

INVESTING IN THE FUTURE





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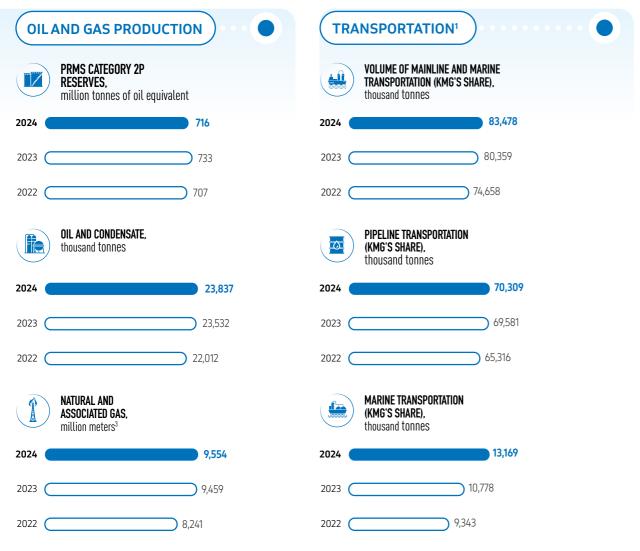
Report Concept: Investing in the Future

KazMunayGas's 2024 Sustainability Report outlines the Company's strategy for ensuring long-term growth and adapting to current challenges. It highlights key areas of investment in operational development and business diversification, as well as environmental initiatives and social projects.

We are committed to generating growth that benefits all stakeholders. Our investments support business development, contribute to the national economy and social well-being, and address ecosystem protection challenges. KazMunayGas aims to be a leader in the sustainable development of the country's energy sector.









PROCESSING AND MARKETING OIL REFINING, thousand tonnes 19,593 WHOLESALE SALES OF OIL PRODUCTS PRODUCED IN KAZAKHSTAN BY KMG, 5,272 2022

SERVICE





LAND TRANSPORT, INCLUDING CARGO AND PASSENGER
TRANSPORTATION, LOGISTICS AND PROCESS
SUPPORT FOR FIELDS



OFFSHORE OPERATIONS SUPPORT



OIL AND GAS WELL DRILLING AND DEVELOPMENT



WELL SERVICING AND WORKOVER



OIL AND GAS EQUIPMENT MANUFACTURING



PROCESS AUTOMATION



MAINTENANCE OF MEASURING INSTRUMENTS,
AUTOMATION AND TELEMECHANICS SYSTEMS, PROVISION
OF TELECOMMUNICATION, RADIO COMMUNICATION AND CABLE
AND SATELLITE TELEVISION SERVICES AT OILFIELDS;
INSPECTION AND REPAIR OF MEASURING INSTRUMENTS;
MAINTENANCE OF SECURITY ALARMS



OIL SPILL RESPONSE SERVICES



EXTRACTION AND TRANSPORTATION OF POTABLE WATER, TRANSPORTATION OF SEA WATER

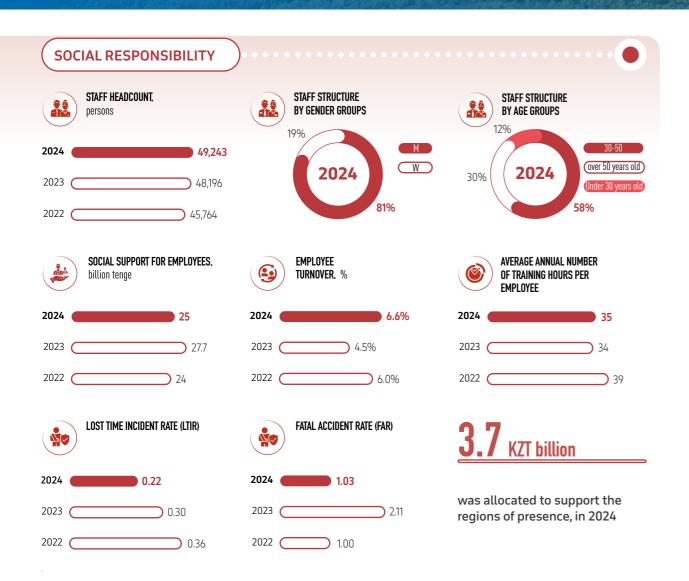


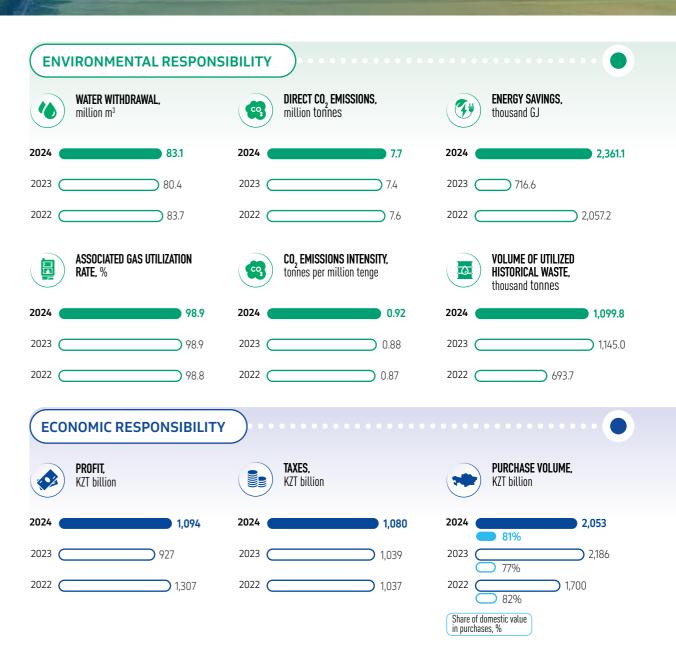
CATERING AND MAINTENANCE OF SOCIAL FACILITIES, ETC.



KMG GROUP OF COMPANIES' KEY INDICATORS

SUSTAINABLE DEVELOPMENT INDICATORS





КазМунайГаз

MESSAGE FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS

DEAR STAKEHOLDERS.

2024 has been a significant year for NC KazMunayGas JSC – a year of sustainability, growth, and new horizons. We continue to move forward amidst the transformation of the global energy landscape, confidently building a business model that creates long-term value – not only in the economy but also in society, the environment, and in every region where we operate.

KMG's investments cover a wide range of areas – from increasing operational efficiency in oil production and refining, and diversifying our portfolio to projects in petrochemicals and renewable energy sources, from social support for our employees to building critical infrastructure in the regions where we are present. These investments create a multiplicative effect: they foster economic growth, support local businesses, strengthen our production and human potential, and create conditions for the harmonious coexistence of business and ecosystems.

Sustainability as a systemic element of corporate governance

In 2024, we continued to strengthen the internal architecture of sustainable development. ESG principles are being steadily integrated at all levels of corporate governance and are becoming an essential part of the Company's business processes. The Health, Safety, Environment and Sustainable Development Committee under the KMG's Board of Directors plays a key role in this work. Throughout the year, its meetings addressed issues such as the implementation of the Low-Carbon Development Program, managing ESG risks, improving health and safety systems, as well as KMG's contribution to achieving the UN Sustainable Development Goals.

The result of this systematic work is reflected in the external assessment of the Company's ESG risk management. In November of last year, the international agency Sustainalytics assigned KMG an ESG risk rating of 32.8, placing the Company 49th among 300 companies evaluated in the oil and gas sector. A sustainable level of ESG risk management was also confirmed by the MSCI agency, which assigned KMG a "BBB" rating. Experts noted progress in managing carbon emissions, biodiversity, land resources, and waste, and also positively assessed the Company's reclamation efforts and the development of "green" technologies.

Social responsibility

We take pride in the fact that KMG is one of the largest employers in the country, providing employment to over 80,000 people, including contractors. In 2024, we approved an updated Personnel Policy that reflects modern principles of sustainable management and is focused on developing the professional potential of each employee. The core values of the policy are transparency, fairness, social responsibility, continuity, and equality of opportunities. KMG adheres to high standards in labor and human rights, guided by the principles of international organizations such as the UN and ILO.

Our commitment to social responsibility is reflected in our support for the regions where KMG operates. For example, in 2024, we completed major construction work on one of the most significant infrastructure projects – the desalination plant in Kenderli. This project is aimed at providing stable water supply to the city of Zhanaozen, improving the quality of life for the population, and supporting the region's development in the long term.

A major focus remains the protection of human rights. KMG updated its Human Rights Policy, reaffirming its commitment to international standards, including the UN Declaration and the UN Guiding Principles on Business and Human Rights.

Environmental Priorities

We continue the consistent implementation of our climate strategy. The Low-Carbon Development Program, approved in 2024, includes specific goals for reducing greenhouse gas emissions, increasing the share of renewable energy sources (RES), and implementing "green" technologies.

Our efforts are already yielding results. International recognition has been given to KMG's achievements in managing climate and water risks – based on our participation in the Carbon Disclosure Project, the Company was assigned a "B" rating, which is a significant step forward compared to previous periods.

In 2024, KMG prepared and submitted a methane emissions report as part of the OGMP 2.0 international initiative, demonstrating a high level of transparency. OGMP 2.0 is the flagship program of the UN initiative aimed at reducing methane emissions in the oil and gas industry. KMG also joined the Decarbonization Charter for the oil and gas sector at COP28, striving for deep transformation and the implementation of best global practices.

In parallel, we continue to develop projects in the field of renewable energy. We have started the construction of a hybrid power station (solar + wind + gas) in Zhanaozen in partnership with the Italian energy company Eni S.p.A., and have commenced work on a 1 GW wind power station in the Zhambyl region in cooperation with Samruk-Kazyna JSC and the French company Total Eren. These projects are laying the foundation for changing the energy consumption structure not only within the Company but also at the national level.



Sustainable long-term growth

We are confident that investments in sustainable development are investments in the future. This is how we see the path of KazMunayGas – a path of sustainable growth based on responsibility, leadership and partnership. We believe that the strength of the Company lies in its people, in a shared goal, in care for the environment, and in a striving for innovation.

I would like to thank everyone who is walking this path with us. We are open to dialogue, ready for new challenges, and look forward to tomorrow with confidence. Sustainable development is not just our strategy. This is our mission.

Sincerely, Yernat Berdigulov Chairman of the Board of Directors of NC KazMunayGas JSC

КазМунайГаз

MESSAGE FROM THE CHAIRMAN OF THE MANAGEMENT BOARD

DEAR COLLEAGUES, PARTNERS, AND SHAREHOLDERS.

The year 2024 marked an important milestone in the implementation of the Development Strategy of NC KazMunayGas JSC. We continued to develop a key sector of the national economy with consistency and commitment, upholding our responsibility to society and future generations. For us, sustainable development means making tangible investments: in modernization, environmental protection, employees' well-being, and regional resilience.

Every action we took in 2024 was aimed at creating long-term value – economic, environmental, and social. This report reflects our philosophy: to invest with consideration for societal interests and environmental protection.

People – at the core of our strategy



In 2024, we expanded our electronic medical check-up system: 63 new modules were installed, a standardized sanitary control program was approved, and a Health Improvement Action Plan for 2025–2027 was adopted.

Youth policy is a strategic priority. We are working with regional universities and implementing the "Zhas Maman", "Intern", dual education, and "KMGE School" programs to train a new generation of professionals.

Dialogue with 35 labor unions representing over 36,000 employees ensures social stability. In 2024, all commitments were fulfilled, and social support expenditures amounted to 25 billion tenge.

KazMunayGas is actively contributing to regional development. Projects completed include: the "Jaiyq Arena" sports complex in Uralsk, a support center for children with special needs in Atyrau, and a Palace of Schoolchildren with a tech park in Kyzylorda. Through the Samruk-Kazyna Trust fund, up to 10 billion tenge was allocated to support regions affected by the flooding.

Environment – at the core of sustainable growth

Environmental responsibility is a top priority. In 2024, 1,099 thousand tonnes of legacy oil waste were disposed of, and 172 hectares of land were remediated. Since 2018, a total of 4.5 million tonnes of waste have been processed. Notably, NC KazMunayGas JSC's subsidiary Karazhanbasmunay JSC has fully eliminated historical contamination within its contract area, having disposed of more than 518 thousand tonnes of oil-containing waste since 2021.

The beneficial utilization rate of raw gas reached 98.9%. Flaring volumes have decreased by 89% compared to 2017. This outcome reflects modernization efforts, adoption of best available technologies, and strict environmental oversight.

As part of water resource management efforts in Kenderli, construction of a seawater desalination plant (50,000 m³/day capacity) is ongoing, with commissioning planned in 2025. Karazhanbasmunay JSC has launched a formation water desalination plant with a daily capacity of 42,500 m³. Compared to 2022, the water intake was reduced by 4.07 million m³.

KazMunayGas supports the national goal of achieving carbon neutrality by 2060. The Company is currently designing a 1 GW wind power plant with storage systems in the Zhambyl region (KMG share – 20%) and construction of a hybrid power plant (247 MW) in the Mangystau region (Zhanaozen), combining both renewable energy sources and traditional electricity production from gas, is in full swing.

We are also assessing the potential for low-carbon hydrogen production, including the use of renewables and carbon capture technologies. A digital Water Resources Atlas has been developed to analyze the feasibility of producing green hydrogen in western regions of Kazakhstan.

Our subsidiaries and affiliates are actively implementing the action plan of the Low-Carbon Development Program, aimed at reducing the carbon footprint and improving energy efficiency. These efforts contribute not only to environmental safety but also serve as an example of effective environmental stewardship.

Responsibility for the Future

The world is changing, and KazMunayGas remains a key player in ensuring Kazakhstan's energy security. Yet true leadership is not defined solely by production, but by the value we create for society, nature, and the national economy.



By investing in sustainability – in technology, environment, people, and regions – we are laying the foundation for strong and prosperous Kazakhstan.

I would like to thank the KazMunayGas team, our partners, and shareholders for their cooperation and shared achievements. Together, we are building the sustainable energy system of tomorrow.

