E-S-G AS A MANAGEMENT PRACTICE: the Eurasian Resources Group approach



In a modern industrial company, sustainability rarely emerges from a single document. It is the result of decisions made daily regarding people, production safety, resources, the environment, suppliers, the regulatory environment, and the regions where the company operates. Eurasian Resources Group (ERG) is an international mining and metals group comprising mining, metallurgy, and energy assets. A significant portion of ERG's production complex is located in Kazakhstan, where the Group's enterprises are closely linked to the economies of industrial regions and single-industry towns. This scale and nature of its business make impact issues particularly relevant: the company's decisions simultaneously affect employment and regional development, human safety, the use of natural resources, the environment, the energy balance, and supply chains.

ESG (environmental, social and governance) management practices evolved across various professional disciplines and, over time, became unified by a common system of ESG goals, corporate policies, and stakeholder engagement mechanisms. ERG's experience demonstrates that the integration of **Sustainable Development Goals (SDGs)** into the company's operations occurs through the development of the business management system itself. Sustainable development issues are practically

expressed in how the company builds relationships with the regions where it operates and invests in human capital, manages occupational safety, modernizes facilities and reduces their environmental impact, plans for decarbonization and develops the energy sector, and formulates requirements for employees, suppliers, and business partners. ERG's corporate ESG goals and management system allow these areas to be linked to the Group's long-term priorities and development strategy and to evaluate the changes achieved. With this approach, the SDGs become not a separate set of international benchmarks but rather enable us to see the contribution of ERG's day-to-day business decisions to the development of people, regions, the environment, and the country's economy.



«For us, our contribution to achieving the Sustainable Development Goals is linked to the long-term development of industry and the economy of Kazakhstan. Modernizing ERG's production, improving environmental efficiency and safety, developing human capital, and supporting the regions where we operate allow us to simultaneously strengthen the competitiveness of ERG's enterprises and create long-term value for the entire country».

— Kudrat Shamiev, General Director of ERG in Kazakhstan

SOCIAL RESPONSIBILITY: PEOPLE, REGIONS OF PRESENCE, AND URBAN DEVELOPMENT

For ERG, social sustainability is particularly closely linked to the geography of its business. A significant portion of its production assets are located in single-industry towns and industrial regions of Kazakhstan, where large enterprises are not only employers but also important parts of the urban ecosystem. The state of education, healthcare, urban infrastructure, entrepreneurship, and the quality of public spaces directly impacts a region's ability to retain employees, as well as the company's ability to build a talent pool and develop over the long term.

ERG's social contribution is not viewed as a set of one-off charitable projects. Internally, it is built around the following questions: what truly matters to the people living near ERG facilities and how investments can create a long-term impact for these regions. In 2026, under memorandums between ERG and local governments, it is planned to allocate over 3 billion tenge for the development of the Pavlodar region, 1.8 billion tenge for the development of the Kostanay region, and almost 6 billion tenge for socially significant projects in the Aktobe region. Since 2001, ERG's total social investment in the regions where it operates has exceeded 331 billion tenge.

But the scale of investments is only the first part of the story. More interesting is the mechanism that precedes the decision on where exactly the funds should be allocated. ERG systematically conducts sociological research in the regions where it operates, studying public expectations, collecting signals about the most sensitive issues, ranking needs, and preparing a consolidated analytical report. Over

time, the results of these studies have come to be used not only within ERG: the company shares them with local executive bodies – city akimats – so that discussions of joint projects begin with a well-formed understanding of public demand.



«We're conducting extensive sociological research to understand the region's needs: we address people's concerns and rank their priorities. Based on this research, we compile a comprehensive report, which underpins our work.»

— Shattyk Abdykalykov, Director of the ERG Social Welfare Department

This approach changes the very logic of social investment. A project must first be tested for relevance: does it meet a real need, is the need justified, are there higher-priority issues, and who will benefit from the outcome? Only then do the financial and procedural stages begin: cost estimates and pricing assessments, documentation review, legal and compliance assessments, financial controlling, and supplier due diligence. The social function operates not in isolation, but within a system of corporate controls. This can be seen as a practical analogue of what international standards call stakeholder engagement: stakeholders are not simply informed about the final solution but become one of the sources of data for its development. For the company, this is both a way to improve the quality and usefulness of investments and to reduce the risk that a promising project will prove to be of little use.

WHEN THE "VOICE OF THE TERRITORY" TURNS INTO A PROJECT

The construction of the Community Center in Khromtau illustrates this logic well. The demand for such a space didn't arise from within a corporate program; it was repeatedly raised by the city's residents themselves. The city lacked space for cultural events, creative groups, and a cinema. The topic recurred for several years, was discussed at meetings with management and shareholders, and was supported by research. Ultimately, these disparate needs were consolidated into a single project.

