this promising energy-saving technology and is already trying to implement VFDs on high-voltage pumps. For 2024, the Company has an ambitious goal — to install VFDs on pumps in the branch of the Bachatskiy open-pit mine.

### Implementation of 1C:MRO and 1C:ERP Software

**The Company is actively implementing the 1C:MRO — “Maintenance, repair and overhaul” software.**

1C:MRO is a specialized industry solution for digitalizing equipment and other material assets repair and maintenance processes. Integration with 1C:ERP (“Enterprise Resource Planning” software) will reduce the influence of the human factor and increase operational efficiency. The system shall automatically

warn about the need of equipment maintenance, calculate the required number of labor hours, materials, etc. This allows to plan in advance the work time of personnel and the scope of spare parts, materials and financial resources. In 2023, the development of technological maps for the MRO

system will be continued. Maps are a step-by-step description of the work process, indicating the resources used, time and other data. Thus, the system gradually will make it possible to plan more and more equipment repair and maintenance works.

### Extension of the MCE ACS “Karyer” implementation

**Implementation of the Automated Control System for operation of mining transport equipment (dispatch system) “Karyer” (“Quarry”) is one of the main directions in the Company’s digital transformation. Its use also helps to increase the energy efficiency of equipment.**

The dispatch system consists of software, communication systems and on-board equipment to monitor various parameters: equipment location, loading, fuel level in the tank, tire pressure, etc. The on-board controller collects sensor readings and transmits these to the dispatch center. The use of the system provides for ongoing monitoring of the technical condition of equipment,

short-term planning and execution control, forecasting technical readiness and repairs planning. The system monitors actual weight of loaded dump trucks, which allows to quickly identify and eliminate underloading, and therefore reduce specific fuel consumption per ton of transported cargo. Following the results of the MCE ACS “Karyer” pilot operation at

the Bachatskiy open-pit mine, productivity per equipment unit in 2021 increased by 3–4%. In 2022, the Company launched the dispatch system at all open-pit mines. In total, the project covered more than 1,200 units of equipment at six branches of the Coal Company “Kuzbassrazrezugol”.

### Automatic system of commercial and technical electrical energy metering of power consumption (AIMSCEPM and ATEMS)

**AIMSCEPM and ATEMS are organizational and technical systems for automated metering of supplied and consumed electricity and other energy resources to achieve accurate mutual settlements among suppliers and consumers. Readings are automatically taken from each consumption point and transmitted through communication lines to the server where data processing occurs.**

AIMSCEPM has been operating at the Coal Company “Kuzbassrazrezugol” branches since 2010. This allows the Company to purchase electricity on the wholesale market at a lower price, and also more accurately plan and control its consumption. Commercial energy metering is carried out at substations and supply points. The introduced technical metering will be carried out by the consumers. This will make it possible to monitor energy consumption directly at main energy consumers —

for example, under similar conditions of using excavators of the same model handling the same rock mass volume. Data monitoring in case of deviations helps to find the cause of equipment inefficient operation and eliminate energy losses. For electrical energy metering, the ATEMS has already been implemented in the Bachatskiy open-pit mine branch, and is undergoing pilot operation. In 2023, it is planned to launch the system at the Kedrovskiy and Krasnobrodskiy

open-pit mine branches. Full implementation of the ATEMS at all Company facilities will ensure most accurate and reliable metering of energy resources. Thermal energy and water supply metering with the help of automated system is planned to be organized at the Coal Company “Kuzbassrazrezugol” enterprises by 2024–2025.