Sincerely, Askhat Khassenov Chairman of the Management Board of NC KazMunayGas JSC

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125 YEARS OF KAZAKHSTAN'S OIL: HISTORY, PRIDE, A PATH TO THE FUTURE

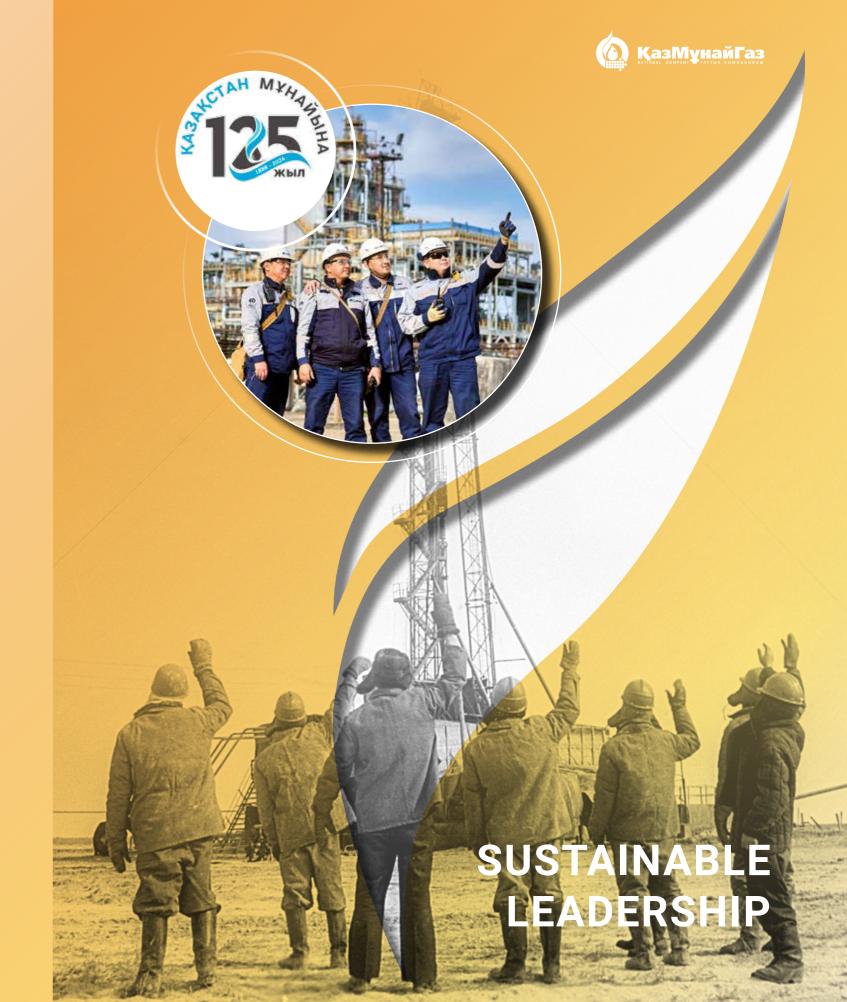
2024 marks the 125th anniversary of the start of industrial oil production in Kazakhstan – a milestone symbolizing not only the long and rich history of the domestic oil industry but also its invaluable contribution to the development of the country's economy, infrastructure, and capital.

The history of Kazakhstan's oil began in 1899 when the first industrial oil fountain was obtained at the Karashungul field, located in the Atyrau region. This event marked the birth of Kazakhstan's oil industry, which later became one of the key sectors for the country. By the early 20th century, fields such as Dossor (1911) and Makat (1913) were discovered and actively developed, earning the region the reputation of being the oil heart of Kazakhstan.

For more than a century, the industry has progressed from the first manual drilling rigs to high-tech production complexes. The Soviet period was marked by large-scale industrialization and geological exploration, which led to the discovery of major fields such as Zhetybay and Uzen, ushering in the era of Mangyshlak oil. With the attainment of independence, Kazakhstan entered a new era of oil development, opening the industry to international investments and implementing advanced technologies. Landmark projects such as the development of the Tengiz, Karachaganak, and Kashagan fields positioned the country among the leading oil-producing states.

KazMunayGas, as the national oil and gas company, occupies a central place in the modern history of the country's oil industry. The company preserves the rich heritage of dozens of enterprises that played a key role in the formation of oil production in Kazakhstan, and today it continues this development by implementing strategic projects, modernizing infrastructure, introducing innovations, and fostering the growth of new competencies. KMG is the successor of traditions and a driver of sustainable change, shaping the future of the modern oil and gas industry.

125 years of oil is 125 years of selfless work by thousands of people: drillers, geologists, engineers, technologists, operators, ecologists, builders, energy specialists, mechanics, welders, drivers, IT specialists, logisticians, industrial safety experts, and many others. It is a story of achievements, overcoming challenges, and continuous movement forward. And today, as more than a century ago, oil remains a powerful driver of progress and a confident look toward the future.





60 YEARS OF OZENMUNAIGAS JSC: TRADITIONS, ENERGY, DEVELOPMENT

In 2024, Ozenmunaigas JSC celebrated its 60th anniversary – one of the largest oil production enterprises in Kazakhstan, playing a key role in the history of the development and formation of the national oil industry. The company's history is closely linked with the development of the unique Uzen oil field and the establishment of the city of Zhanaozen, now an important industrial and social center in the Mangystau region.

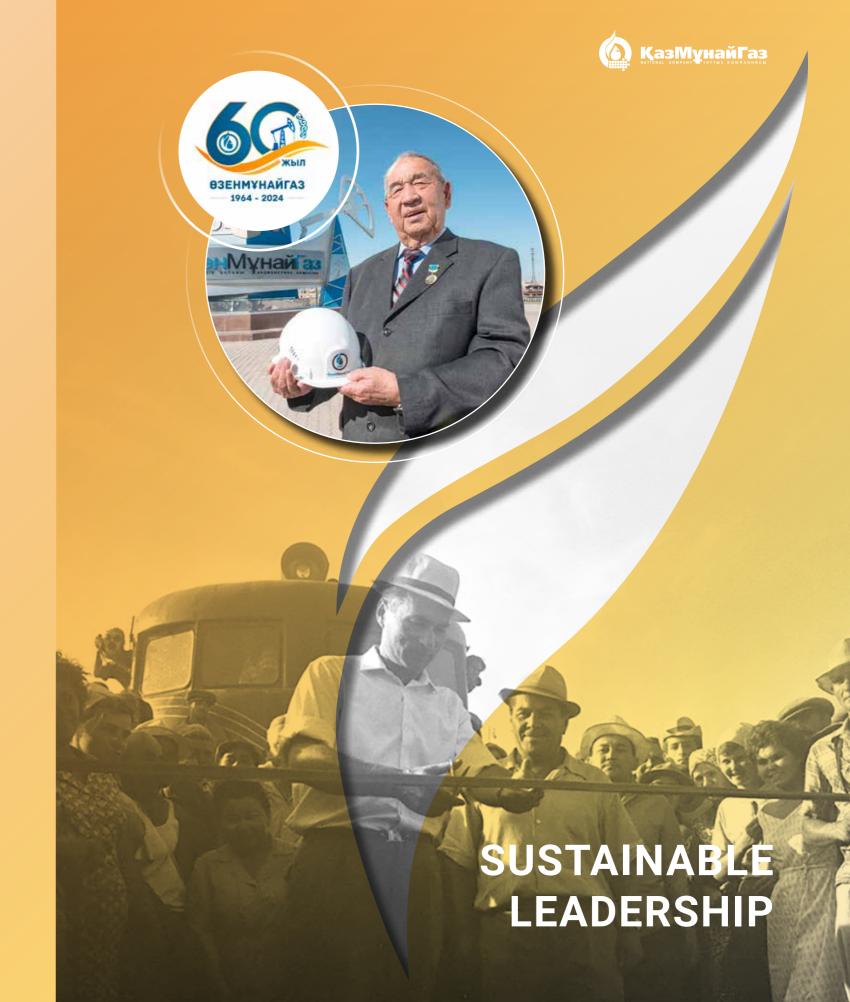
Exploration work at the Uzen field began in 1959. In 1960, the first gas fountain was obtained, and shortly thereafter, on December 15, 1961, the first oil fountain was discovered. In 1964, industrial oil production began. These events marked the beginning of a new phase in the development of the oil industry in Mangyshlak.

On July 15, 1965, the first train carrying Uzen oil was sent to the Atyrau oil refinery. A few years later, a large pipeline was constructed, connecting Uzen to Atyrau and Samara. In 1966, the first million tonnes of oil were extracted. In the 1970s, the field produced half of the total oil extracted in the republic, which ensured the strategic importance of the Uzen field for the entire economy of the Soviet Union.

In 1996, the oil production management was reorganized into Ozenmunaigas JSC. Since 2004, the company has been part of Exploration Production KazMunayGas JSC, and since 2012, it has operated as an independent production company within the structure of NC KazMunayGas JSC.

Over the six decades, Ozenmunaigas has not only increased its production capacity but also made significant contributions to the development of the region. The company actively participates in the construction of social infrastructure, supports education, healthcare, culture, and sports, creates jobs, and invests in the professional development of its employees. Special attention is paid to the modernization of production processes, the implementation of digital technologies, environmental protection, and industrial safety issues.

Today, Ozenmunaigas is home to more than 10,000 employees, a team of professionals united by shared values and a commitment to sustainable development.





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COMPANY PROFILE

National Company KazMunayGas JSC is the largest vertically integrated oil and gas company in Kazakhstan, performing a full production cycle – from geological exploration and hydrocarbon production to their transportation, processing, and marketing of petroleum products, as well as the provision of specialized services.

The Company was established on February 20, 2002, in accordance with the Presidential Decree of the Republic of Kazakhstan No. 811 "On Measures

for Further Safeguarding State Interests in the Oil and Gas Sector of the Country's Economy" and the Government Decree No. 248 dated February 25, 2002. KMG became the legal successor of the national oil and gas companies Kazakhoil, Oil and Gas Transportation, and KazMunayGas -Refining and Marketing JSC. The founding entity of KMG is the Government of the Republic of Kazakhstan, represented by the State Property and Privatization Committee of the Ministry of Finance of the Republic of Kazakhstan.

SHARE CAPITAL STRUCTURE

As of December 31, 2024, the shareholders of KMG are:



Sovereign Wealth Fund Samruk-Kazyna JSC



State Institution "Ministry of Finance of the Republic of Kazakhstan"



State Institution "National Bank of the Republic of Kazakhstan"



shares are in free circulation on the KASE and AIX stock exchanges

GROUP STRUCTURE

The KMG Group comprises 105 enterprises in which KMG owns 50% or more of the voting shares (equity stakes). Of these, 55 companies are located in Kazakhstan, while the remaining assets are situated in Romania, Georgia, Switzerland, the Netherlands, Canada, Bulgaria, Moldova, Russia, Turkey, the United Kingdom, Germany, the UAE, Gibraltar, the British Virgin Islands, the Marshall Islands, the Bahamas, and the Isle of Man.

CHANGES IN THE GROUP STRUCTURE

The reduction in the number of legal entities within the Group, including through the liquidation or reorganization of subsidiaries and dependent entities, is being carried out under privatization and divestment programs.

KMG's Comprehensive Privatization Plan for 2021– 2025, approved by the Decree of the Government of the Republic of Kazakhstan, includes:

- 53 companies designated for sale;
- 94 companies included in the perimeter of KMG's IPO:
- 7 KMG Group companies for which the procedure and conditions for sale and reorganization are defined by the Management Board of Samruk-Kazyna JSC.

On November 13, 2024, the Board of Directors of KMG approved an updated List of Non-Strategic Assets, which provides for the divestment of 7 companies during the period from 2024 to 2025. In accordance with this list, the following actions were taken in 2024:

- 2 companies were liquidated: Snow Leopard International Inc., and KMG-Ustyurt LLP;
- Equity stakes were sold in 2 companies: Karaton Operating Ltd., and Silleno LLP.

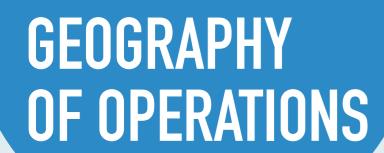
In addition, in 2024, the following companies were either divested or established, although they are not included in the list of companies in which 50% or more of the voting shares (equity interest) are directly or indirectly owned by KMG:

- 3 companies were liquidated: AktauOilMash LLP, Caspi Meruerty Operating Company B.V., and BIO ADVANCED ENERGY SAS;
- 2 companies were established: Mangistau Power B.V. and Mangistau Renewables B.V.





Upstream





OPERATIONAL EXTRACTION ASSETS KAZGERMUNA

Shymkent refinery

Astana

PETROKAZAKHSTAN

KUMKOL RESOURCES

HTTPS://WWW.KMG.KZ/EN/

TURGAI PETROLEUM

MEGA PROJECTS

OIL PUMPING STATION (OPS)

MAIN OIL PUMPING STATION (MOPS)

MunayTas North-West Pipeline Company LLP

Pavlodar refinery

Kazakhstan-China pipeline LLP

Caspian Pipeline Consortium

KazTransOil LLP

Operating oil pipeline





HEADQUARTERS

The Company's head office is located in Astana, and there is also a representative office of KMG in Aktau.



BUSINESS MODEL

Competitive Advantages

- Unique geographical location
- Full integration across all stages of the value chain
- Financial stability
- Diversified portfolio of exploration assets
- Leadership in Kazakhstan's oil transportation sector
- Modern oil refineries
- Oil and gas chemistry projects as a new growth driver for the company
- Modern corporate governance system and commitment to sustainable development principles

Areas of Activity



Exploration and Production of Hydrocarbons: KMG is engaged in the exploration and development of oil and gas fields, ensuring stable

the exploration and development of oil and gas fields, ensuring stable production levels and holding a diversified portfolio of assets with attractive growth potential.



Oil and Gas Transportation:

The company participates in all oil transportation projects in Kazakhstan, holding a 56% market share, and controls a significant portion of gas transportation infrastructure.



Oil Refining and Product
Marketing: KMG controls the four
largest oil refineries in Kazakhstan
and two in Romania, ensuring oil
refining and the sale of oil products
both in domestic and international
markets.



Oil and Gas Chemistry: KMG is developing a new oil and gas chemistry business line, including the launch of a polypropylene production plant and the implementation of a polyethylene production plant project.



Service Maintenance:

The company provides services for the maintenance and repair of equipment, as well as other service activities to ensure the uninterrupted operation of its production facilities.

Strategic Priorities



Resource Base Expansion: Ensuring sufficient reserves for traditional activities and

promising areas.



Increasing Efficiency of the Value Chain: Maximizing benefits from exploration, transportation, refining, and marketing of oil.



Business Diversification and Product Portfolio Expansion: Developing the oil and gas chemistry direction through

the creation of new capacities.



Sustainable Development and Reducing Carbon Intensity of Production: Progressive reduction of carbon footprint and implementation of energysaving technologies.

Stakeholders



Shareholders: Ensuring stable growth in production indicators. High level of corporate governance.



Investment Community:

Investment profitability, transparency, and implementation of ESG practices.



Government: Contribution to Kazakhstan's economic development through tax revenues, export income, and attracting foreign investments.



Employees: Creating safe and favorable working conditions, social guarantees, ensuring fair wages, and professional development.



Society: Implementing social and environmental initiatives aimed at improving the quality of life for the population and protecting the environment.



Clients and Partners: Providing high-quality products and services, maintaining long-term and mutually beneficial relationships.