Work began in 2023, and the Community Center opened its doors in December 2025. This is an important example for the company not only because it adds another social infrastructure facility, but because the entire chain can be traced: resident request, confirmation of need, discussion of priorities, investment decision, construction, and the facility's use. This traceability chain allows for meaningful discussion of the SDG contribution, not just through a list of funded initiatives.



Another element is the ability to see results through the eyes of residents themselves. ERG's ESG indicator system assesses a company's contribution to the social development of a city or town. On average, this indicator for the Group increased to 68% in 2025. It reflects not just one specific project, but the overall perception of the company's activities in the regions where it operates, and is therefore useful as a higher-level indicator of results than just the amount of investment. Such mechanisms gradually generate feedback: the company not only implements the project but also returns to the region through new research to determine what has changed and which issues are becoming more important. In this way, the social program becomes a recurring management cycle.

TUGAN QALA: PUBLIC PARTICIPATION AS PART OF THE OUTCOME

The Tugan Qala (Туған Қала) project occupies a special place. It is a participatory budgeting model in which residents themselves propose ideas and participate in selecting projects for their cities. In 2026, the program was included in the Compendium of Best ESG Practices in Central Asia in the category "Social Responsibility and Strengthening Connections between People." For ERG, the value of this model lies in the fact that residents are no longer simply recipients of the outcome; they participate in its creation, development, and acceptance.





«People themselves determine what's important for their city, propose initiatives, participate in their implementation, and monitor the results. This makes the project feel less like outside assistance and more like residents' own contribution to the development of the area.»

— Shattyk Abdykalykov, Director of the ERG Social Welfare Department

This approach contains an important idea for sustainable development: social value is determined not only by a project's budget. Two identically priced projects can have completely different life cycles depending on how well they meet real demand and whether residents feel a sense of ownership. Within ERG's social function, this logic, is expressed by a simple formula:

«The effectiveness of social investments is determined not only by the volume of funds invested, but above all by how accurately they meet the real needs of people and create the desired results for the regions.»

— Shattyk Abdykalykov, Director of the ERG Social Welfare Department

In practice, this principle extends far beyond urban development. ERG's social portfolio includes schools and kindergartens, support for colleges and universities, healthcare, public spaces, sports infrastructure, community projects, and entrepreneurship development. For the company, the

employee's connection to the enterprise extends beyond the workplace: family quality of life and urban sustainability also become part of ERG's long-term business context.

FROM SCHOOL TO PROFESSIONAL CAREER

ERG's investment in human capital goes beyond building educational infrastructure and begins long before a future employee is hired. The company is consistently building an educational ecosystem linking schools, colleges, universities, businesses, and corporate training. Its goal goes beyond training personnel to meet current production needs: it aims to ensure that industrial regions have a modern educational environment where young people can acquire in-demand professions, develop engineering and digital competencies, and identify opportunities for further professional growth. This approach simultaneously builds the talent pool of companies and increases the attractiveness of the regions themselves for young professionals and families.



One of ERG's largest social projects in recent years was the construction of a modern school-gymnasium with capacity for 1,200 students in Rudny, which opened in September 2025. The new educational complex covers over 19,500 square meters, and ERG's investment in the project amounted to over 6.7 billion tenge. The school is the third new school facility built by the company in Kazakhstan in three years as part of the ERG Mektep programme. In addition to modern classrooms, digital labs, engineering

classrooms, and sports and creative infrastructure, the project is conceived as the country's first "green" school, including the use of solar panels. Importantly, the decision to develop Rudny's educational infrastructure is consistent with ERG's approach to social investment, which selects regional projects based on resident surveys and the actual needs of the area.

For ERG, a modern school is more than just a new building and expensive equipment. It also includes STEM classrooms, robotics, digital technologies, and other tools that children should actually use. Therefore, with ERG's support, additional educational formats are being developed around the established infrastructure, including STEM Olympiads, which encourage the use of equipment and give students the opportunity to progress to national and international Olympiads and competitions. Thus, the company's contribution extends beyond the construction of a single facility: it creates a modern educational environment capable of improving the quality of human capital and the long-term attractiveness of the industrial region for families and young professionals.



Particular attention is paid to the technical and vocational education system. ERG collaborates with colleges in the regions where it operates and participates in developing approaches to their development in conjunction with the government. This work covers facilities, educational programs, and practical training: at various times, AR/VR classrooms and occupational safety training rooms have been created at colleges. The company also assesses not only the educational institution's equipment but also how well the educational environment meets the expectations of the new generation. The College Alliance and ERG conduct comparative assessments of colleges and conduct student surveys to better understand young people's evolving educational and career needs. Khromtau College, for

example, is among the most advanced colleges in Kazakhstan in terms of equipment, training, and collaboration with the company.