## Recultivation and biodiversity

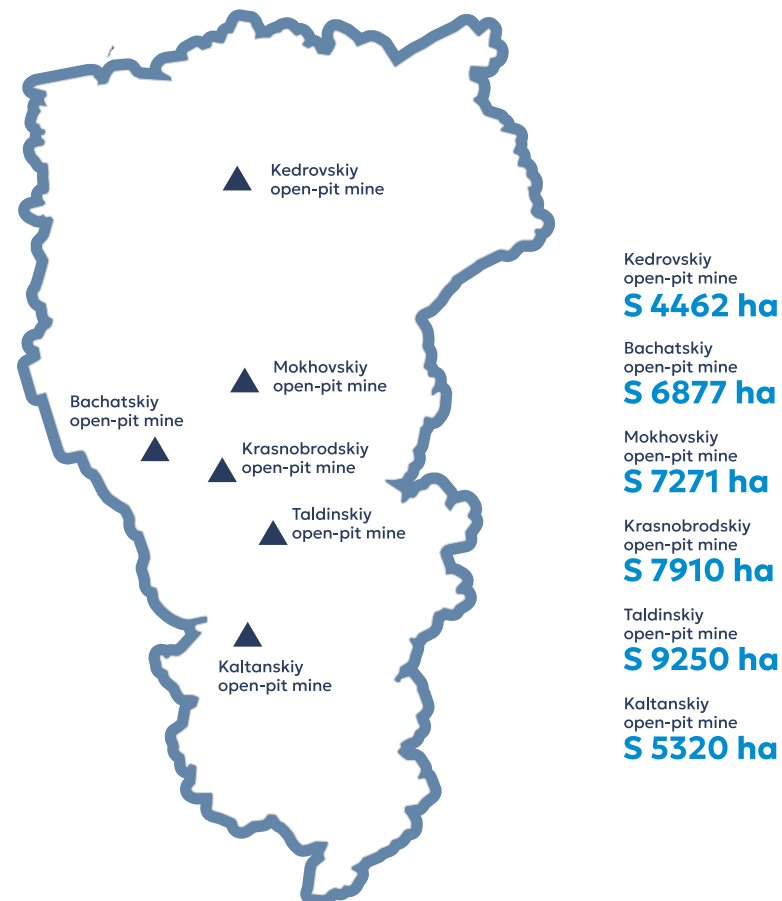
GRI 12-3 12-5

Coal mining is a natural resource-intensive industry that produces a significant impact on the environment and the mining region ecosystem. The area of disturbed lands in the Kemerovo Region is constantly increasing, and as a result of open-pit coal mining, its topography is changing.

The environmental policy of the Coal Company "Kuzbassrazrezugol" as of an essential natural resources user is aimed at reducing and compensating the environmental footprint of the region.

The Company develops 16 fields in the Kemerovo Region, mining coal by open-pit (quarry) methods in six open-pit mines. Industrial facilities of the Company occupy about 39 thousand hectares of land, including land plots involved in production activities of at least 28 thousand hectares.

Area of open-pit mines of the Coal Company "Kuzbassrazrezugol"



## Obligations for land recultivation and biodiversity preservation

The Coal Company "Kuzbassrazrezugol" observes legislative norms regarding recultivation volumes, systematically participates in environmental projects, cooperates with scientific institutions in finding best solutions for disturbed lands restoration. To reduce loads on ecosystems, the Company introduces environmentally friendly and resource-saving technologies, installs modern treatment facilities, creates sanitary protection zones, and continuously improves environmental protection systems.

Lands development and recultivation at coal mining are regulated by the following laws:

- Decree of the RF Government dated July 10, 2018 No. 800

(as amended on March 7, 2019) "On Lands Recultivation and Conservation" (together with the "Rules for Land Recultivation and Conservation");

- Federal Law "On State Regulation in the Field of Coal Mining and Use, on Specifics of Employees Social Protection at Coal Industry Organizations" dated June 20, 1996 No. 81-FZ;

- The "Forest Code of the Russian Federation" dated December 4, 2006 No. 200-FZ (as amended on July 24, 2023).

In accordance with the requirements of environmental legislation, the Coal Company "Kuzbassrazrezugol" recultivates the lands taken out of production and restores forest resources by a "1:1" principle. That is, the Company plants the same number of trees and shrubs as there was on the lands involved in production turnover of the previous year.

Land recultivation is carried out sequentially in two stages.