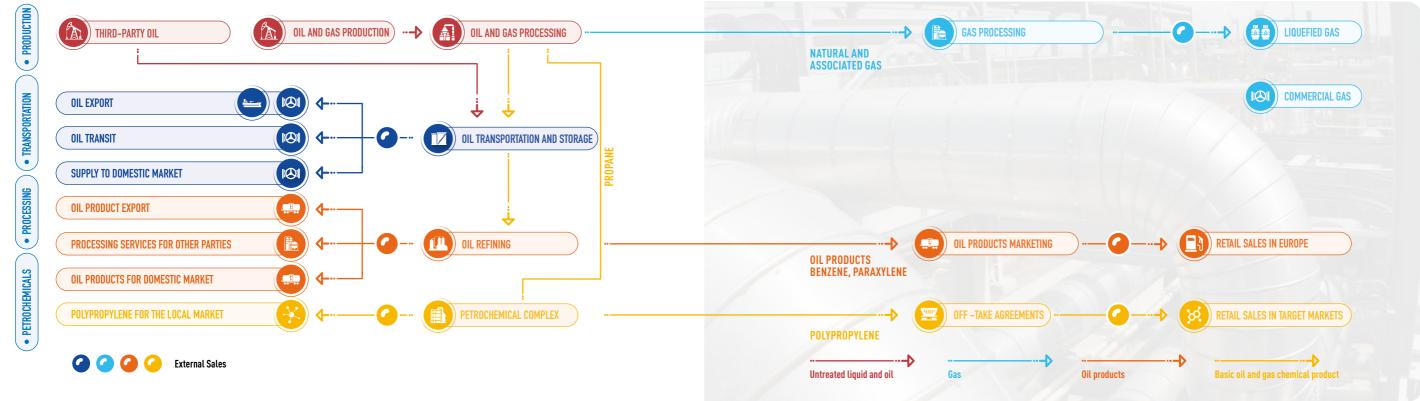


Contractors: Transparency in procurement, fair cooperation terms, and safety on sites.

HTTPS://www.kmg.kz/en/

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PRODUCTION, TRANSPORTATION, AND SALES OF OIL AND GAS

In 2024, KMG's oil and gas condensate production totaled 23,837 thousand tonnes (equivalent to 490 thousand barrels per day), which is a 1.3% increase compared to the previous year. The production volume of associated and natural gas (before reinjection) increased by 1.0%, reaching 9,554 million cubic meters.

The total volume of trunk and marine oil transportation rose by 3.9%, amounting to 83,478 thousand tonnes.

The volume of sales of KMG's own produced oil and gas condensate increased by 1.4%, reaching

24,019 thousand tonnes, of which 64.5% was exported.

To meet domestic market needs, KMG supplied 8,519 thousand tonnes of its own oil and gas condensate, including 5,224 thousand tonnes of crude oil from its operating assets (Ozenmunaigas JSC, Embamunaigas JSC, KazakhTurkMunai LLP) to the Atyrau Refinery, Pavlodar Petrochemical Plant (hereinafter – Pavlodar Refinery), and Shymkent Refinery (hereinafter – PKOP) for further processing and sale of petroleum products.

REFINING AND SALES OF PETROLEUM PRODUCTS

The volume of petroleum products output at Kazakhstani and Romanian refineries totaled 17,949 thousand tonnes in 2024, representing a 1.3%¹ decrease.

The volume of wholesale sales of KMG's own petroleum products increased by 6.7%, reaching 5,272 thousand tonnes. This growth

was driven by increased crude oil supplies from Ozenmunaigas JSC and Embamunaigas JSC for further refining, as well as the sale of additional volumes of diesel fuel carried over from 2023.

¹The sustainability report data on petroleum products output includes other petroleum products (Naphtha, Gasoil, and others) that are not included in the production results for 2024 (operational report).

ECONOMIC PERFORMANCE



Supporting the Kazakhstan's Economy Investment Projects.....

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INVESTING IN THE FUTURE



27















Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.

SUPPORTING THE KAZAKHSTAN'S ECONOMY

GRI 201-1

NC KazMunayGas JSC ensures the reliable functioning of the oil and gas sector, supports the regions in which it operates, and implements sustainable development projects. The Company

creates long-term economic value for stakeholders through investment activities, stable financial results, tax payments, job creation, social projects, and support for domestic producers.

DEVELOPMENT OF THE OIL AND GAS SECTOR

KMG ensures the stable development of the country's oil and gas sector, contributing to the growth of energy resource production

and refining. In 2024, the Company achieved the following:

23.8 million tonnes

Oil and condensate production (+1.3% compared to 2023)

83.5 million tonnes

Oil transportation (+4%)

9.55 billion m³

Natural and associated gas production (+1%)

Bitumen production

One of KMG's strategic areas is the development of petrochemicals, aiming to produce high valueadded products. In 2024, polypropylene production at KPI amounted to 249 thousand tonnes, a 37% increase.

FISCAL CONTRIBUTION

KMG is one of the largest taxpayers in the country. In 2024, the Company paid KZT 1.08 trillion **in taxes**, supporting government programs and national economic development.

Information on tax policy and tax payments is available on the Company's website.

INVESTMENT ACTIVITY

KMG continues to actively invest in key segments of the oil and gas industry, infrastructure, and sustainable development projects. As of the end of 2024, the value of KMG's investment portfolio is estimated at KZT 51.3 trillion, with KMG's share amounting to KZT 19,390 billion. These projects have a multiplier effect on Kazakhstan's economic development.

The Company also generates returns for its shareholders, a significant portion of which includes the state and citizens of Kazakhstan. Since its IPO, the share price of KMG has increased by 60%.

See more in the section "Investment Activity".

JOB CREATION AND SOCIAL SUPPORT

KMG remains one of the largest employers in the country. The Company employs approximately 50,000 staff, and this number reaches 80,000 when including contractor personnel. Beyond job creation, KMG implements employee social support programs that contribute to professional development and overall wellbeing. Particular attention is given to developing young professionals by providing training and career growth opportunities.

See more in the section "Human Capital Management".

CONTRIBUTION TO REGIONAL DEVELOPMENT

KMG actively supports the regions where it operates by investing in socially significant facilities and infrastructure. In 2024, KZT 3.7 billion was allocated for regional development and infrastructure support. As part of these efforts, the Company funds the construction of critical

regional economic infrastructure, educational and sports institutions, and takes part in local community development.

See more in the section "Our Communities".



SUPPORT FOR DOMESTIC PRODUCERS

KMG promotes the development of Kazakhstani businesses through long-term offtake contracts, ensuring stable demand for local products and supporting import substitution. In 2024, the Company's subsidiaries and dependent entities

signed 137 offtake contracts totaling KZT 58.7 billion.

See more in the section "Supplier Engagement".

DEVELOPMENT OF SUSTAINABLE PROJECTS

KMG is actively implementing projects in the field of renewable energy sources (RES), supporting Kazakhstan's transition to a low-carbon economy. Key initiatives include the construction of a 1 GW wind power plant with an energy storage system in the Zhambyl region and a hybrid power plant in the Mangystau region, which will combine electricity generation from renewable

sources (wind, solar) and a gas-fired power plant (hereinafter referred to as GPP) with a capacity of 247 MW. These projects will increase the share of clean energy in the country's energy balance.

See more in the section "Climate Change and Low-Carbon Development".

KMG is not only the country's leading oil and gas company, but also a key economic player, contributing to Kazakhstan's stable and sustained long-term development. Through investments, revenues and tax payments, job creation, and support for social initiatives, the Company contributes to economic growth, improved public welfare, and regional development. At the same time, economic objectives are aligned with environmental and social impacts, ensuring the sustainable development of both the industry and the Kazakhstani economy as a whole.

INVESTMENT PROJECTS

GRI 203-1, GRI 203-2

CORPORATE PROJECT MANAGEMENT

In 2024, KMG continued to enhance its Corporate Project Management System (CPMS):

- Project management documentation was updated;
- The second edition of the CPMS desktop guide was published;
- The second Project Management Conference was held, with the participation of 150 specialists;

 Nine project management courses were conducted for 500 employees of KMG and its subsidiaries; 63 employees received IPMA certification.

In 2025, the Company plans to further develop its expert system and form a pool of project managers.

INVESTMENT PORTFOLIO OVERVIEW

KMG's investment portfolio includes projects in exploration, transportation, oil refining, petrochemicals, and sustainable development. As of the beginning of 2025, the portfolio's value is estimated at KZT 51,270 billion (KMG's share – KZT 19,390 billion).

In 2024, final investment decisions were made for key projects totaling KZT 4,972.3 billion (KMG's share – KZT 3,558.8 billion), including:

- Phase 2 of the Gas Chemical Complex in Atyrau (polyethylene production and construction of a gas separation complex);
- Modernization of JV CASPI BITUM LLP (increasing refining capacity to 1.5 million tonnes per year).

IMPLEMENTATION OF INVESTMENT PROJECTS IN 2024



Exploration and Production

- Geological exploration work has been conducted on the North Ozen, Zharkyn, Berezovsky, Mugodzhary, and Bolashak fields;
- Drilling of exploration wells PZ-1 (depth 5,500 m) has begun on the Turgai, Karaton Podsolevoy, Karazhar, and Taysoygan fields;
- Drilling of the first well at the "Abai" field has been completed;
- Five wells connected at Rozhkovskoye field with a raw gas output of 1.4 million m³/day;
- Well EU-6 commissioned at the Urikhtau field with a production increase of 90.3 tonnes/day;
- Project design initiated for Kalamkas-Sea, Khazar, and Auezov fields.





Major Projects - Tengiz, Kashagan, Karachaganak

- Tengiz: Future Growth Project nearing completion (99.95% readiness), commissioning expected in Q2 2025;
- Kashagan: Development of Phases 2A and 2B underway to increase output to 710 thousand bbl/day;
- Karachaganak: 5th compressor project completed; construction of the 6th compressor at 67.5% readiness.



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Oil Refining

- Commissioning work nearly complete on the liquefied gas treatment unit at Pavlodar Refinery;
- Modernization started at Atyrau Refinery to process up to 1 million tonnes of Tengiz oil;
- Capacity expansion underway at JV CASPI BITUM LLP;
- Transition to three-year inter-repair cycles launched at Atyrau Refinery, Pavlodar Refinery, and Petrokazakhstan Oil Products.





Petrochemicals

- The warranty tests of the PP unit have been completed, and a demonstration run of the polypropylene production plant took place. The range of grades has been expanded (10 grades), and production amounted to approximately 249 thousand tonnes;
- Design of the polyethylene production facility completed;
 EPC contract signed with Tecnicas Reunidas and Sinopec
 Engineering, early construction work initiated;
- Pre-feasibility study completed for the project "Production of terephthalic acid and polyethylene terephthalate (PET)";
- Framework agreement signed between KMG and CNPC on construction of a gas chemical complex for ammonia and carbamide production.





Sustainable Development Projects

- Main construction completed at the Kenderli desalination plant project; launch planned for 2025;
- A hybrid power plant (gas + renewables) under construction in the Mangystau region;
- With the participation of the European Bank for Reconstruction and Development, KMG-Aero, and Air Astana, a feasibility study was conducted for a sustainable aviation fuel (SAF) production plant.
- The implementation of these projects supports business diversification, carbon footprint reduction, and Kazakhstan's energy security.







GRI 2-22

Implementation of the Corporate Strategy34Key Performance Indicators37Performance Evaluation37Development of the Sustainability Management System38



















Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights.

Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility.

Principle 9: Businesses should encourage the development and diffusion of environmentally friendly technologies.

IMPLEMENTATION OF THE CORPORATE STRATEGY

In 2024, the oil and gas industry continued to face the impact of global economic and geopolitical factors, leading to price volatility, limited investment, and shifts in demand for hydrocarbon resources. In this environment, NC KazMunayGas JSC focused its strategic efforts on ensuring energy security, strengthening exploration

activities, diversifying export routes, developing the petrochemical sector, and introducing renewable energy sources. The Company continues to balance its investments between traditional oil and gas operations and sustainable development, as reflected in KMG's long-term strategy for 2022–2031.

STRATEGIC GOALS AND 2024 RESULTS

STRATEGIC GOAL NO. 1:

Sufficient resource base to ensure Company's growth

KMG is focused on increasing its hydrocarbon reserves to support both current operations and future projects. The key tools for achieving this goal are organic growth, strategic partnerships, and the acquisition of new assets.

2024 results:

- Deep drilling of exploration wells initiated for four projects (Turgay Paleozoic, Karaton Subsalt, Karazhar, Taisoigan);
- Five promising blocks identified under the project of geological exploration of the subsurface 1.0 (Mugodzhary, Berezovsky, Zharkyn, Bolashak, Northern Uzen); fieldwork was completed and partners were selected;
- Three new blocks identified under the project of geological exploration of the subsurface 2.0 (Bereke, Shygys, Southern Shu-Sarysu) with plans for 2025–2026.

STRATEGIC GOAL NO. 2:

Improving the Company's value chain efficiency

KMG aims for maximum efficiency at all stages of oil production, refining, transportation, and sales, with a strong emphasis on operational resilience.

2024 results:

- An additional 418 thousand tonnes of oil were produced through the implementation of new technologies;
- The implementation of the Uzen and Karamandybas fields rehabilitation project allowed for an additional 157.7 thousand tonnes of oil production;
- Gas production began at the Rozhkovskoye, East Urikhtau, and Aksai South fields;
- Preliminary preparatory work has started for the Kalamkas-Sea Khazar offshore project;
- The 5th gas injection compressor unit was launched at Karachaganak;

STRATEGIC DIRECTIONS

VALUE CREATION

ENERGY TRANSITION

STRATEGIC GOALS

Sufficient resource Improving **Business** Sustainable development base to ensure the Company's value diversification and progressive reduction and product portfolio the Company's chain efficiency of the carbon intensity of production growth expansion **TARGETS 2031 TARGETS 2031**

- Increased reserves for onshore and offshore projects
- Accelerated turnover of reserves into production
- Exploration of prospects
- Cumulative oil production of 240 million tonnes for 2022–2031
- Uninterrupted operation of refineries
- Increased gas production and its commercialisation
- Production of petrochemicals (gasoline, paraxylene)
- Increase of efficiency of utilisation of the created production facilities
- Development of additional oil export transportation routes

Production of petrochemicals:

- Polyethylene
- Polypropylene
- Carbamide
- Polyethylene terephthalate
- Terephthalic acid

- Gradual improvement of ESG rating
- Implementation of projects aimed at obtaining **carbon offsets**
- Purchase of I-REC certificates
- Reduction of CO₂ emissions by 15% of 2019 levels
- Forest climate projects
- Low-carbon hydrogen
- Development of RES projects with KMG's share in total capacity of at least 300 MW
- Application of carbon capture and storage technology
- Carbon and energy intensity decrease by at least 10%

ALL BUSINESS AREAS



Optimising operating costs



Optimising the asset structure



procurement



Digitalization and technological development



Project management

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- Wellhead Pressure Management Project facilities at Tengizchevroil (TCO) were commissioned;
- Export routes were expanded: supply growth through Baku-Tbilisi-Ceyhan (+34%) and the Druzhba pipeline (+50%);
- Production of light oil products increased by 370 thousand tonnes at 3 refineries, and an automatic emission monitoring system was implemented;
- Expansion projects for Caspi Bitum and Shymkent Refinery continue.

STRATEGIC GOAL NO. 3:

Business diversification and product portfolio expansion

KMG is developing its petrochemical segment in response to global demand for petrochemical products.