The next level of this system is interaction with the higher education ecosystem. In the regions where it operates, ERG works with anchor universities, including Toraigyrov University (Pavlodar), K. Zhubanov Aktobe Regional University, and Rudny Industrial University, and also collaborates with other universities to share knowledge and experience. The company supports the development of their facilities, educational programs, and faculty. This has a very practical purpose: the quality of education in an industrial city influences not only the training of future specialists but also the decision of families to remain in the region. A strong regional university becomes part of an environment in which employees can connect their children's futures with the city, and young professionals can connect their professional paths with the city.



At the next level is the ERG Corporate University, which combines professional, mandatory, and leadership training within the Group. In 2025, ERG Corporate University was the first in Kazakhstan and the CIS to receive EFMD LIFT Learning Impact certification, and in July 2026 – international accreditation from EFMD Corporate Learning Improvement Process (CLIP), becoming the first corporate university in Kazakhstan to receive such accreditation. For the ESG approach, this is important not only as international recognition but also as confirmation of the connection between education and business strategy.

The corporate university's educational ecosystem utilizes VR technologies, digital simulators, and industrial training equipment. The technological transformation of industry makes this connection particularly noticeable. Automation and digitalization are gradually shifting some arduous, routine, and

potentially dangerous operations to a new technological environment. At the same time, demands on digital, engineering, and management competencies are increasing. Therefore, for ERG, employment sustainability increasingly means not maintaining a static job, but rather enabling people to develop alongside production.



«Technology isn't just changing production; it's changing the demands placed on people. Therefore, for us, investing in human capital means not just training employees for today's challenges, but creating opportunities to grow alongside the business and be prepared for the professions and competencies that industry will need tomorrow.»

— Shattyk Abdykalykov, Director of the ERG Social Welfare Department

This is one of the key features of the ERG social management model: investments in the region, health, education, and the quality of the urban environment are viewed not as peripheral to the core business, but as part of the long-term viability of the business. This is the connection between the SDGs and the ERG development strategy: not through a formal listing of goals, but through an understanding of the sustainable conditions that must be in place for the enterprise and the region to develop together.

SAFETY: WHEN PRINCIPLE OUTWEIGHS PERFORMANCE

While social sustainability begins with understanding the needs of the territory, safety begins with a different question: what negative impact is unacceptable, regardless of production results and economic benefits? In 2026, ERG updated its Occupational Health and Industrial Safety Policy. The document clearly establishes the management's position: worker safety is the highest priority, and only a project without injuries and accidents can be considered successful.



«Worker safety is always our top priority. We only consider projects successful if they are free of injuries and accidents.»

— Alimkhan Yerkhodzhaev, Director of Occupational Health and Industrial Safety

The primary strategic goal is defined as eliminating fatal and potentially fatal injuries. The ultimate goal is sustainable production without injuries, incidents, and accidents. In the corporate ESG system, this

objective is enshrined in fatal injury and LTIFR metrics, meaning safety is measured not only by the implementation of measures but also by actual results.



SEVEN PRINCIPLES OF SAFETY AS A MANAGEMENT FRAMEWORK

The OHS policy outlines seven principles that translate a general focus on safety into daily management practices. The first is the primacy of safety: it takes precedence over production, financial, and other metrics, and the need for safe work execution and resource availability must be considered in decision-making. This is crucial for industrial environments, where risk can arise precisely when deadlines, production objectives, and safety requirements conflict.

The second principle is a clear division of responsibility. Line managers of workshops, sections, and plants are responsible for decisions, planning, and control, while the OHS department is responsible for the methodology, system, control, consultation, and the authority to stop hazardous work. Each employee is individually responsible for compliance and stopping unsafe work. This approach shifts responsibility away from the "safety department is responsible for safety" model and places it back where operational decisions are made.



«Our occupational health and safety department isn't responsible for safety. The occupational health and safety department is a methodologist and facilitator. Responsibility for worker safety falls on line management and the workers themselves.»

— Alimkhan Yerkhodzhaev, Director of Occupational Health and Safety at ERG

The ERG approach is based on the understanding that a consistently high level of safety cannot be achieved solely through a system of rules and subsequent enforcement. Safety requirements must become part of professional competencies—equally understood by both the manager making production decisions and the employee directly performing the work. This presupposes not a formal knowledge of regulations, but the ability to recognize risks before work begins, choose a safe method for performing it, and perceive compliance with requirements as an integral condition of professional performance. In this way, safety is gradually integrated into the very culture of production: from a control function, it becomes a criterion for the quality of management and operational decisions.