- The technical stage provides planning, forming slopes, applying a fertile soil layer, installing hydraulic and reclamation structures, burying overburden rocks, as well as carrying out other works to create necessary conditions for the further use of reclaimed land for its intended purpose or for carrying out measures to restore soil fertility (biological stage).

- The biological stage includes a set of agrotechnical and phytomeliorative measures aimed at restoring the agrophysical, agrochemical, biochemical and other soil properties.

Recultivation of disturbed lands is carried out strictly in accordance with calendar plans adopted at design solutions develop for recultivation.





One of the most important areas of the Company's environmental program over recent years has been biodiversity preservation in the region. To maintain the environmental balance, the Coal Company "Kuzbassrazrezugol" takes the following measures:

- reduces the negative impact on ecosystems: builds treatment facilities, organizes quarry and waste water disposal, controls pollutants emissions, reduces waste generation, and transfers waste for neutralization and recycling;

- performs scientific research together with biologists and searches to find effective technologies for preservation of rare flora and fauna species;
- restores biodiversity: landscaping areas and stocking fishery water bodies.

According to the Federal Law of December 20, 2004 No. 166-FZ "On Fisheries and Preservation of Aquatic Biological Resources," specialists from the Coal Company "Kuzbassrazrezugol" continuously monitor the impact of coal mining

activities on water bodies condition in the region, including their biodiversity. Each project is approved by Rosrybolovstvo, receiving the appropriate opinion. The Coal Company "Kuzbassrazrezugol" regularly compensates for damage that the company's activities can cause to fish populations in water bodies.

## Outputs

GRI 304-2 304-3

**On the average, the annual reclamation rate across the Company is about 100 hectares. The restoration area is determined according to reclamation schedules and in accordance with current design solutions, which, in turn, undergo timely updating as necessary.**

From 2018 to 2022, work was planned on mining technical reclamation of disturbed lands on a total area of 660 hectares. In fact, reclamation was completed on a total area of 592 hectares, which is 90% of the plan. Technical solutions for reserves development were changed, and

therefore the areas were reduced.

From 2018 to 2022, it was planned to carry out biological reclamation works on 414 hectares. Planting works were performed on a total area of 471 hectares. Thus, the plan was fulfilled by 114%. In 2022, under the

reclamation program, over 363 thousand trees and shrubs were planted on an area of about 110 hectares. Five years earlier, in 2017, the area of biological reclamation was three times smaller and amounted to about 35 hectares.

### Scope of territories restoration works

Open-pit mine	Number of saplings and seedlings	Reclamation area, ha
Taldinskiy	~194,000	48.5
Kedrovskiy	~51,000	25.5
Krasnobrodskiy, Mokhovskiy, Kaltanskiy	~118,000	>30

Under the Kuzbass Forest Restoration Program, about 446 thousand coniferous trees were planted in two districts — Belovskiy and Guryevskiy forestries. In addition, the Company, as a part of its "green" campaigns, planted more than 2 thousand seedlings in Kuzbass settlements.

In total, in 2022, over 800 thousand trees and shrubs were planted as a part of reforestation, reclamation activities. As an experiment, at the Kedrovskiy, Bachatskiy and Mokhovskiy open-pit mines, seedlings with a closed root system were used for reclamation.

This allowed us to achieve a survival rate of about 90–100%.

The total cost of forest reproduction in 2022 amounted to over 52 million rubles.

**In 2023, the Coal Company "Kuzbassrazrezugol" will continue to work on natural systems restoration and will set itself the following goals:**

- to minimize environmental risks;

- to increase investments in environmental programs;
- to create an experimental site for mining spoil dump reclamation by using relict deciduous plants on the territory of the Kaltanskiy open-pit mine.

- The plan of mining-engineering reclamation for 2023 is 95.42 hectares; for the biological stage of reclamation — 98.1 hectares.