2024 results:

- The integrated gas chemical complex KPI produced 249 thousand tonnes of polypropylene (10 grades developed, fully covering domestic demand);
- Construction of a polyethylene gas chemical complex (1.2 million tonnes/year) launched in cooperation with SIBUR and Sinopec. The final investment decisions made and construction started:
- Pre-feasibility study results for the "Polyethylene Terephthalate" project approved; strategic partner search underway;
- Agreement signed with CNPC to establish a joint venture for the "Carbamide" project.

STRATEGIC GOAL NO. 4:

Sustainable development and progressive reduction of carbon intensity of production

KMG is integrating sustainable development principles and working to reduce its negative impact on the environment.

2024 results:

 Updated ESG risk rating for 2023 reached 32.8 points; improvement plan is being implemented;

- Under the international Carbon Disclosure Project, KMG received a "B" rating for the 2024 reports on "climate change" and "water security" (previous years: "C");
- Low-Carbon Development Program through 2060 was approved (target: 15% GHG reduction by 2031 and 64% by 2060);
- Methane emissions report was submitted to UNEP under OGMP 2.0;
- Construction of hybrid power plants (gas and renewables) initiated with Eni;
- The law on ratification of the agreement with Total Eren on the Mirny project (1 GW) was signed, and \$1.4 billion in financing was received:
- Main construction was completed on the Kenderli desalination plant, including 201 km of trunk pipeline to supply desalinated water to Zhanaozen:
- 1,099 thousand tonnes of historical waste were disposed:
- HR policy was updated;
- KZT 5.1 billion was invested in employee
- 64 additional units of the Electronic Medical Screening System were installed across various subsidiaries:
- Unified standard program for industrial sanitary control was approved in line with Ministry of Health regulations;
- Action plan was approved for the Group's employee wellness program for 2025-2027.

KEY PERFORMANCE INDICATORS

IN 2024, KEY INITIATIVES WERE IMPLEMENTED, AND THE PLANNED TARGETS FOR KMG'S CORPORATE KEY PERFORMANCE INDICATORS WERE ACHIEVED.

Improving the Company's value chain efficiency	
Implementation of Investment Projects	100% (2023: 80%)
Volume of Oil and Gas Condensate Production	23,837 thousand tonnes (2023: 23,490 thousand tonnes)
EBITDA Margin (excluding trading)	44% (2023: 41,1%)
TSR (Total Shareholder Return)	28.55% (2023: 43,1%)
Share of In-Country Value in Procurement of Goods, Works, and Services by the KMG Group	The share of in-country value in procurement of goods was 55%, and in procurement of works and services – 89% (This indicator was introduced in 2023)

Sustainable development and progressive reduction	on of carbon intensity of production
Integrated Industrial Safety Indicator	125% (2023: 156%)

The performance values are estimated. The final approval of the actual performance indicators for 2024 by the KMG Board of Directors is expected in July 2025.

PERFORMANCE EVALUATION

KMG EXECUTIVE MANAGEMENT EFFECTIVENESS ASSESSMENT

As part of the corporate management system of NC KazMunayGas JSC, Key Performance Indicators (KPIs) for executives serve as a tool to evaluate their contribution to achieving the Company's strategic goals. These indicators cover economic, environmental, and social development aspects, as well as elements of corporate governance.

The performance evaluation process for executives is aimed at monitoring the implementation of KMG's Development Strategy and includes:

- Assessment of employees' contributions to the achievement of strategic goals;
- Use of motivational KPIs in calculating compensation;
- Application of the KPI system and goal-setting for KMG employees, ensuring transparency and accountability.

CORPORATE KPIs

To ensure the implementation of sustainable development goals, the following corporate KPIs were approved:

- Implementation of investment projects, including sustainability-related projects (e.g., construction of the desalination plant in Kenderli and construction of the new gas processing plant in Zhanaozen);
- Integrated industrial safety indicator, aimed at reducing the incident rate and identifying hazardous conditions.

Among the motivational KPIs at the level of Board members (Deputy Chairmen of the Board) and heads of KMG structural divisions, the following KPIs in the area of sustainable development have been defined:

- Implementation of corrective measures based on the results of IR-screenings conducted at KMG subsidiaries' contractors in 2024;
- Execution of Roadmaps for improving the social and living infrastructure of KMG subsidiaries in 2024;

- Fulfillment of the Action Plan under KMG's Low-Carbon Development Program for 2022– 2031 in the respective business areas;
- Implementation of renewable energy projects;
- Remediation of historical oil waste;
- Deployment of a transport management information system as part of the "Trip Management" project;
- Comprehensive HSE audits at subsidiaries and dependent entities;
- Development of a Corporate Wellness Program for KMG Group employees for 2025–2028;
- Update of KMG's HR policy;
- Social stability index across KMG Group.

At the level of individual subsidiaries and dependent entities, the following KPIs were introduced:

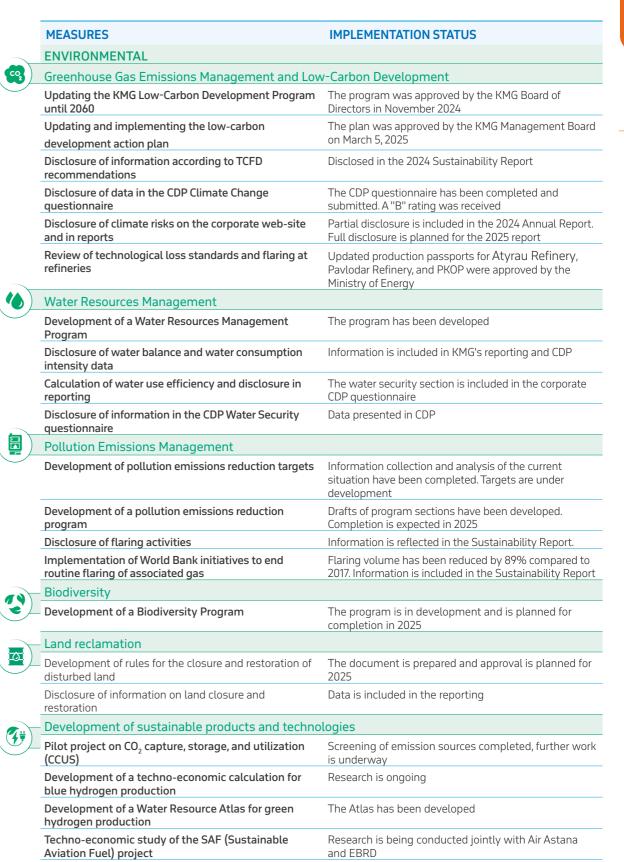
- Integrated industrial safety indicator;
- Reduction of carbon footprint;
- Development of corporate culture through internal communications.

DEVELOPMENT OF THE SUSTAINABILITY MANAGEMENT SYSTEM

In 2024, KMG continued to actively develop ESG practices aimed at reducing environmental risks, enhancing social responsibility, and improving corporate governance. During the reporting period, a set of measures was implemented in the areas

of decarbonization, water resource management, occupational health and safety, human rights, and human capital management. Below is information on the Company's key initiatives in advancing sustainable development practices.







	MEASURES	IMPLEMENTATION STATUS
	SOCIAL	
	Interaction with Local Communities	
	Development of a Local Communities Development and Engagement Program	The program is under development
_	Disclosure of information on local community engagement	Information is disclosed annually in reports
۷)_	Human Rights	
	Update of the Human Rights Policy	The policy is submitted for approval by the Board of Directors
	Development of a Human Rights Program	Planned for 2025
	Conducting human rights impact assessments	Scheduled for 2025
	Human Capital Development	
	Updating the KMG Human Resources Policy	The policy was updated and approved by the KMG Board of Directors in December 2024
	Disclosure of information on human capital	Data is presented in the reporting
_	Implementation of the "Green Office" project	A number of resource rationalization initiatives have been implemented
	Health and Safety	
	Updating the Health, Safety, and Environmental Roadmap	The document has been approved
	Updating safety reporting rules	The rules have been updated, including the cal-culation of LTIR and FAR
	Disclosure of safety indicators	Data is disclosed annually
_	GOVERNANCE	
	Board of Directors	
	Disclosure of information on the composition and independence of the Board of Directors	Data is presented in the reporting
_	Gradual increase in the share of women on the Board of Directors to 30%	Implementation is progressing in accordance with the Roadmap
	Transparency of remuneration	
	Transparency of executive remuneration	Data is included in the Annual Report
	Election of independent directors to the Remuneration Committee	The committee consists entirely of independent directors
	Updating and approving rules for assessing the performance of senior executives, the Head of the Compliance and Risk Management Department, the Ombudsman, considering sustainable development KPIs	The rules have been updated
	Anti-Corruption Measures and Compliance	
	ISO 37001 certification	Preparation has been completed, and the audit is scheduled for 2025
	Disclosure of tax information according to GRI Standards and OECD Action 13	Data is published annually on the KMG website



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OR 2024 • STRATEGY AND SUSTAINABLE

INVESTING IN THE FUTURE SUSTAINABLE DE

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Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.

Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility. Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

CORPORATE GOVERNANCE SYSTEM

KMG's corporate governance system is based on respect for the rights and legitimate interests of shareholders and key stakeholders, including the state, strategic partners, contractors, investors, employees, municipalities, local communities, and residents of the regions where the Company

Corporate governance at KMG is continuously improving in line with Kazakhstani and international standards, as well as best practices. A key element of the system is the integration of sustainable development principles, which supports long-term value creation, effective risk management, and the consideration of environmental, social, and governance (ESG) factors in strategic and operational processes.

CORPORATE GOVERNANCE STRUCTURE

KMG's corporate governance system includes the following bodies:

- General Meeting of Shareholders the supreme governing body that determines the strategic direction of the Company;
- Board of Directors the governing body accountable to the General Meeting of Shareholders, providing overall oversight of the Company's activities;
- Committees under the Board of Directors specialized bodies that review and prepare decisions on key issues:
 - Nomination and Remuneration Committee responsible for HR policy, remuneration systems, and employee development;

- Strategy and Portfolio Management Committee – addresses strategic development, investment policy, and business transformation:
- Audit Committee oversees financial reporting, internal controls, and risk management;
- HSE and Sustainable Development Committee – ensures the integration of sustainability principles and monitors environmental and social performance;

- Management Board the executive body accountable to the Board of Directors, responsible for the Company's day-to-day operations;
- Internal Audit Service an independent control body reporting to the Board of Directors, evaluating the internal control system and risk management;
- Corporate Secretary an independent officer responsible for implementing and monitoring corporate governance practices;

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- Compliance Service a body reporting to the Board of Directors, ensuring compliance with anti-corruption regulations and ethical business conduct:
- **Ombudsperson** advises employees and facilitates resolution of labor and ethical issues.

BOARD OF DIRECTORS COMPOSITION

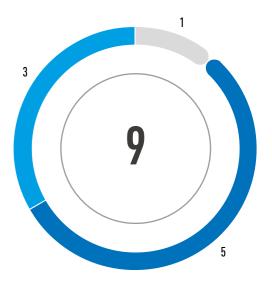
As of December 31, 2024, the members of the Board of Directors of KMG are:

- Yernat Berdigulov Chairman of the Board of Directors, representative of Samruk-Kazyna JSC
- Askhat Khassenov Executive Director, Chairman of the Management Board of KMG
- Philip Malcolm Holland Independent Non-Executive Director
- Uzakbay Karabalin Non-Executive Director, representative of Samruk-Kazyna JSC
- Yelzhas Otynshiyev Representative of Samruk-Kazyna JSC
- Armanbai Zhubayev Independent Non-Executive Director Arman Argingazin
- Independent Non-Executive Director Saya Mynsharipova
- Independent Non-Executive Director Askar Shakirov Independent Non-Executive Director

INDEPENDENCE

The Board of Directors complies with the requirements of the Corporate Governance Code regarding the number of independent directors, who make up more than 50% of the total composition. All Committees of the Board are chaired by independent directors, and the Chairman of the Board is a representative of Samruk-Kazyna JSC.

BOARD OF DIRECTORS STRUCTURE, NUMBER OF PERSONS



- Independent Directors
- Representatives of Samruk-Kazyna JSC
- Executive Director (Chairman of the Board)

BALANCE OF COMPETENCIES

GRI 2-17

The Board maintains a balance of competencies, experience, and professional knowledge that supports objective and effective decision-making in the interests of KMG and in alignment with sustainable development principles.

TERM OF OFFICE

The term of office for the Board of Directors is three years. Reappointment for a period longer than six consecutive years requires special consideration. An independent director may not serve on the Board of Directors for more than nine consecutive years. Appointment for a term of up to nine years is permitted only in exceptional cases.

NOMINATION AND SELECTION OF BOARD MEMBERS

GRI 2-10, GRI 2-11

The nomination and selection process is governed by KMG's Charter and regulatory documents, ensuring transparency, fairness, and professionalism.

Candidates are selected by the General Meeting of Shareholders together with the Board Chair and Chair of the Nomination and Remuneration Committee. They must possess the necessary knowledge, skills, and experience, contribute to the long-term development of the Company, and have an impeccable business reputation.

According to KMG's Board Succession Policy, appointments and succession plans must be merit-based and promote gender, social, and ethnic diversity, as well as cognitive and personal

The Chair and members of the Board are elected by the General Meeting of Shareholders. Independent directors are appointed in accordance with the Rules for the Formation of Boards of Directors approved by Samruk-Kazyna JSC.

According to corporate standards and legislation, the Chair of the Management Board may not serve as Chair of the Board of Directors.

BOARD SKILLS DEVELOPMENT

Board members regularly improve their professional skills, including management of economic, environmental, and social aspects. The Nomination and Remuneration Committee analyzes the balance of competencies to ensure alignment with the Company's strategic goals. Training information is published on KMG's website.

THE HEALTH, SAFETY, ENVIRONMENT AND SUSTAINABLE **DEVELOPMENT COMMITTEE'S PERFORMANCE IN 2024**

In 2024, the Health, Safety, Environment and Sustainable Development Committee held 10 meetings and reviewed 55 issues related to integrating sustainability into KMG's business processes.

KEY ACTIVITIES INCLUDED:

- Guiding sustainability integration into KMG's
- Overseeing ESG strategies and initiatives;

- Monitoring occupational health, industrial safety, and environmental protection;
- Developing and approving internal documentation and action plans on sustainability.

COMMITTEE'S KEY AGENDA ITEMS IN 2024:

- Reports on labor protection, safety, and environment:
- Implementation of KMG's Low-Carbon Development Program (2022-2031);
- ESG rating assessment and improvement plans;

• Introducing sustainability systems across business units:

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- Contribution to UN Sustainable Development
- Approval of KMG's Low-Carbon Development Program to 2060:
- Analysis of significant health, safety, and industrial risk incidents.

The Committee reviewed and approved KMG's 2023 Sustainability Report.

Executives and employees of KMG regularly participated in the Committee's work, and the Board of Directors adopted the Committee's recommendations.

EVALUATION OF THE BOARD OF DIRECTORS' PERFORMANCE

GRI 2-18

The Board, its committees, and members undergo annual evaluations per KMG's Corporate Governance Code. Every three years, an external consultant is engaged.