This approach simultaneously changes the logic of risk management. Attention and resources are focused primarily on where the potential consequences are most serious—on preventing fatal injuries, major accidents, and fires—while maintaining readiness to act effectively even in situations whose likelihood cannot be completely eliminated.

Openness to incident information is equally important: an incident is viewed not as a fact to be minimized in reporting, but as a source of knowledge about system failures and existing practices. Recording and analyzing it allows us to go beyond the immediate cause, identify deeper organizational and technical factors, and disseminate the lessons learned to other divisions and facilities. Dissemination of lessons learned occurs not only through the analysis of individual incidents. To this end, ERG also utilizes group-wide platforms for professional dialogue. For example, in February 2025, the "Territory of Safety" Forum was held with the participation of the Group's and divisions' top management, production shop managers, and occupational health and safety specialists. Based on its results, a Roadmap for the further development of the occupational health and safety system was developed. In February of this year, a second Forum was held, where a report on the implementation of the Roadmap was presented and the Occupational Health and Safety Strategy for 2026-2028 was presented. This format allows the translation of the experience of individual assets and the results of risk analysis into solutions applicable to the entire Group. It is the ability to prevent, learn, and prevent recurrence that distinguishes a mature safety culture from a system based primarily on compliance monitoring.





«A mature safety culture begins when safety ceases to be something to control and becomes a way of making decisions: anticipating risk, acting safely, openly learning from every incident and preventing it from happening again.»

— Alimkhan Yerkhodzhaev, Director of Occupational Health and Safety at ERG

FROM INCIDENT TO SYSTEM CHANGE

ERG has a practice of regularly analyzing aggregated incident and injury rates: the results are reviewed quarterly, allowing us to assess overall trends, identify systemic causes, and determine measures to prevent similar events from recurring at Group companies. The results are reviewed by the Central Occupational Safety Committee, chaired by ERG's CEO. The discussion focuses not only on the specific event but also on the question of what measures are needed to prevent a similar scenario from recurring at any Group company. This logic is close to the classic continuous improvement cycle: data collection, root cause analysis, management decision, corrective action implementation, and subsequent verification.

The cultural aspect is also important in the new safety system. In developing the OHS Strategy, the team used a comparative analysis of mining and metals companies in Kazakhstan, Russia, and international leaders, comparing practices and assessing their applicability to ERG. The Bradley Curve was used to assess safety culture maturity. According to an internal assessment, the company was at approximately level two, "dependent," in its safety culture, where compliance is largely determined by external oversight. The next goal is to move to level three, where responsibility becomes more personal and embedded in management behavior.



«At the same time, we don't set ourselves unrealistic goals like reaching Level 4 within five years. We operate on the principle of realistic and consistent transformation of our safety culture. Our goal over the next five years is to reach Level 3 maturity on the Bradley Curve, creating a sustainable culture of personal responsibility for safety».

— Alimkhan Yerkhodzhaev, Director of Occupational Health and Safety at ERG

The developed tools have begun piloting at two sites: the metallurgy and mining sectors. The purpose of the pilot is not to quickly roll out the new practice to all assets, but rather to first observe the change, compare the results, and adjust the approach if necessary.





«We use a phased approach: first, we test the Strategy's proposed initiatives and tools on pilot sites, assess their impact on safety culture and performance, refine the tools as necessary, and, once their effectiveness is confirmed, scale the most effective practices to other Group assets.»

— Alimkhan Yerkhodzhaev, Director of Occupational Health and Safety at ERG

CLIMATE: LONG-TERM AMBITION IN A CARBON-INTENSIVE INDUSTRY

Decarbonization is one of the most strategic topics for ERG, as Kazakhstan's energy sector and the Group's production profile have historically relied heavily on coal. This creates a challenging starting point: significant emissions reductions require more than just one project, but rather changes to the energy mix, technologies, investment criteria, and planning horizon.

ERG's climate policy, adopted in 2024, supports the goals of the Paris Agreement and includes the cost of greenhouse gas emissions in business decisions across the entire value chain. The company has a long-term ambition to move towards carbon neutrality by 2050. ERG Kazakhstan's decarbonization strategy envisions a reduction of approximately 6 million tonnes of CO2 -eq, or approximately 20%, by 2035, through reductions in Scope 1 and 2 emissions and a reduction in the carbon footprint of its core products.



The ESG goals set more specific targets: the share of renewable energy and low-carbon sources in electricity consumption should increase to 15% by 2030; the carbon footprint of aluminum, high-carbon ferrochrome, and iron ore pellets should decrease by 30% by 2035 compared to 2021. The mechanisms also include the development of renewable energy sources, increased energy efficiency, modernization of production processes, and the introduction of new low-carbon technologies.