## Reference projects

### Experimental ecological test site

Since 2019, on the territory of the former Yuzhniy mining dump (the Kedrovskiy open-pit mine), the Kedrovskiy experimental-demonstrative site (hereinafter referred to as the ecological test site) has been organized. On 3 hectares area, the Company, with participation of scientists from the Soil Science Institute of the Siberian Branch of the Russian Academy of Sciences, has been experimenting for several years with different conditions for trees and shrubs planting.

The main objective of the experiment was to create demonstration sites for coal industry spoil dumps reclamation by using innovative technological methods:

- Using planting material with closed root systems.
- Combining forest and herbaceous vegetation.
- Creating different-purpose plantings.
- Optimizing water mode for plantings and seedlings at the survival stage by applying hydrogel to the planting site.
- Applying fundamentally new methods of landscapes restoration and reclamation in accordance with the Methodological Recommendations for Restoration for Agricultural Reclamation (Kemerovo, 2017).
- Applying measures for long-term care of reclamation sites at coal industry spoil dumps.
- Introducing drip irrigation at the plants establishment stage to achieve better results.

- Using hydroseeding adapted to mining spoil dumps conditions.

The project is scheduled for completion in 2023. On the basis of collected data, life scientists will prepare methodological recommendations that will describe

what conditions will ensure best survival rate during reclamation of large areas without additional costs that could significantly affect coal mining profitability. All coal mining enterprises of the region can use these best practices.





## Designated conservation areas

**With development of mining operations, the problem of biodiversity preservation in the regions of the Coal Company “Kuzbassrazrezugol” presence is becoming more urgent.**

The Company, together with the Federal Coal and Coal Chemistry Research Center of the Siberian Branch of the Russian Academy of Sciences and the public environmental

organization “IRBIS”, is creating designated conservation areas (DCAs). As a part of this cooperation, methods are developed to preserve rare and endangered plants listed in Kuzbass

and the Russian Federation Red Books. The Coal Company “Kuzbassrazrezugol” invested over 4 million rubles in these research works.

### The “Bayatskiy Sopki” project

**In 2019, in the area of the Bachatskiy open-pit mine branch operation, at the initiative of the Company, the “Bayatskiy Sopki” project was launched.**

The floristic state of the “Bayatskiy Sopki” was assessed, and individual strategies for rare and endangered plants preservation were developed. Population material was collected and transferred to similar conditions outside the land allotment of the Bachatskiy open-pit mine to the “Bayatskiy Sopki” natural environment and to artificially

maintained territories (the Kuzbass Botanical Garden). In 2022, the final stage of the project was completed: methodological recommendations for rare plants preservation at rocky habitats using ex situ and in situ<sup>1</sup> methods at mining were developed. Methodological recommendations created as a part of the project describe methods

for rare plants preservation, their transfer and extraction procedures, as well as coal mining companies responsibilities in biodiversity preservation. They were approved by the Kuzbass Ministry of Natural Resources and Environment and recommended to mining coal organizations in the Kemerovo Region.

### The “Artyshhta” and the “Luchshevo Village Ouvals” DCAs

**In 2021, the Coal Company “Kuzbassrazrezugol” supported creation of two designated conservation areas (DCAs): the “Luchshevo Village Ouvals” State Natural Biological Reserve and the “Artyshhta” Regional Natural Monument.**

The project was implemented jointly with the Federal Coal and Coal Chemistry Research Center at the Siberian Branch of the Russian Academy of Sciences.

The “Luchshevo Village Ouvals” Reserve is a hilly forest-steppe area of 920.7 hectares. On the territory of the Reserve, 227 plant species grow,

and five of these are recorded in the Kemerovo Region and the Russian Federation Red Books.

The “Artyshhta” Regional Natural Monument is located in the Belovskiy District, near Borodenkovo village. It is an area of 317.3 hectares, on which remnant conform hills of ancient relief are preserved with limestone

outcrops and large tracts of steppes. On the territory of the reserve, about 300 types of plants grow, 14 of which are rare and endangered species, and three of these are listed in the Kemerovo Region and the Russian Federation Red Books.

There is a complete ban on production activities in these

territories. However, a possibility of traditional land use remains: cattle grazing and haymaking.