In 2024, a self-assessment was conducted for 2023. covering composition, processes, and behavior. Results were reviewed by the Board, identifying areas for improvement, such as diversity and succession. An action plan was developed.

In December 2024, the Board decided to conduct an external evaluation in 2025 covering the Board, its committees, the Chair, members, and the Corporate Secretary. The evaluation will form part of the corporate governance diagnosis and internal audit system effectiveness review. A technical specification was prepared in Q1 2025 and reviewed by relevant committees and the Board.

REMUNERATION

GRI 2-19, 2-20

BOARD REMUNERATION

The remuneration of the members of the Board of Directors of KMG is determined by the decision of the General Shareholders' Meeting and is paid to independent directors and representatives of "Samruk-Kazyna" JSC. It is fixed and determined based on the Company's scale, responsibilities, and strategic goals.

The approach to remuneration is aligned with the Rules for the Formation of Boards of Directors/ Supervisory Boards of "Samruk-Kazyna" JSC companies and aims to attract and retain qualified professionals. In 2024, KMG did not engage external consultants to determine remuneration.

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The Nomination and Remuneration Committee reviews remuneration matters as needed, including during Board performance evaluations.

MANAGEMENT BOARD REMUNERATION

The Board of Directors sets remuneration policy and performance evaluation procedures for Management Board members in accordance with the Corporate HR Management Standard of Samruk-Kazyna JSC.

Annual remuneration is paid based on performance evaluations to motivate achievement of strategic and priority goals, expressed through measurable and interconnected KPI maps. These include corporate and functional KPIs.

A Nomination and Remuneration Committee under the Board reviews remuneration matters to ensure an effective and transparent system.

MANAGEMENT BOARD COMPOSITION

AS OF THE END OF 2024, THE MEMBERS OF KMG'S MANAGEMENT BOARD WERE:

A.G. Khassenov	Chairman of the Management Board
K.O. Iskaziyev	First Deputy Chairman of the Management Board
S.A. Brekeshev	Deputy Chairman of the Management Board (Gas Projects and Low-Carbon Development)
B.K. Abaiyldanov	Deputy Chairman of the Management Board (Exploration and Production)
R.A. Balykbayev	Deputy Chairman of the Management Board (Major Oil and Gas Projects)
A.M. Magauov	Deputy Chairman of the Management Board (Oil Refining and Petrochemicals)
B.K. Zakirov	Deputy Chairman of the Management Board (Oil Transportation and International Projects)
D.E. Abdulgafarov	Deputy Chairman of the Management Board (Strategy, Investments and Business Development)
D.A. Aryssova	Deputy Chairman of the Management Board (Economy and Finance)
V.S. Lavrenov	Deputy Chairman of the Management Board (Legal Affairs and Corporate Security)

NOTIFICATION OF THE BOARD OF DIRECTORS ON CRITICAL ISSUES

GRI 2-16

The Board of Directors of KMG receives regular reports on the Company's activities, covering key strategic, financial, and operational aspects, as well as updates on critical matters. These include:

- Report from the Chairman of the Management Board – on major changes and the overall performance of the Company;
- Financial and operational reports on preliminary results, investment projects, and strategy implementation;
- Reports on occupational safety and environmental protection – including

information on significant incidents and preventive measures;

 Risk and corporate governance reports – tracking implementation of Board decisions, committee reports, and corporate transaction analyses.

In the event of urgent issues, including financial indicators, critical incidents, or operational matters, the Board of Directors is notified immediately.

CONFLICT OF INTEREST

GRI 2-15

Conflict of interest management at KMG is regulated by the Conflict of Interest Policy and the Code of Business Ethics, both approved by the Board of Directors.

Every employee and officer is responsible for complying with the requirements of this policy. Upon hiring, appointment, or transfer to a new position, mandatory disclosure of potential conflicts of interest is required, including:

- Ownership of shares in KMG counterparties or competitors;
- Participation in governing bodies of counterparties or competitors;
- Interactions with KMG counterparties;
- Intent to acquire KMG assets or securities.

The verification process includes an analysis of potential affiliated relationships and ensures compliance with anti-corruption legislation.

STAKEHOLDER ENGAGEMENT

GRI 2-25, GRI 2-26

KMG's highest corporate governance bodies maintain ongoing dialogue with stakeholders on economic, environmental, and social matters.

Consultations are conducted through various channels, including the official website, the Press Office, and the annual Sustainability Report, which serves as a key tool for disclosure and engagement with both internal and external stakeholders.

Additionally, KMG uses specialized platforms for targeted interaction:

• For investors – a **portal** with up-to-date information:

- For employment inquiries a job vacancies
- For reporting labor rights violations hotline: nysana@cscc.kz;
- Confidential reporting system online portal;
- Functional contact areas:
 - Ombudsperson: ombudsman@kmg.kz;
 - Occupational health and environment: hse@kmq.kz;
 - Sustainable development: sustainability@kmq.kz.

These mechanisms ensure transparency, information accessibility, and effective stakeholder engagement.

COMPLIANCE WITH LEGISLATION

GRI 2-27

ANTI-COMPETITIVE BEHAVIOR

During the reporting period, 4 administrative cases were initiated against KMG and its Group companies for violations of antimonopoly legislation (1 case involving KMG and 3 involving subsidiaries). Three of these cases were resolved unfavorably for KMG and its subsidiaries by the courts, while one was settled through mediation.

Additionally, two civil cases related to antimonopoly laws were reviewed by the courts (one ruled in favor of the subsidiary; in the other, the claim was withdrawn by the subsidiary).

SOCIO-ECONOMIC COMPLIANCE

No civil or administrative cases were recorded concerning violations or disputes related to legal or regulatory acts in the field of social and economic regulation, or disputes with local communities.

However, 29 labor-related lawsuits were filed with the courts, in which subsidiaries were defendants in 24 cases and plaintiffs in 5 cases.

ANTI-CORRUPTION

GRI 2-15, 3-3, 205-1, 205-2, 205-3

KMG conducts its operations based on the principles of legality, integrity, and ethical conduct. The Company strictly adheres to human rights standards, takes all necessary measures to prevent corruption, and strives to maintain an impeccable reputation by integrating international ethical standards into its business processes.

The Compliance Service, an independent division within the Company, is responsible for minimizing corruption risks in the workplace. This service is fully integrated into the operations of all business units at KMG.

In 2024, a number of internal documents were updated, including the Anti-Corruption Policy and the Regulations on Handling Reports of Violations related to the laws of the Republic of Kazakhstan and KMG's internal regulations on anti-corruption activities. These updates are aimed at aligning the Company's practices with high standards of ethical business conduct.

The Compliance Service also monitors the use of insider information and conducts due diligence checks on the Company's counterparties. This helps minimize the risk of entering into agreements with unreliable partners, thereby reducing the likelihood of non-delivery of goods,

failure to perform work, or failure to provide services.

Candidate screenings are conducted for positions involving administrative or managerial responsibilities. These include mandatory psychological assessments and polygraph tests, especially for roles involving procurement activities.

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One of the key areas of focus is the internal analysis of corruption risks, which helps identify factors contributing to corruption and weaknesses in business processes. In 2024, such assessments were conducted in 35 subsidiaries and dependent entities, as well as within the Company's Central Office. Based on the results, recommendations and action plans were developed to address the findings.

During the reporting period, six confirmed cases of corruption were recorded. All six cases resulted in the dismissal or punishment of employees for corrupt actions. Nevertheless, KMG continues to strengthen its anti-corruption culture, including engaging top management in awareness-raising initiatives for employees and counterparties to emphasize the unacceptability of corrupt practices. In 2024, the number of employees who underwent anti-corruption training was 5,753.



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TAX POLICY AND PAYMENTS TO THE STATE

APPROACH TO TAXATION

NC KazMunayGas JSC has adopted a Corporate Tax Accounting Policy (Corporate TAP) aimed at standardizing tax accounting practices across the KMG Group organizations. The document is based on the tax legislation of the Republic of Kazakhstan (RoK), International Financial Reporting Standards (IFRS), and KMG's internal regulations.

The Corporate TAP is guided by the following principles:

- Obligation to Pay Taxes KMG and its subsidiaries pay taxes to the RoK budget fully and on time:
- Fairness of Taxation double taxation of the same object within the same period is not
- Good Faith obtaining benefits through illegal actions aimed at tax avoidance is not acceptable.

KMG's approach to taxation takes into account the specifics of the Group's commercial activities and their social impact. The tax policy is fully aligned with the KMG Development Strategy for 2022-2031.

The Corporate TAP is followed by all subsidiaries, except for:

- Entities engaged in subsoil use operations under production sharing agreements that provide for a special stable tax regime;
- Entities registered outside of Kazakhstan, including branches of KMG and its subsidiaries incorporated outside of Kazakhstan.

Based on Corporate TAP, KMG and all its subsidiaries have developed and implemented individual Tax Accounting Policies that consider the specific characteristics of their industry operations.

Information on tax payments to governments is published annually on KMG's corporate website: https://www.kmg.kz/en/investors/reporting//.

TAX ADMINISTRATION AND CONTROL

KMG's tax risk management approach is integrated into its Corporate Risk Management System (CRMS). As part of its monitoring activities, KMG analyzes the application of tax legislation and proposes improvements where needed.

STAKEHOLDER ENGAGEMENT

KMG is included in the list of large taxpayers subject to tax monitoring. In its interaction with government authorities, the Company:

- Initiates amendments to tax legislation to foster a favorable tax environment for KMG operations:
- Engages in dialogue with shareholders, industry associations, and government agencies. Reviews and provides opinions on draft regulatory legal acts;
- Advocates for the interests of the KMG Group by supporting improvements in tax and customs legislation.

KMG's tax policy is aimed at ensuring transparency in tax administration, compliance with national legislation, and effective collaboration with regulatory authorities to enhance the overall tax environment.

TAX PAYMENT INDICATORS, KZT BILLION

INDICATOR	2022	2023	2024
Tax payments to the RoK budget	1,037.2	1,039.2	1,079.7
RoK share under PSAs (Production Sharing Agreements)	138.7	123.3	129.2
Total	1,175.9	1,162.5	1,208.9



















SUSTAINABLE DEVELOPMENT MANAGEMENT





























Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights.



Principle 2: Business should make sure that they are not complicit in human rights abuses.



Principle 4: Business should uphold the elimination of all forms of forced and compulsory labour.



Principle 6: Business should uphold the elimination of discrimination in respect of employment and occupation.



Principle 8: Business should undertake initiatives to promote greater environmental responsibility.



Principle 10: Business should work against corruption in all its forms, including extortion and bribery.









COMPANY APPROACH TO SUSTAINABLE DEVELOPMENT

GRI 2-22

NC KazMunayGas JSC recognizes its impact on the economy, the environment, and society and strives to ensure the long-term sustainability of its operations by integrating sustainable development principles into its core business processes. The Company manages sustainable development in accordance with international standards, particularly the UN Global Compact, as well as the Corporate Governance Code of Samruk-Kazyna JSC and KMG's own Sustainable Development Concept. KMG also supports the UN Sustainable Development Goals (SDGs) and incorporates them into its strategic planning and operational activities.

KMG's Development Strategy for 2022–2031 identifies sustainable development as one of its core strategic priorities. Within this framework, the Company is committed to engaging effectively with stakeholders, integrating ESG factors into decision-making processes, and achieving target performance indicators in the area of sustainable development.

SUSTAINABLE DEVELOPMENT MANAGEMENT SYSTEM

KMG's sustainability management system includes the following key elements:

- Strategy, Policy, and Goals establishing a long-term vision for sustainability and integrating sustainability principles into corporate governance and operations;
- Risk and Opportunity Management including ESG risks in the corporate risk management system and assessing sustainability-related opportunities;
- Integration into Business Processes embedding sustainable development principles into strategic and operational planning, investment activities, human resource management, and the supply chain;

- Stakeholder Engagement maintaining ongoing dialogue with key stakeholders and considering their expectations and interests in decision-making:
- Reporting and Monitoring preparing an annual sustainability report aligned with international standards and conducting independent verification of non-financial disclosures:
- Corporate Culture and Competency **Development** – implementing training programs, developing ESG competencies, and fostering a corporate culture based on sustainability principles.

ROLE OF GOVERNANCE BODIES IN SUSTAINABLE DEVELOPMENT

GRI 2-12, GRI 2-13, GRI 2-14

The Board of Directors of KMG holds strategic responsibility for sustainability management, including the approval of corporate policies and the consolidated sustainability report.

ESG-related topics and initiatives are regularly discussed at Board meetings, a dedicated annual sustainability session of the Board, and meetings of the Health, Safety, Environment and Sustainable Development Committee.

This Committee coordinates sustainability processes, establishes key performance indicators (KPIs), and monitors their implementation.

The Board also reviews and approves KMG's sustainable development reporting.

Other roles involved in sustainable development management include:

- Management Board ensures implementation of sustainability principles, monitors progress toward goals and KPIs, and evaluates performance on sustainable development initiatives:
- Deputy Chairman of the Management Board for Sustainable Development – coordinates the achievement of goals and KPIs, oversees implementation of corporate standards, and supervises sustainable development reportina:
- Dedicated Sustainable Development **Unit** – initiates, coordinates, and implements the sustainability management system, provides methodological support, and coordinates sustainable development reporting and ESG risk management;
- Relevant Business Units execute sustainable development initiatives, participate in risk and opportunity assessments, engage with stakeholders, and contribute to reporting.

SELECTION AND IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT INITIATIVES

KMG develops sustainable development initiatives based on risk analysis, stakeholder expectations, and strategic business goals. The main steps for selecting and implementing initiatives include:

- Identifying material topics considering economic, environmental, and social risks and opportunities:
- Determining priority initiatives in line with stakeholder input;

 Evaluating the economic feasibility and technological viability of initiatives;

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- Developing and executing implementation plans, including defining objectives, KPIs, timelines, and responsibilities;
- Monitoring and evaluating initiative effectiveness, including adjustments to strategies and activities as needed.

MEASURING SUSTAINABLE DEVELOPMENT PERFORMANCE

KMG regularly monitors and assesses the effectiveness of its sustainability initiatives using key performance indicators (KPIs), which cover economic, environmental, and social dimensions. These KPIs are developed in alignment with the Company's strategic goals.

MONITORING AND IMPROVING THE SUSTAINABLE **DEVELOPMENT MANAGEMENT SYSTEM**

KMG performs regular analysis of its sustainable development management system, including:

- Monitoring the achievement of target indicators:
- Conducting management reviews;
- Performing internal and external audits of sustainability reporting;
- Assessing the maturity level of the sustainable development management system;
- Identifying areas for improvement and developing corrective actions.

The results of this analysis are used to refine strategic priorities, enhance the sustainability management system, and develop new initiatives.



MATERIALITY ASSESSMENT

GRI 3-1, GRI 3-2

APPROACH TO DETERMINING MATERIAL TOPICS

The identification of material topics is a key stage in the preparation of the Sustainable Development Report of NC KazMunayGas JSC and is carried out in accordance with the requirements of the GRI Standards (including the sectorspecific standard GRI 11: Oil and Gas Sector 2021). This process enables the Company to identify and disclose topics that have the greatest impact on its activities, stakeholders, and sustainable development as a whole.