One of the most notable projects is the 150 MW Khromtau Wind Farm in the Aktobe region, commissioned in 2025. Its expected output exceeds 500 million kWh per year. The project will avoid up to 440,000 tons of CO2 emissions annually and save over 300,000 tons of coal. For the Group, this is not only a power generation facility but also a means of reducing the carbon footprint of ferrochrome products.

The climate agenda management mechanism itself is also important. The climate policy sets the principle for incorporating the cost of emissions into business decisions, while the decarbonization strategy assigns roles to the CEO, the ESG Committee, the Investment Committee, divisions, and the project function. This means that climate is gradually moving from the realm of non-financial reporting to the investment decision-making system, where the company's long-term carbon profile is formed.



«For ERG, decarbonization is a long-term business transformation. We must consider our future carbon profile today when choosing technologies, developing our energy sector, and making investment decisions. This approach allows us to simultaneously reduce our climate impact and enhance the long-term competitiveness of our products».

— Talgat Torebekov, Director of the Department of Environmental Protection and Sustainable Development of ERG

ECOLOGY: FROM IMPACT CONTROL TO TECHNOLOGICAL TRANSFORMATION OF PRODUCTION

For ERG, environmental responsibility begins not with individual environmental protection measures, but with understanding its own impact and the ability to systematically manage it. The company's environmental approach is evolving according to this strategic, long-term logic. Back in 2018, the Group developed an Environmental Strategy to 2030, which currently covers the main production processes – mining, metallurgy, and energy. It is updated annually to reflect achieved results, technological developments, and changing requirements. Approximately 282 billion tenge is planned for the implementation of the environmental program through 2030.

At the same time, ERG's Environmental Strategy is built around specific, measurable results. By 2030, ERG plans to reduce particulate matter emissions by 56%, water withdrawals from water bodies by 33%, anthropogenic discharges of pollutants from quarry and mine waters into natural water bodies by

30% relative to the baseline, ensure recycling of at least 60% of generated hazardous waste, and increase the recycling and sale of secondary materials obtained from industrial waste to 2 million tons. These targets are directly aligned with the SDGs in the areas of clean water, responsible production, sustainable industrialization, and ecosystem conservation.

But the most telling aspect here is not the existence of goals, but the mechanism for achieving them. ERG's environmental strategy is effectively becoming a long-term program for the technological modernization of assets: environmental indicators are translated into specific engineering solutions, investment projects, and measurable impact. Thus, to date, 73 projects have been implemented within the framework of the strategy, another 21 are underway, and 72 are planned. These projects cover the modernization of gas cleaning and ash collection equipment, aspiration systems, the construction and reconstruction of wastewater treatment facilities, automated environmental monitoring, dust suppression, and the research and testing of new technologies.

A key element of this transformation is the implementation of best available techniques (BAT). ERG is consistently modernizing existing industrial facilities using technological solutions from leading international manufacturers. At the Pavlodar Alumina Plant, six sintering furnace electrostatic precipitators were replaced with modern hybrid filters, with investments in this program totaling approximately 22 billion tenge. Modern gas and dust collection systems have been implemented at the Aksu and Aktobe Ferroalloy Plants, the Eurasian Energy Corporation power plant, and the Aluminum of Kazakhstan Thermal Power Plant No. 1, while the Kacharsky The heating plant was converted from coal to natural gas.





The results of this consistent modernization are already being reflected across the Group: by the end of 2025, particulate matter emissions have decreased by 16%, or approximately 21,000 tons, relative to the baseline. The next stage is bringing process parameters closer to international environmental benchmarks. Specifically, a project costing over 13 billion tenge is being implemented at the Aksu Power Plant to replace three ash collection units with hybrid filters; the expected effect is an approximately 97% reduction in emissions.



«Environmental modernization at ERG is not a standalone set of environmental protection measures, but a consistent change in the technological basis of production: measurable impact becomes a goal and a specific engineering solution, and the achieved result becomes the basis for the next cycle of improvements.»

— Talgat Torebekov, Director of the Department of Environmental Protection and Sustainable Development of ERG

FROM MEASUREMENT TO REAL-TIME CONTROL

The quality of environmental data is becoming a key component of modernization. Instead of relying solely on periodic reporting, ERG is developing an automated monitoring infrastructure that allows for the collection of information directly from production sources. From 2021 to 2023, automated monitoring systems were installed at 57 emission sources and three discharge sources. They enable online tracking of both impact indicators and process parameters. Additionally, seven automated monitoring posts have been installed at the boundaries of sanitary protection zones. In Pavlodar, information from the Pavlodar Alumina Plant post is transmitted in real time to the city's LED screens, thereby becoming an element of open communication between the plant and the city.