In 2022, the Coal Company “Kuzbassrazrezugol” continued cooperation with scientists from the Kuzbass Botanical Garden and, as a part of environmental education,

created ecological tourist routes in both DCAs. On the “Artyshhta Green Pearls” (“Artyshhta”) and the “Ancient Sea Bottom Journey” (the “Luchshevo Village Ouvals”) ecological trails, the Company installed information stands that introduce tourists to the local flora and fauna, and equipped comfortable places for rest.



<sup>1</sup>**in-situ** (within the natural habitat) — creation and protection of special protected areas (reserves, sanctuaries, national parks and natural monuments), natural systems restoration.

The objective: to preserve ecosystems in natural conditions.

**ex-situ** (outside of the natural habitat) — preservation of life forms at special institutions (zoos, botanical gardens and genetic data banks).

The objective: to preserve rare and endangered species, restore their populations and use genetic resources for research and breeding.

## ABOUT THE REPORT

The Sustainable Development Report of the Coal Company “Kuzbassrazrezugol” JSC (hereinafter referred to as the Report) is a public non-financial report addressed to a wide range of stakeholders.

The Report discloses key results of the Kuzbassrazrezugol Coal-Mining Company operations in 2022, principles of activities in the field of social and environmental responsibilities, data on the impact of the Company's production activities on the territory of its operation, as well as its interaction with stakeholders.

### Report Boundaries

GRI 2-2 2-3

The Report discloses the approach to compliance with ESG principles in all aspects of the Company production activities and its coal-mining assets — the Kedrovskiy, Bachatskiy, Mokhovskiy, Krasnobrodskiy,

Taldinskiy and Kaltanskiy open-pit coal mines.

The report covers the period from January 1, 2022 to December 31, 2022, and contains qualitative and quantitative information, unless

otherwise noted. The Report contains a number of initiatives of 2023 to provide stakeholders with information about the Company's business prospects.

### Reporting Interpretation and Content

The report was prepared in accordance with the GRI Standards for Sustainability Reporting (2022). In this Report, the terms “Company” and “Enterprise” refer to the Coal Company Kuzbassrazrezugol JSC.

Unless the context indicates or requires otherwise, all product names, trade names, trademarks, service marks or logos used are the intellectual property of the Company. All rights reserved. The Report also contains trade

names of other commercial and non-commercial organizations and does not mean that the use or display of these trade names implies any endorsement or sponsorship.

### Declaration Statement

GRI 2-5

Information in the Report, including data on the product, competitive positions and market trends, was prepared by the Company as a part of the corporate reporting

system. The collected data was internally approved and checked for completeness and correctness. This information has not been verified by any third party.

The Report also contains certain industry and market data obtained from publicly available sources, as well as research and surveys conducted by third parties.

### Significant Topics Analysis

GRI 3-1 3-2 3-3

Most significant topics included in the Report were determined by an expert assessment and through consultation with stakeholders.

In preparing the report, the list of topics of the basic GRI standards, the 2022 edition, was analyzed, as well as the GRI 12 standards: the Coal-Mining Sector. The list of topics was also extended to include additional aspects reflecting the specifics of the

Company's activities, including topics recommended for disclosure by SASB standards.

To clarify the main topics of the Report, a survey was carried out among the Company's key stakeholders — employees. Access to the questionnaire was provided via email to 3.2 thousand employees, and about 400 of them (12.5% of the total selection) completed the survey. The

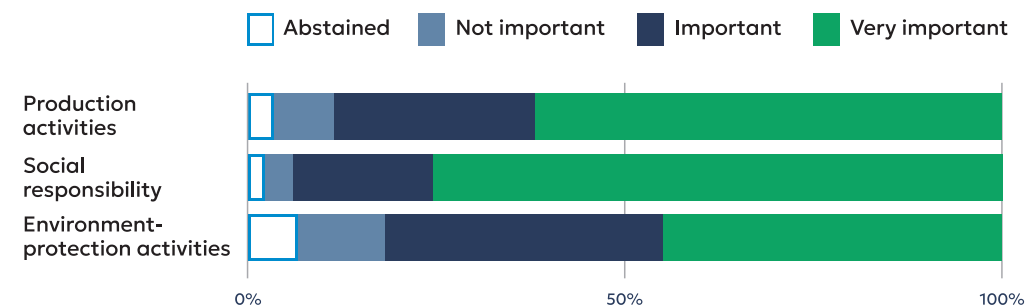
respondents work in different assets of the Company in different areas, and were selected randomly. This allows us to assert the validity of the survey results.