STAGES OF THE MATERIALITY ASSESSMENT PROCESS

1. TOPIC IDENTIFICATION

The first stage involves analyzing internal and external factors affecting KMG, including:

- Regulatory requirements and international standards:
- The Company's development strategy;
- Stakeholder expectations and demands;
- Industry trends and best practices;
- ESG risk and opportunity analysis.

2. ASSESSMENT OF TOPIC SIGNIFICANCE

Identified topics are assessed from two perspectives:

- Impact on the economy, environment, and society – the scale and nature of KMG's impact on sustainable development is considered;
- Relevance to stakeholders priority issues for shareholders, partners, employees, local communities, and other stakeholder groups are analyzed.

This assessment is conducted through stakeholder surveys.

3. TOPIC PRIORITIZATION

Based on the evaluation, a materiality matrix is developed, ranking topics according to their level of importance. The most material topics are included in the report and serve as a basis for further strategic actions by the Company.

4. VERIFICATION AND APPROVAL

The results of the analysis are discussed with KMG's management to ensure the completeness and accuracy of topic selection. Members of the HSE and Sustainable Development Committee are informed about the material topics to be disclosed in the Sustainability Report.

REGULAR REVIEW

The materiality assessment process is dynamic and subject to regular review. This allows KMG to reflect changes in the external environment, Company strategy, and stakeholder expectations. It ensures the relevance of information and reinforces transparent engagement with society.

Thus, KMG's approach to materiality assessment aligns with leading international practices and enhances the quality of reporting,

strengthening stakeholder trust and contributing to the Company's long-term sustainability.

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MATERIAL TOPICS

The 2024 Sustainability Report includes 12 material topics, consistent with those disclosed in the previous report.

Nº	Material Topics	3===	\$ TT.	/ =			A Bee	(X)	(O)	\$1. <u>**</u>
1	11.1. Greenhouse Gas Emissions								0	
2	11.2. Climate Adaptation, Resilience, Sustainability and the Transition Periodansition			0	0	0		0	0	
3	11.3. Atmospheric Emissions	0					0		0	0
4	11.5. Waste	0						0		0
5	11.6. Water and Wastewater							0		0
6	11.7. Closure and Rehabilitation	0			0		0			0
7	11.8. Asset Integrity and Critical Incident Management						0			
8	11.9. Occupational Health and Safety	0			0					
9	11.10. Employment Practice		0		0					
10	11.11. Non-discrimination and Equal Opportunities		0		0					
11	11.14. Economic Impacts		0		0	0				
12	11.20. Anti-corruption							0		



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STAKEHOLDER ENGAGEMENT

GRI 2-29

APPROACH TO STAKEHOLDER ENGAGEMENT

NC KazMunayGas JSC views effective engagement with stakeholders as one of the key components of its sustainable development efforts. The Company recognizes the importance of dialogue with government representatives, investors, employees, partners, local communities, and other stakeholders, as their involvement and support contribute to the achievement of KMG's strategic goals. Stakeholder engagement is carried out in accordance with international standards, including the AA1000 Stakeholder Engagement Standard (2015) and the GRI Standards, as well as KMG's internal regulations, such as the Stakeholder Map of KMG.

PRINCIPLES OF ENGAGEMENT

KMG adheres to the following key principles when engaging with stakeholders:

- Respect and consideration of interests –
 The Company takes into account the opinions, expectations, and preferences of stakeholders in decision-making;
- Openness and transparency KMG regularly discloses information about its activities, plans, and sustainability initiatives;
- Accountability and commitment –
 The Company strives to fully meet its commitments to stakeholders;

- Engagement and dialogue KMG maintains open communication with key stakeholders, ensuring their participation in the discussion of significant issues;
- Adaptability and continuous improvement Stakeholder engagement is treated as a cyclical process involving regular evaluation and adjustment.

STAGES OF STAKEHOLDER ENGAGEMENT

The stakeholder engagement process at KMG includes five main stages:

- Identification of stakeholders and material issues
- Developing and regularly updating the KMG Stakeholder Map, which includes a list of stakeholders, interaction methods, and engagement formats;
- Assessing stakeholders' contributions to the Company's activities and understanding their key expectations.
- Classification and prioritization of stakeholders
- Evaluating stakeholder influence and significance to the Company;
- Identifying priority stakeholder groups for deeper dialogue.
- Planning engagement
 - Designing engagement activities at various levels (consultation, negotiation, collaboration, integration into decisionmaking);

- Determining engagement frequency and methods (meetings, surveys, public consultations, partnership initiatives, etc.).
- Implementation of activities
- Carrying out planned activities and initiatives focused on stakeholder engagement;
- Maintaining continuous dialogue and information exchange.
- Evaluating and improving engagement

- Analyzing the effectiveness of activities, capturing lessons learned, and adjusting approaches;
- Developing two-way feedback mechanisms and incorporating stakeholder input into the Company's future strategies.

KMG regularly assesses the effectiveness of its stakeholder engagement and improves the process in line with international best practices and evolving public expectations.



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KMG actively engages with its stakeholders, aiming to reflect their expectations and ensure constructive dialogue. In 2024, the Company continued implementing its sustainable

development strategy, introducing advanced corporate governance practices, enhancing environmental responsibility, and strengthening social partnerships.



Shareholders

Communication Methods: publication of reports, disclosure of information on the corporate website, shareholder meetings, reporting via the Kazakhstan Stock Exchange.

Interests and Expectations:

financial stability, adherence to corporate governance principles, return on investment, improved operational performance, integration of sustainability principles.

What We Do

The Company consistently improves its operational and financial performance, ensuring stability and value growth for shareholders. In 2024, KMG successfully implemented strategic initiatives aimed at modernizing production facilities and enhancing operational efficiency.

A key milestone was the development of a new Low-Carbon Development Program through 2060, aimed at reducing environmental impact and supporting the sustainable transformation of the business.

In addition, the Company remains committed to high standards of corporate governance, ensuring transparency in reporting and the protection of shareholder rights.



Investors

Communication Methods: Roadshows, financial reporting, engagement with analysts, press releases.

Interests and Expectations:

ESG practices, transparent risk management, return on investment, integration of leading ESG reporting standards

What We Do

The Company aims to maintain open and transparent dialogue with investors by providing timely updates on its strategic initiatives and outlook. A key focus is the development of ESG reporting in line with international standards, including GRI Standards, TCFD, and the OGMP 2.0 initiative, enabling investors to better assess KMG's environmental, social, and governance impacts.

In 2024, KMG continued implementing low-carbon development and energy efficiency projects, attracting the attention of sustainability-focused investors and international rating agencies.



Government Authorities

Communication Methods:

Consultations, participation in working groups, reporting, official meetings.

Interests and Expectations:

Compliance with legislation, tax payments, fulfillment of social obligations.

What We Do

The Company strictly complies with all legal requirements and actively participates in the development of regulations governing the oil and gas sector and sustainable development. KMG responsibly pays taxes and other mandatory contributions to the state budget. The Company continues to invest in projects aimed at regional development, improvement of social infrastructure, and environmental protection, thereby contributing to long-term economic growth.



Employees and Trade Unions

Communication Methods:

Management meetings with teams, trainings, internal communication channels.

Interests and Expectations:

Occupational safety, career development, fair wages, improved working conditions.

What We Do

The Company places great emphasis on creating safe and comfortable working conditions for its employees. In 2024, additional measures were taken to modernize workplaces and implement health protection programs. KMG creates new opportunities for staff through training and skills development. Fair compensation, transparent hiring processes, and a clear professional growth system help attract and retain top talent in the industry. To strengthen corporate culture and employee engagement, KMG actively develops internal communication channels and maintains ongoing dialogue with trade unions.



Local Communities and the Public

Communication Methods: Public hearings, charitable programs,

feedback via hotlines.

Interests and Expectations: Job creation, social investment, environmental responsibility.

The Company acknowledges its responsibility to society and actively contributes to improving the quality of life in the regions where it operates. In 2024, KMG continued to allocate significant resources to support education, healthcare, and social well-being of local communities. Special attention is given to environmental initiatives, including emissions reduction, water resource management, and land restoration. Corporate social responsibility programs help develop local infrastructure and create favorable living conditions for the population.



Clients and Partners

Communication Methods: Business meetings, contracts, joint projects.

Interests and Expectations: Stable supply, product and service quality, procurement transparency.

The Company ensures uninterrupted supply of petroleum products and services while maintaining high standards of quality and reliability. It continues to optimize logistics and supply chain management. An open approach to partner engagement, adherence to corporate governance best practices, and commitment to fair competition help build trust and long-term relationships with clients.



Contractors

Communication Methods: Tenders. conferences, working meetings.

Interests and Expectations:

Procurement transparency, fair collaboration terms, safety at worksites

What We Do

The Company strives for transparency and efficiency in procurement by implementing automated supplier selection systems. Efforts continue to strengthen safety measures for contractors at worksites, including training on industrial safety and occupational health standards. Developing partnerships based on mutual trust enhances service quality and reduces operational

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KMG continues to strengthen its engagement with all stakeholders by adopting international best practices and enhancing corporate governance. Open dialogue, consideration of stakeholder interests, and the implementation of strategic

sustainability initiatives enable the Company to achieve its long-term goals and ensure a positive impact on the economy, society, and the environment.

ESG RISK MANAGEMENT

The risk management system at NC KazMunayGas JSC is a key component of corporate governance, aimed at the timely identification, assessment, and mitigation of potential events that may affect the achievement of the Company's strategic and operational objectives. Risk management is carried out at all organizational levels, covering both the parent company and its subsidiaries and affiliates.

KMG adheres to recognized international risk management standards, particularly the "Three Lines of Defense" model embedded in the corporate risk management framework. This model ensures a clear distribution of roles and responsibilities among operational units, risk management functions, and internal audit, creating a reliable system of control and risk prevention.

Sustainable development is one of KMG's strategic goals, as outlined in the Company's Development Strategy through 2031. ESG risk management is fully integrated into the overall risk management system and serves as a tool to enhance the Company's adaptability to external changes, minimize potential negative impacts, and ensure long-term growth aligned with stakeholder interests.

In 2024, KMG updated its consolidated Risk Register, incorporating factors that influence the sustainable development of the Group. The effective use of risk information in managerial decision-making helps reduce uncertainty, build a resilient operating model, and ensure business stability in the face of dynamic economic, environmental, and social challenges.



ESG RISKS

Trend (over the year)

Risk Description

Mitigation Measures

ENVIRONMENTAL ASPECT

Climate risks and low-carbon development



Climate risks for KMG are associated with the transition to a low-carbon economy and the physical impacts of climate change These include:

Transition risks – tightening regulatory requirements, changes in technology, market risks, and reputational risks;

Physical climate risks - extreme weather events (floods, droughts) and chronic climate changes (water stress, rising temperatures). In 2024, floods in KMG's regions

of operation, including Atyrau, Aktobe, and West Kazakhstan regions, led to a state of emergency, requiring urgent measures to minimize damage.

Potential Impact

Climate risks may lead to increased costs, reduced profitability, limited market opportunities, deterioration of employee health, and a higher likelihood of injuries. They may also impact demand for the Company's products and the long-term sustainability of the business.

KMG is actively working to reduce climate risks, including:

- Implementing the Low-Carbon Development Program
- Monitoring energy consumption and greenhouse gas emissions, and launching projects to reduce methane
- Conducting guarterly monitoring of subsidiaries' action plans for the implementation of the Low-Carbon Development Program at the Corporate Center level;
- Purchasing international renewable energy certificates
- Exploring opportunities for carbon capture, utilization, and storage (CCUS);
- Developing hydrogen energy by assessing the potential for low-carbon hydrogen production;
- Analyzing the prospects for sustainable aviation fuel (SAF) production and the implementation of forest-climate projects;
- Developing measures to prepare for spring floods and prevent flooding of vulnerable areas (e.g., road erosion, damage to power lines, flooding of wells)

KMG continues to improve its climate adaptation measures, reducing the impact of climate risks on the Company's operations.

Risk of Negative Environmental Impact



KMG is exposed to the risk of negative environmental impact, including emissions of pollutants into the air, water and soil contamination, as well as increasing environmental regulatory requirements. Noncompliance with environmental standards may lead to stricter sanctions, additional financial costs, and damage to the Company's reputation.

Potential Impact

The realization of environmental risk may lead to fines, excess payments, environmental remediation costs, and legal liability. Furthermore, a decline in environmental performance may negatively impact investment attractiveness and the long-term sustainability of the business.

To minimize environmental impact, KMG implements a comprehensive set of actions:

- Management of air emissions and reduction of flaring of raw
- Implementation of water and waste management projects; Environmental monitoring and land reclamation;
- Application of best available techniques and automated emission monitoring systems;
- Preventive management of significant environmental impacts and engagement with stakeholders on environmental issues;
- In 2024, KMG developed and approved a Waste Management Standard and updated its Corporate Standard for Environmental Impact Assessment.

KMG continues to improve environmental protection measures, ensuring compliance with environmental requirements and reducing the impact of its operations on the environment.

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Trend over the year)

Risk Description

Mitigation Measures

Risk of Oil Spills During Offshore Operations



Oil spills may occur due to violations of technological procedures, pipeline accidents, equipment failures, and challenging natural conditions in the Caspian Sea. Risk factors include shallow waters, high reservoir pressure at fields, the presence of hydrogen sulfide, and seasonal surface freezing.

Potential Impact

Oil spills can cause severe environmental damage, halt production processes, and result in significant financial costs for response and compensation efforts.

To minimize the risk of oil spills, KMG implements a range of preventive measures:

- Continuous monitoring of technological processes and equipment condition;
- Scheduled preventive maintenance of pipelines and equipment;
- Personnel training and oil spill response drills;
- Effective operation of the North Caspian Environmental Response Base;
- Monitoring of abandoned wells;
- Participation in working groups on accident prevention.

KMG continues to improve its oil spill prevention and response system, reducing potential environmental and financial risks.

Risk of Industrial Accidents and Technogenic Disasters at Production Facilities



KMG's production activities involve a high level of hazard, creating the risk of accidents, explosions, fires, and other industrial disasters. Potential causes include equipment wear and tear, violations of technological processes, human error, and adverse external

Potential Impact

Accidents at production facilities may result in injuries or fatalities, destruction of equipment and infrastructure, significant financial recovery costs, and environmental damage.

To prevent accidents, KMG implements a comprehensive set of measures:

- Preventive actions during well drilling operations;
- Regular maintenance and diagnostics of equipment;
- Industrial safety assessments and identification of potential hazards;
- Personnel briefings and training on safe equipment
- Monitoring the implementation of industrial safety enhancement measures:
- Property insurance contracts to cover potential damages.

KMG continues to improve its systems for preventing and responding to technogenic risks, ensuring robust protection of personnel, equipment, and the environment.





Risk Description

Mitigation Measures

SOCIAL ASPECT

Occupational Injury Risk



The risk of occupational injuries is associated with non-compliance with occupational safety rules, violations of workplace discipline, and exposure to hazardous and harmful production factors. This may lead to accidents, loss of working capacity, and threats to employee life.