The next step is digitalization, not just of individual measurements, but of the entire environmental information system. In 2025, a pilot project was launched at the Eurasian Energy Corporation (EEC) to implement the Emissions software product, designed to collect, analyze, and consolidate environmental data. The solution is expected to be expanded to other Group companies in the future.

This approach is important specifically from an impact management perspective: data no longer serves only as a reporting tool. The faster a company sees changes in environmental parameters, the sooner it can identify deviations, understand their technological cause, and make decisions. Thus, monitoring becomes a feedback loop between production and the management system.

INDEPENDENT EVALUATION AS A MECHANISM FOR CONTINUOUS IMPROVEMENT

Another element of the ERG environmental model is voluntary external verification of its own practices. In 2025, an independent environmental audit was conducted at the Aktobe Ferroalloy Plant with the participation of international specialists. The assessment focused not only on compliance with Kazakhstan's environmental legislation: the company's practices were also compared with current BAT reference standards and the requirements of the European Industrial Emissions Directive. The findings of this audit are taken into account in the annual update of the Ecostrategy. ERG. A similar assessment is planned for Kazakhstan Aluminium Smelter in 2026.



ERG's environmental programs develop as a sequential process: established goals define modernization areas, the results of completed projects are assessed based on actual changes in environmental indicators, and data from monitoring, audits, and independent assessments are used to plan future activities. This approach allows for the adjustment of decisions as data accumulates and consistently improves the environmental performance of production.

ENVIRONMENTAL CHARACTERISTICS OF PRODUCTS AS A FACTOR OF COMPETITIVENESS

As the system develops, ERG's focus expands to another level: from the environmental performance of the production site to the environmental performance of products. In March 2026, an Environmental Product Declaration (EPD) for high-carbon ferrochrome from the Aktobe Ferroalloy Plant was

registered and published on the EPD International platform. Its preparation was preceded by a life cycle assessment in accordance with ISO 14040 and independent international verification. The declaration complies with the requirements of ISO 14025.



For ERG, this represents a qualitatively new level of environmental management. Impact is no longer assessed solely within the enterprise: environmental performance is becoming part of the product information itself, accessible to consumers, investors, and partners in the international market. In this sense, the EPD links environmental modernization of production with the competitiveness of Kazakhstani products and gradually transforms environmental performance from an internal production indicator to a characteristic of the market offering.

WATER AND WASTE: FROM REDUCING CONSUMPTION TO REUSING RESOURCES

Another key feature of ERG's approach is the gradual expansion of the environmental agenda from pollution reduction to more efficient natural resource management. The goal of reducing water withdrawal from natural water bodies by 33% requires not just one infrastructure project, but a systematic approach to water balances, water reuse, and the maintenance of networks and treatment facilities. Similarly, in waste management, the emphasis is shifting from landfill to the return of materials to economic circulation. ERG's strategic focus envisions the recycling and sale of to 2 million tonnes of secondary materials obtained from industrial waste.

This logic already goes beyond traditional environmental protection and approaches the circular economy model, in which the waste from one technological process is viewed as a potential resource for another. Projects to extract metallic gallium from waste at the Pavlodar Alumina Plant and the development of ERG Green in Khromtau also fall within this category.

Finally, ERG's environmental strategy doesn't end at the border of the sanitary protection zone. The Group combines technological modernization with the restoration of natural capital and the development of an environmental culture in the regions where it operates. In 2024–2025 alone, ERG financed the planting of approximately 5.2 million tree seedlings in the Pavlodar region, and in 2022–2025, the Group participated in the planting of over 5.5 million seedlings and trees.



Environmental education has become a separate focus: the "Save Water, Save the Future!" project unites schools and translates the topic of rational water consumption from the corporate environmental agenda into everyday practices of the new generation. In 2025, a unified environmental class session was held simultaneously in 111 schools with the participation of the Minister of Water Resources and Irrigation of the Republic of Kazakhstan. Furthermore, 1,502 ERG employees from various assets and divisions completed environmental training aimed at developing environmental awareness, conscious resource consumption, and eco-friendly everyday practices. This creates another important layer of impact: ERG not only reduces its own environmental footprint but also uses its accumulated industry expertise to foster a broader environmental culture. Technology, data transparency, government engagement, environmental education, and local community engagement are becoming components of a single system.

The company is moving from environmental regulation and control to a model in which environmental goals influence technological decisions and investments: data is used for near-real-time management, practices are compared with international benchmarks, impact is assessed at the product level, and accumulated expertise is disseminated beyond the enterprise. In this model, ecology is no longer an

auxiliary function of industrial production, but a factor in its technological development, sustainability, and long-term competitiveness.