Sample questionnaire indicating the connection with relevant topics, GRI indices, sustainable development goals, and national development goals in Russia

Section	Question	Topic	GRI	NDG <sup>1</sup>	SDG <sup>2</sup>
Production activities	How did we reform in complicated conditions?	Production activities	2-14, 12.8	6.1	
	How do we assess potential risks and what do we do to prevent them?	Risks management	207-2, 201-2, 403-2, 403-3, 12.13	-	8
	How do we ensure transparency in our activities?	Legal discipline and anti-corruption	205-1, 205-1, 205-3, 12.20	-	16.5
	How do we comply with our obligations and legal requirements?	Legal discipline and anti-corruption	2-27, 12.22	-	16
	What innovations and best technologies do we use to improve operational efficiency and safety?	Operational transformation and production digitalization program	3-3	3.5.2, 5.1, 5.3, 5.4	1.4, 9
Environment-protection activities	How do we reduce energy consumption in production processes?	Energy efficiency	302-4, 12.10	-	7.1, 7.3
	What technologies do we use to preserve water resources?	Water resources protection	303-1, 303-2, 12.7	3.6.2	6.4
	How do we reduce waste generation and increase the share of recyclable materials?	Waste management	306-1, 306-2, 306-3, 306-4, 306-5, 12.6	3.4	6.3, 12.2, 12.4, 12.5, 12.6
	What technologies do we use to reduce pollutants emissions into the atmosphere?	Atmospheric air protection	305-7, 12.1, 12.4	3.5.3	3.9, 11.6.1
	How do we reduce our greenhouse gas emissions?	Greenhouse gas management	305-1, 305-2, 305-3, 305-4, 305-5	3.5.1	3.9, 7.2, 7.3, 13
	How do we restore areas and preserve nature?	Recultivation and biodiversity	304-3, 12.3, 12.5	3.6.3	15
Social responsibility	How do we take care of our employees?	Labor practices	202-1, 401-2, 403-6, 404-3, 404-1, 404-2	1.2.2, 1.2.6	8
	What do we do to make your work as safe as possible?	Health and safety	3-3, 403-1, 403-3, 403-4, 403-5, 403-8, 12.12, 12.14	1.2.3, 1.2.1	3, 8.8
	What opportunities for growth and development do our employees receive?	Training	404-1, 404-2, 404-3, 12.19	1.3, 2.2	4, 8
	How do we support families of our employees and develop the Company operation areas?	Labor practices, areas maintenance	414-1, 12.9, 12.11	1.4, 2.1	5, 10, 11

<sup>1</sup> National Development Goals of the Russian Federation until 2030<sup>2</sup> UN Sustainable Development Goals

#### Assessment of topics relevancy by the Company employees





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GRI 2: General Disclosures	2-1	Organizational details	8
	2-2	Entities included in the organization's sustainability reporting	9, 84
	2-3	Reporting period, frequency and contact point	84
	2-4	Restatements of information	84
	2-5	External assurance	84
	2-6	Activities, value chain and other business relationships	14, 16, 19
	2-7	Employees	29
	2-9	Governance structure and composition	12
	2-14	Role of the highest governance body in sustainability reporting	12
	2-15	Conflicts of interest	20
	2-16	Communication of critical concerns	20
	2-19	Remuneration policies	31
	2-20	Process to determine remuneration	31
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GRI Standart	GRI index	Name of the Indicator	Page number
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