Potential Impact

- Occupational injuries may result in serious consequences, including:
- Deterioration of employee health, temporary or permanent disability;
- Reduced production efficiency and unplanned downtime;
- Financial losses related to compensation, fines, and legal claims;
- Reputational risks for the Company.

To prevent workplace injuries, KMG implements a systematic approach to occupational health and safety:

- Ensuring safe working conditions and introducing new
- Conducting regular safety briefings and training;
- Implementing behavior-based safety observation programs:
- Internal monitoring of compliance with occupational safety
- Rolling out a near-miss reporting program through the "Qorgau" card system.

KMG is committed to reducing injury rates by ensuring safe working conditions and fostering a strong safety culture among employees.

Risk of Occupational Diseases and Threat of Emerging Strains and Viruses



KMG's production activities involve exposure to adverse factors such as intoxication, pollution, vibration, noise, and significant physical strain. Prolonged exposure to these factors can lead to occupational diseases. There is also a threat of infectious disease outbreaks, including new virus strains, which may impact employee health and the stability of production processes.

Potential Impact

- Development of occupational diseases, temporary or permanent loss of employee work capacity;
- Increased illness rates and higher healthcare costs:
- Potential workforce reduction and decreased production efficiency;
- Risk of infectious disease spread affecting operational activities.

To reduce this risk, KMG implements the following measures:

- Regular workplace certification on working conditions;
- Mandatory medical examinations for employees;
- Occupational sanitary control and improvement of working
- Implementation of a health protection action plan for employees.

KMG continues to enhance its occupational health and safety system, minimizing the risks of occupational diseases and infectious threats.

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Trend over the year) **Risk Description**

Mitigation Measures

Shortage of Qualified Personnel



This risk is associated with employee turnover, a shortage of specialists with the required competencies, and potential challenges in attracting and retaining qualified personnel. The shortage may be driven by a competitive labor market, workforce migration, and evolving professional requirements.

Potential Impact

Decreased efficiency and productivity of the Company;

Increased workload on existing staff, risking process disruptions;

Delays in the implementation of strategic projects;

Higher costs for recruitment, training, and onboarding of new employees.

KMG implements a comprehensive approach to attract, develop, and retain talent:

- Regular monitoring of turnover reasons and exit surveys;
- Employee satisfaction surveys on working conditions;
- Implementation of the "MANSAP" program;
- Improvement of incentive programs and working conditions;
- Creation of career opportunities and professional development programs.

KMG is actively addressing personnel risks by creating attractive conditions for employee growth and development.

Terrorism Risk



This risk is associated with the possibility of terrorist and other violent acts targeting the Company's personnel, contractors, and assets. KMG operates in regions where there may be security threats, necessitating measures to protect employees and facilities.

Potential Impact

Threats to the life and health of employees;

Disruption of operations and damage to Company assets;

Increased costs for security and infrastructure restoration;

Reputational and legal risks.

KMG implements a comprehensive set of safety measures:

- Inspection of security systems and updating of evacuation plans;
- Personnel training on anti-terrorism protection;
- Cooperation with law enforcement agencies;
- Emergency response drills and training;
- Monitoring of video surveillance systems and access control;
- Certification of facilities vulnerable to terrorism, in accordance with counterterrorism legislation.

KMG continues to enhance its employee and facility protection measures, reducing terrorism-related risks.



Social Climate in Regions of Operation



Trend

the year)

This risk is associated with the potential for social tensions, unauthorized strikes, and protest actions in regions where KMG operates. The main causes include employee demands for higher wages, improved social conditions, and stronger labor guarantees.

In 2024, 17 strikes were recorded in the Mangystau region, 11 of which involved compliance with its obligations to employees, social discontent remains a risk factor.

Potential Impact

Reputational risks and reduced public trust in the Company;

Potential disruptions to operations;

Increased operating costs related to resolving labor disputes;

Impact on the Company's investment attractiveness.

Mitigation Measures

KMG is taking a comprehensive approach to stabilize the social

- Implementation of Roadmaps to improve working and living conditions in subsidiaries:
- Monitoring of social infrastructure and elimination of deficiencies;
- Support for healthcare workers and development of the social sector in the regions;
- KMG's contractors. Despite the Company's full Oversight of labor conditions in contractor organizations:
 - Support for the socio-cultural development of the city of Zhanaozen:
 - Development of transparent employment tools;
 - Automation of the contractor database for real-time monitoring.

KMG continues to engage with employees and stakeholders to ensure social stability in the regions of operation.

CORPORATE GOVERNANCE

Compliance Risks



Compliance risks are associated with potential instances of corruption, violations of legislation, and internal regulatory documents, which may result in financial losses, reputational damage, and legal consequences. Ensuring transparency in business processes and adherence to ethical standards is a key priority for KMG.

Potential Impact

Financial losses and fines;

Erosion of trust from investors and partners;

Legal liability for the Company and its employees;

Reputational risks affecting the sustainable development of the business.

KMG implements a range of measures to prevent compliance risks:

- Conducting internal analyses of corruption risks and developing corrective actions;
- Regular anti-corruption monitoring and compliance audits;
- Review and update of internal regulatory documents;
- Promoting an anti-corruption culture among employees through training and awareness programs.

KMG continues to improve its compliance control system, ensuring transparency of business processes and minimizing the risk of legal violations.

ESG RATINGS

32.8 SUSTAINALYTICS ASSESSMENT





In November 2024, the international rating agency Sustainalytics assigned an ESG Risk Rating of 32.8 to NC KazMunayGas JSC. The Company ranked 49th out of 300 organizations assessed in the oil and gas sector.

The agency rated KMG's ESG risk management at 67.3 points ("strong"), maintaining a stable level compared to 2023 (67.2). The Company's exposure to ESG risks was assessed at 77 ("high"), slightly increasing from 2023 (74.0) due to methodological changes.

The Company achieved progress in several key areas. Notably, improvements in water resource management had a positive impact on the rating, confirmed by more detailed data disclosure, including water intensity indicators and new water efficiency initiatives. Significant progress was also made in corporate governance – an expanded list of assessment indicators enabled the Company to demonstrate transparency and a high level

of governance practices. The development of lowcarbon products and services, particularly through enhanced greenhouse gas disclosures in the CDP questionnaire, also contributed significantly to strengthening the Company's standing.

At the same time, there is room for further improvement, particularly in community engagement, disclosure of lobbying activities, and more detailed reporting on payments to government bodies. Additionally, methodological changes impacted the emissions and waste category, leading to a lower score due to the addition of new indicators reflecting stricter expectations for emissions intensity.

Detailed information on the Sustainalytics rating is available at the following link.

https://www.sustainalytics.com/ esg-rating/national%20companykazmunaygasjsc/1028382256

MORNINGSTAR SUSTAINALYTICS

INTERNATIONAL RATING AGENCY SUSTAINALYTICS (AMSTERDAM, NETHERLANDS)

Sustainalytics is a globally recognized independent provider of environmental, social, and governance (ESG) research, ratings, and analytics, that helps investors around the world develop and implement responsible investment strategies.

SUSTAINALYTICS ASSESSMENT METHODOLOGY

The ESG Risk Rating is based on an analysis of a company's exposure to material ESG risks and its effectiveness in managing those risks. The rating is on a scale from 0 to 100, with "0" indicating negligible risk. In 2024, the methodology was updated, resulting in a redistribution of indicator weights and the addition of new parameters.

MSCI RATING



According to MSCI, NC KazMunayGas JSC maintained its ESG rating of "BBB" in 2024, which corresponds to an average level within the industry. This reflects balanced management of environmental, social, and governance risks.

The Company shows steady progress in managing carbon emissions, biodiversity, and land resources. Notably, carbon management scores improved by 1.2 points due to lower operational and regulatory risks in this area compared to peers. The Company's efforts to prevent adverse ecosystem impacts, land reclamation initiatives, and the use of oil waste recycling technologies were viewed positively.

KMG's Low-Carbon Development Program (2022-2031), which targets a 15% reduction in Scope 1 and Scope 2 emissions by 2031 (from a 2019 baseline), also received a favorable evaluation.

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In terms of social responsibility, KMG performs at an average level globally, due to the sectoral impact of operations on local ecosystems and communities. However, its strong certification in employee health and safety systems aligns with industry standards.

INTERNATIONAL RATING AGENCY MSCI (NEW YORK. USA)

MSCI Inc. is an American financial services company that provides global equity, bond, and real estate indexes, ESG and climate products, and portfolio analytics. It helps investors worldwide make informed decisions by offering data and tools to evaluate risks and opportunities across asset classes.

MSCI ASSESSMENT METHODOLOGY

MSCI's ESG rating is a sector-relative measure of a company's management of financially relevant ESG risks and opportunities. It is assessed on a seven-point scale from AAA (highest) to CCC (lowest), based on the company's exposure to and management of ESG factors.

FOR REFERENCE

An ESG rating (Environmental, Social, and Governance) is an assessment of a company's exposure to environmental, social, and governance risks and how effectively these are being managed. ESG ratings serve as a strategic tool for investors in making informed investment decisions and help identify both risks and opportunities, offering insight into a company's long-term sustainability and resilience.



UN GLOBAL COMPACT

Since 2006, KMG has been a member and active participant of the United Nations Global Compact. The Company's annual Sustainability Report serves as its Communication on Progress, demonstrating the implementation of the UN Global Compact principles in its operations.

Area	Principle Princi
Human Rights	1. Businesses should support and respect the protection of internationally proclaimed human rights.
	2. Businesses should make sure that they are not complicit in human rights abuses.
Labor	3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining
	4. Businesses should uphold the elimination of all forms of forced and compulsory labor.
	5. Businesses should uphold the effective abolition of child labor.
	6. Businesses should uphold the elimination of discrimination in respect of employment and occupation.
Environment	7. Businesses should support a precautionary approach to environmental challenges.
	8. Businesses should undertake initiatives to promote greater environmental responsibility.
	9. Businesses should encourage the development and diffusion of environmentally friendly technologies.
Anti-Corruption	10. Businesses should work against corruption in all its forms, including extortion and bribery.

These principles serve as the foundation for KMG's strategic initiatives aimed at sustainable development and long-term value creation for stakeholders.





https://unglobalcompact.org/ what-is-qc/participants/6810

CONTRIBUTION TO THE UN SUSTAINABLE **DEVELOPMENT GOALS (SDGs)**

















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NC KazMunayGas JSC strives to contribute to sustainable development by integrating the core principles of the United Nations, global trends, Kazakhstan's development priorities, and universal values into its business strategy. The Company adheres to all 17 UN Sustainable Development Goals and actively supports their implementation.

Taking into account strategic priorities and key objectives, KMG focuses on contributing to 10 priority SDGs and 24 relevant targets. These goals are pursued through strategic initiatives aimed at enhancing operational efficiency, improving working conditions, creating opportunities for employees, supporting local communities, protecting the environment, and fostering innovation.

Engagement with stakeholders and adherence to international standards enable the Company to consistently move toward a sustainable future.

Targets

KMG's Contribution



GOOD HEALTH AND WELL-BEING

3.6 Reduce the number of deaths and injuries from road traffic accidents.

3.8 Achieve universal health coverage, including access to quality essential health-care services and access to safe. effective, quality, and affordable essential medicines and vaccines.

3.9 Substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination.

Priority

Ensure healthy lives and promote well-being for all at all ages.

2024 Results:

- Transport management diagnostics were carried out in 7 KMG subsidiaries, and roadmaps for scaling the "Trip Management" project were approved;
- 3837 KMG subsidiary employees and 2106 contractor employees completed the "Defensive Driving" training course.
- 18,265 employees of KMG subsidiaries and 1,490 employees of contracting organizations participated in a practical demonstration of the use of seat belts;
- 100% of KMG employees were covered by a medical insurance program.

Key Initiatives:

- "Trip Management" Project implementation of a transport management system with a focus on traffic safety;
- Employee Wellness Program (2024–2028) health monitoring for employees with chronic conditions, preventive measures, innovative pre-shift health screenings, improved accessibility and quality of medical care;
- Medical Insurance regular medical checkups and employee vaccinations;
- Leadership and Employee Commitment Code promoting adherence to industrial
- "Qorgau" Safety Card identification and prevention of unsafe working conditions.

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KMG's Contribution Targets



GENDER EQUALITY

5.1 Eliminate all forms of discrimination against all women Ensuring gender equality and empowering all women and girls. and girls everywhere.

5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life.

Priority

Results in 2024:

- Recruitment procedures are free from discrimination;
- Women's representation on the KMG Board of Directors and Supervisory Boards reached 13% in 2024 (target: 30% by 2030).

Key initiatives:

- Increase the share of women in top management positions across KMG Group to 30% by 2030;
- Implementation of the Women's Empowerment Principles (WEPs), including a gender gap self-assessment and public disclosure of gender composition data;
- Strict adherence to the labor legislation of Kazakhstan to prevent any form of discrimination.



AFFORDABLE AND CLEAN ENERGY

7.1 Ensure access to affordable, reliable, and modern energy services for all.

7.b Expand infrastructure and upgrade technology for supplying modern and sustainable energy services.

Priority

- Improving production energy efficiency;
- Increasing the share of clean energy.

- 70 energy-saving initiatives implemented, resulting in savings of 2.36 million GJ (81.6 thousand toe) of fuel and energy resources - equivalent to a reduction of 174.9 thousand tonnes of CO₂ emissions;
- Energy audits conducted for technological equipment;
- 20,000 I-REC green certificates purchased in 2023–2024;
- KMG Group approved its Energy Policy and Regulations on Energy Saving and Efficiency Management.

Key Initiatives:

- Enhancing energy efficiency through equipment modernization
- and the implementation of automated metering systems;
- Development of renewable energy sources: 1 GW wind power project with Total Eren and a 247 MW hybrid power plant with Eni;
- Purchasing green electricity (target: 15% of total consumption by 2031);
- Development of sustainable aviation fuel (SAF) based on ethanol.

Targets



DECENT WORK AND ECONOMIC GROWTH

KMG's Contribution

8.5 Achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

- 8.6 Substantially reduce the proportion of youth not in employment, education, or training.
- 8.8 Protect labor rights and promote safe and secure working environments for all workers.

Priority

Promoting sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.

2024 Results:

- KMG provides employment to over 49.000 people:
- The Company is implementing youth development programs such as Zhas Maman, Dual Education, Intern, and KMGE School.

Key Initiatives:

- Youth engagement programs, graduate training and employment, preparation of specialized professionals, and internship opportunities;
- Social support for employees through collective agreements (50+ types of benefits).



INDUSTRY, INNOVATION AND INFRASTRUCTURE

9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development on affordable and equitable access for all.

9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes.

Development of sustainable infrastructure, promotion of inclusive and sustainable industrialization and innovation.

Results in 2024:

- and human well-being, with a focus Six ABAI information system modules were implemented to improve data and production process management;
 - Implemented solutions resulted in additional oil production and a reduction in the number of well workovers;
 - A "Digital Citizen" training course was developed.