«We view environmental performance not as an ancillary function of production, but as a factor in its technological development. Environmental goals should influence investment and engineering decisions, data should help manage impacts, and best practices should become part of a business's long-term competitiveness».

— Talgat Torebekov, Director of the Department of Environmental Protection and Sustainable Development of ERG

CORPORATE GOVERNANCE AND RESPONSIBLE BUSINESS PRACTICES

For ERG, responsible business conduct is an integral part of its corporate governance and risk management system. The company's fundamental principle is compliance with all applicable laws and regulations, coupled with high standards of business ethics and responsible behavior.

These standards are enshrined in ERG's Code of Corporate Conduct, which sets out key requirements for conducting business and interacting with employees, business partners, and other stakeholders. The Code covers issues of combating corruption, money laundering, and terrorist financing; compliance with industrial safety, labor protection, and environmental protection; sanctions and antitrust laws; transparency in interactions with counterparties; and the protection of personal data and confidential information. Particular attention is paid to the principles of integrity, fair labor practices, and respect for human rights, including the prohibition of forced and child labor, and the prevention of discrimination and harassment. ERG's approach goes beyond formal compliance with the law: the Company consistently develops its policies and practices in line with international standards and evolving ESG requirements, including those related to human rights.

To implement the provisions of the ERG Code of Corporate Conduct and effectively manage compliance risks, the Group implements a risk-based compliance management system. This includes identifying and assessing compliance risks, developing and implementing relevant policies and procedures, conducting comprehensive due diligence on counterparties, training employees and business partners, as well as monitoring and reporting. This approach allows compliance to be viewed as a risk management tool and ensuring business resilience: identifying risks early, assessing them, and taking mitigating measures allows for the potential impact of decisions on the Company, its partners, employees, and other stakeholders to be considered.



ERG also consistently develops a culture of open communication, providing employees of Group companies and business partners with the opportunity to freely ask questions and report potential violations of the ERG Code of Conduct or other policies and procedures, including through the ERG Hotline. The ERG Hotline is a confidential channel, operated by an independent operator and available 24 hours a day, seven days a week. ERG Hotline contact information is publicly available, including on the ERG website and the Procurement Portal. All incoming requests are reviewed, and the Company adheres to the principle of non-repercussion against bona fide complainants.

Since 2023, ERG in Kazakhstan has held an annual Ethics and Compliance Day. In 2025, the event united thousands of employees around the company's values and commitment to high standards of business ethics and professionalism. Initiatives such as these further promote the integration of corporate policy requirements into daily operations.

RESPONSIBLE INTERACTION WITH SUPPLIERS AND PARTNERS

Responsible business principles also extend to supply chains. ERG has adopted the ERG Supplier Code of Conduct, which defines the Company's expectations regarding supplier compliance with ethical business principles and responsible supply chain management. The Code's provisions are incorporated into supplier contracts and considered during due diligence, and suppliers are required to ensure that similar requirements are applied to their subcontractors. Thus, responsible business principles extend

not only to ERG's direct counterparties but, where appropriate, to a broader range of supply chain participants.



ERG 's third-party risk management system provides a comprehensive, risk-based approach to interacting with counterparties at all stages of the contractual cycle—from establishing business relationships and concluding contracts to their execution and completion. A key element of the system is comprehensive counterparty due diligence. During due diligence, the risks of non-compliance with sanctions requirements, human rights violations in supply chains, money laundering, and bribery and corruption are assessed, among other things. Based on the assessment results, the counterparty and the relevant transaction are assigned a risk category, which is used to determine the measures necessary to minimize risks when they are identified. This approach allows for differentiated levels of control based on the nature and potential significance of the identified risks.

The Group's aluminum division implements the Responsible Aluminium Production Programme, developed in accordance with London Metal Exchange (LME) requirements and the principles of the OECD Due Diligence Guidance for Responsible Mineral Supply Chains. The program integrates environmental, social, and governance aspects of responsible production and provides a risk-based assessment of the mineral supply chain. The program addresses issues of human rights, business ethics, occupational health and safety, environmental protection, as well as risks associated with countries of origin, conflict zones, and high-risk areas (CAHRA). The aluminium brand of the Kazakhstan Aluminum Smelter undergoes an annual verification process to confirm its compliance with LME requirements.

Responsible management practices are also being developed at other Group assets: JSC TNC Kazchrome has repeatedly undergone independent EcoVadis assessments and confirmed its status as a "Responsible Chromium Producer" by the International Chromium Development Association (ICDA). In the 2026 EcoVadis assessment, Kazchrome received a silver medal.

Independent assessments and industry confirmations not only demonstrate the achieved level of maturity of relevant practices, but also use external assessment as a tool for their further improvement and development of corporate processes.



«The long-term sustainability of the Company's business is largely determined by the level of trust from clients, partners, society, and the countries in which we operate. This trust is built through honesty, transparency, and responsibility, which we consistently integrate into all aspects of our management system.»

— Annetta Natanzon, Director of Compliance, ERG

ERG SUSTAINABLE DEVELOPMENT MANAGEMENT SYSTEM

In ERG ESG creates a unified management framework that allows for the consideration of various business impacts through a common decision-making logic: defining what is material, setting goals and responsibilities, providing the necessary mechanisms and resources, measuring results, and using the resulting data for further improvement. Thus, sustainable development becomes not a collection of individual initiatives, but rather an integral part of the company's corporate governance system.



The practical implementation of this approach is reflected in ERG's corporate ESG goals for 2030, adopted in 2021. They link sustainability priorities to specific areas of the Group's activities and measurable results, while also aligning them with the SDGs. At the same time, the company does not attempt to mechanically replicate the SDG structure: the goals are grouped around the most significant areas for the business. As of 2026, the system includes approximately 30 ESG indicators, allowing it to connect long-term benchmarks with annual results and specific mechanisms for achieving them.

The ERG ESG Committee, chaired by the CEO of ERG, plays a coordinating role in this governance framework. The ESG Committee annually reviews ESG goals and indicators, strategies and roadmaps, key internal documents, environmental and social performance, human rights, stakeholder engagement, green projects, and sustainability reporting. This format ensures that key sustainability issues are addressed at the Group's senior management level, while the development and implementation of specific solutions remain the responsibility of the relevant functions and businesses.

The final element of the management cycle is sustainability reporting and public disclosure of results. ERG has been publishing Sustainability Reports since 2014, covering key environmental, social, and governance aspects of the Group's activities. The reports are prepared with reference to international reporting frameworks and requirements, including GRI Standards and the EU CSRD, and approaches to identifying material topics and managing ESG data are evolving in line with new corporate reporting requirements, including the double materiality principle. Along with Group-level reporting, individual ERG companies in Kazakhstan also disclose information: the annual and financial reports of JSC TNC Kazchrome and JSC Kazakhstan Aluminium Smelter are presented on the KASE marketplace, with KAS's annual report including a separate sustainability review.



«ESG is a way for us to incorporate long-term goals into specific business decisions. Overall priorities are set at the Group level, and actual results depend on the work of the professional functions and enterprises where investment, technological, and production decisions are made.»

— Kudrat Shamiev, General Director of ERG in Kazakhstan

Sustainability as a quality of competitive business

The ERG experience reviewed is in many ways consistent with the SDG Impact Standards for Enterprises and ISO/UNDP 53001, which consider business's contribution to achieving the SDGs through the linkages between strategy, impact management, corporate governance, transparency, and continuous improvement. In the Group's practice, these principles are implemented through professional management systems for social, safety, environmental impacts, decarbonization, and the supply chain, while corporate ESG goals allow them to be linked to long-term business priorities and measurable

results. With this approach, sustainability is determined not by the number of individual ESG projects, but by the quality of decisions, the consequences of which shape the company's future profile. Technological choice influences emissions and resource consumption, safety investments influence production culture, regional engagement influences human capital and territorial sustainability, supplier requirements influence practices along the value chain, and climate solutions influence the carbon characteristics of products and their competitiveness in international markets.

For ERG, whose production assets and investment decisions are designed for decades to come, the SDGs are becoming a factor in long-term business competitiveness, alongside operational efficiency, technological development, and production reliability. The ability to safely conduct production, use resources more efficiently, reduce environmental impact, address climate and regulatory changes, maintain the trust of employees and the regions where it operates, and meet the demands of international markets increasingly determines the Group's long-term sustainability. The SDGs provide a common reference point for this system, allowing it to align economic performance with the broader business impact, and their practical significance is realized when long-term commitments are translated into investment programs, technological and management decisions, and measurable results. For ERG, this is part of a more fundamental task: developing an industrial business capable of creating long-term value and maintaining competitiveness over decades.



«For ERG, sustainable development is a matter of quality and long-term business competitiveness. The decisions we make today regarding technology, investments, safety, people, and the environment shape ERG's future for decades to come. Therefore, ESG is an important part of our responsibility for the future of the company and the regions where we operate.»

— Kudrat Shamiev, General Director of ERG in Kazakhstan

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This document provides an overview of ERG's management approach to sustainable development.

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