Kev initiatives:

- Development and implementation of the ABAI information system to centralize all production data of the KMG group and process it using artificial intelligence and machine learning:
- "Digital Citizen" program to enhance employees' digital literacy;
- Optimization of energy consumption and modernization of technological equipment.

Targets

Targets

11.6 Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.

Priority

Ensure inclusive, safe, resilient, and sustainable cities and human settlements

2024 Results:

- Participation in the "Taza Kazakhstan" environmental campaign:
- 75 clean-up and improvement events held;
- 235 community clean-ups with over 10,000 participants, collecting 240 tonnes
- 60 events for whitewashing green plantings—around 170,000 trees.
- Installation of automated pollutant emission monitoring systems;
- Since 2021, approximately 200,000 trees have been planted across the KMG Group, including more than 97,000 in 2024.

Key Initiatives:

- Development of charging infrastructure for electric vehicles;
- Implementation of Best Available Techniques (BAT) to reduce environmental impacts step-by-step;
- Development of a pollutant emission reduction program;
- Implementation of the World Bank's "Zero Routine Flaring by 2030" Initiative;
- Creation of a "green belt" through landscaping and tree planting projects;
- Participation in the "Taza Kazakhstan" initiative to improve environmental conditions.



RESPONSIBLE CONSUMPTION AND PRODUCTION

12.4 Achieve environmentally sound management of chemicals and all wastes throughout their life cycle in accordance with agreed international frameworks and significantly reduce their release into the air, water, and soil to minimize their adverse impacts on human health and the environment.

12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling,

12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and integrate sustainability information into their reporting cycle.

Priority

Facilitating the transition to responsible consumption and production models.

2024 Results:

- 4.5 million tonnes of historical oil waste recycled from 2018 to 2024;
- Ongoing implementation of water resource management measures.

Key Initiatives:

- Historical oil waste disposal program;
- "Tazalyk" project at Atyrau Refinery for wastewater treatment;
- Implementation of a waste management standard;
- Water resource management program;
- Development of "green" offices and separate waste collection systems.



KMG's Contribution



CLIMATE ACTION

13.2 Integrate climate change measures into national policies, strategies, and planning.

13.3 Improve education, awareness- 2024 Results: capacity on climate change mitigation, adaptation, impact reduction, and early warning.

Take urgent action to combat climate change and its impacts.

- raising, and human and institutional KMG's Low-Carbon Development Program through 2060 was approved;
 - Corporate methodology for GHG emissions monitoring and reporting was updated to include Scope 1, 2, and 3 emissions and approaches to inventorying, accounting, and disclosure;
 - A Hydrogen Atlas was developed; a green hydrogen pilot project is underway, and lab samples of iron and titanium alloys for hydrogen storage were obtained;
 - A feasibility study on SAF (Sustainable Aviation Fuel) production in Kazakhstan was completed with Air Astana and EBRD support;
 - Sites in Pavlodar Region were identified for a forest-climate project, including a carbon sequestration assessment and working plan for green space development;
 - First methane emissions report submitted to UNEP under OGMP 2.0 initiative;
 - KMG specialists trained in methane leak management; field measurements conducted at two subsidiaries;
 - Instruction for methane emissions management across the KMG Group was adopted;
 - At COP28, KMG joined the Oil and Gas Decarbonization Charter.

- Implementation of internal carbon pricing;
- Participation in the Carbon Disclosure Project and disclosure of climate risks
- Methane emissions management in cooperation with Carbon Limits, IFC, and Tetra Tech Inc;
- Participant in UNEP OGMP 2.0 methane initiative;
- Signatory to the Oil and Gas; Decarbonization Charter;
- Forest-climate offset project in partnership with Chevron in Pavlodar Region.











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KMG's Contribution Targets



LIFE ON LAND

15.3 Combat desertification, restore **Priority:** degraded land and soil, including land affected by desertification, drought, and floods, and strive to achieve a land degradationneutral world.

15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity, and ensure the conservation and protection of threatened species.

Protection and restoration of terrestrial ecosystems, promotion of their sustainable use, sustainable forest management, combating desertification, halting and reversing land degradation, and halting biodiversity loss.

2024 Results:

- 4.5 million saxaul seedlings planted across 15,000 hectares on the dried seabed of the Aral Sea;
- Implementation of a project to reconstruct wastewater channels and reclaim evaporation fields at the Atyrau Refinery;
- Ongoing efforts to restore contaminated lands and reduce pollutant discharges.

Key Initiatives:

- Construction of a desalination plant in Kenderli with a capacity of 50,000 m³ of water
- Land rehabilitation initiatives;
- Development of a biodiversity conservation program and cooperation with environmental organizations;
- Implementation of the mitigation hierarchy: avoidance, minimization, restoration, and offsetting of environmental impacts;
- Execution of the "Tazalyk" environmental project aimed at improving environmental

Targets

KMG's Contribution



PARTNERSHIPS FOR THE GOALS

17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection.

17.16 Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology, and financial resources to support the achievement of the Sustainable Development Goals in all countries, particularly developing countries.

17.17 Encourage and promote effective public, public-private, and civil society partnerships, building on the experience and resourcing strategies of partnerships.

Enhancing engagement within the Global Partnership for Sustainable Development.

- KMG annually discloses information on taxes and government payments, adhering to leading transparency standards:
- The Company actively collaborates with international agencies and intergovernmental organizations in implementing sustainable development

Key Initiatives:

- Disclosure of tax reports in line with GRI standards and the OECD Action 13 Countryby-Country initiative;
- Participation in international initiatives on sustainable development, environmental protection, and emissions reduction;
- Strengthening transparency in corporate governance.



KMG'S MEMBERSHIP AND PARTICIPATION IN INITIATIVES AND ASSOCIATIONS

GRI 2-28

NC KazMunayGas JSC actively participates in international and national initiatives aimed at sustainable development, environmental

protection, reducing environmental impact, and enhancing safety standards.

CLIMATE AND ENVIRONMENTAL INITIATIVES



World Bank's "Zero Routine Flaring by 2030" Initiative

KMG has supported the initiative since 2015, working to minimize associated gas flaring.



Global Methane Initiative (GMI)

Since 2017, KMG has participated in the GMI network, implementing methane reduction and utilization projects.





Caspian Environmental **Protection Initiative (CEPI)**

Participating since 2020 to support environmental protection in the Caspian region.



Oil and Gas Methane Partnership 2.0

reporting transparency and reduction efforts.



Oil and Gas Decarbonisation Charter

Participating since 2023 following accession at COP28, to support carbon footprint reduction in the sector.

SAFETY, EMERGENCY PREPAREDNESS, AND OIL SPILL **RESPONSE**



Oil Spill Preparedness Regional Initiative (OSPRI)

Engagement with IPIECA and the International Maritime Organization to prevent and respond to oil spills.



Oil Spill Response Limited

Member of the global oil spill response organization.

NATIONAL AND INTERNATIONAL ASSOCIATIONS



National Chamber of Entrepreneurs "Atameken

> Cooperation on legal and regulatory matters.



KAZENERGY

Active in committees and working groups; chairs the Coordination Council on Ecology and Social Responsibility.



UN Global Compact

A signatory since 2006; KMG annually publishes its Communication on Progress.



International Association of Oil and Gas Producers (IOGP)

Member since 2018, implementing international safety standards.

(4) KAZWELD KazWeld - Kazakhstan Welding Association

> Promotes development of welding technologies and specialist training to international standards.



New Kazakhstan Taxpayers' **Association**

Focuses on improving tax legislation and corporate tax





Supports the engineering sector and promotes industrial

collaboration.



Association of Producers and Consumers of Petrochemical Products

Promotes sustainable development of Kazakhstan's petrochemical sector.





Member of the association for

regional environmental initiatives since 2021.

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SOCIAL AND PROFESSIONAL INITIATIVES

Collaboration with the NGO Veterans of the Oil and Gas Sector

Since 2021, KMG has worked with the expert council of industry veterans to facilitate knowledge transfer and advisory support.



INFORMATION DISCLOSURE



PwC Kazakhstan top 50 for Non-Financial Disclosure

KMG consistently ranks in the top 5 for ESG information disclosure in corporate reports.





The ESG Disclosure Rating, conducted by PwC Kazakhstan, is an annual analysis of the quality and completeness of sustainable development disclosures by Kazakhstani companies. The Rating evaluates annual reports and sustainability reports, including integrated and social reports, with the aim of identifying leaders and providing recommendations for improving disclosure practices.

The assessment is conducted across the following key areas: Sustainable Development Strategy, Corporate Governance, Social Policy and Human Resource Management, Environmental Impacts and Their Management, Reporting Practices and Compliance with International Standards. Companies are evaluated based on 76 criteria.

The goal of the rating is to support the development of ESG reporting in Kazakhstan and contribute to improving the quality of sustainable development management in the country.

KMG continues to foster partnerships and integrate global best practices in sustainability, environmental stewardship, and safety.



Climate Change and Low-Carbon Development
Environmental Impact Management
Water Resource Management
Air Protection1
Waste Management and Land Reclamation
Prevention and Response to Oil Spills
Biodiversity Protection1
Environmental Assessment of Planned Economic Activities
Closure and Reclamation of Work Sites
Implementation of Green Office Principles
Compliance with Legislation and Environmental Expenditures

























Principle 7: Businesses should support a precautionary approach to environmental challenges. Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility. Principle 9: Businesses should encourage the development and diffusion of environmentally friendly technologies.

CLIMATE CHANGE AND LOW-CARBON DEVELOPMENT

NC KazMunayGas JSC recognizes that climate change is one of the most significant global challenges impacting ecosystems, the economy, and social development. In alignment with global and national strategies to reduce greenhouse gas emissions and achieve carbon neutrality, the Company integrates climate considerations into its development strategy and risk management system.

KMG's climate strategy is focused on reducing its carbon footprint, improving energy efficiency, and developing low-carbon technologies, as outlined in the Low-Carbon Development Program to 2060 (LCDP-2060), approved by the Board of Directors in 2024. This document outlines the key stages and mechanisms of business decarbonization, including the development of renewable energy sources (RES), implementation of energy-saving technologies, methane emissions management, and carbon capture, utilization, and storage (CCUS) projects.

The Company adopts a comprehensive approach to climate risk management that includes:

• Strategic integration of climate agendas into corporate governance and decisionmaking processes;

- Systematic identification and assessment of climate-related risks as part of the corporate risk management system;
- Development of adaptation mechanisms to physical and transition climate risks, including strengthening infrastructure resilience and accounting for carbon
- Transparency and monitoring regular disclosure of GHG emissions data.

KMG also places strong emphasis on collaboration with international partners, government agencies, and stakeholders to advance low-carbon initiatives. In 2024, the Company joined the Oil and Gas Methane Partnership (OGMP 2.0), contributing to more accurate methane emissions accounting and the adoption of global best practices.

KMG's commitment to low-carbon development and responsible climate risk management enhances its resilience during the global energy transition, maintaining its leadership in Kazakhstan's oil and gas sector.

GREENHOUSE GAS EMISSION REDUCTION TARGETS

In line with the LCDP-2060, the Company has established clear emission reduction and lowcarbon technology development targets.

The base year for measuring GHG emission trends is 2019, which represents typical pre-COVID-19 operations and is considered the most representative for tracking progress.

TARGETS FOR 2031:

- Reduce direct (Scope 1) and indirect (Scope 2) emissions by 15% from 2019 levels;
- Reduce methane emissions by 32%;
- Reduce carbon intensity by 15%;
- Achieve a 15% share of RES in electricity consumption:
- Eliminate routine flaring of associated gas;
- Implement a forest-climate offset project covering 1,600 hectares;
- Deploy carbon capture, utilization, and storage (CCUS) technologies.

TARGETS FOR 2060:

- Reduce Scope 1 and Scope 2 emissions by 64%, including offsets;
- Reduce methane emissions by 96%;
- Reduce carbon intensity by 60%;
- Reach a 50% share of RES in electricity consumption:
- Implement forest-climate offset projects covering 11,600 hectares;
- Inject 421 thousand tonnes of CO₂ via CCUS projects:
- Produce 1.4 million tonnes of sustainable aviation fuel (SAF):
- Achieve an "A" rating in the CDP Climate score.

These targets ensure a long-term reduction of the carbon footprint, laying the foundation for a gradual transition to a low-carbon economy.



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DISCLOSURE ACCORDING TO TCFD RECOMMENDATIONS

Component	TCFD Recommendation	Disclosed Information	Report Section
Governance	Description of the Board's oversight of climate- related risks and opportunities	Description of governance mechanisms for climate issues at the Board level	Governance of Climate Risks
	Description of management's role in assessing and managing climate-related risks and opportunities	Management's involvement in developing and implementing the climate strategy	
Strategy	Identification of climate-related risks and opportunities over the short, medium, and long term	Key climate risks and opportunities and their potential impacts on company operations	Climate Risk Assessment
	Impact of climate-related risks and opportunities on the business, strategy, and financial planning	Description of adaptation of strategy and business processes to climate challenges	Climate Risk Management Strategy Key projects under the climate strategy
	Resilience of the company's strategy under different climate scenarios	Climate scenario analysis and its implications for the company	Climate Risk Management Strategy Climate Risk Assessment
Risk Management	Processes for identifying and assessing climate- related risks	Approaches to identifying, assessing, and monitoring climate-related risks	Climate Risk Assessment
	Processes for managing climate-related risks	Measures for mitigation and adaptation to climate risks	
	Integration of climate risks into the overall risk management system	Incorporation of climate risk management into corporate risk governance	Integration of Climate Risks into Risk Management
Metrics and Targets	Metrics used to assess climate-related risks and opportunities	Key climate metrics such as greenhouse gas emissions and energy efficiency	Greenhouse Gas Emissions Energy efficiency and conservation programs
	Scope 1, 2 (and if applicable, Scope 3) greenhouse gas emissions	Detailed disclosure of emissions data	Greenhouse Gas Emissions
	Targets set by the organization related to climate issues	Long-term and mid-term emission reduction and climate resilience targets	Greenhouse Gas Emission Reduction Targets

CLIMATE RISK MANAGEMENT

NC KazMunayGas JSC applies a comprehensive and systematic approach to climate risk management, aligning with leading international practices, including the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). The Company views climate risks as strategically significant factors that may impact operational activities, investment decisions, and the long-term resilience of the business.

ROLE OF MANAGEMENT IN CLIMATE RISK MANAGEMENT

The **KMG Board of Directors** exercises the highest level of oversight over the Company's climate policy, approves key strategic documents such as the Low-Carbon Development Program to 2060 (LCDP-2060), and monitors the implementation of climate-related initiatives. For in-depth review of environmental, climate, and ESG issues, the Health, Safety, Environment and Sustainable Development Committee (HSE&SD Committee) operates under the Board and regularly analyzes current and emerging climate risks and opportunities.

The Company's Management Board is responsible for integrating climate aspects into strategic and operational management. Within KMG's management structure, designated executives oversee climate initiatives, including the Deputy Chairman of the Management Board, who coordinates implementation efforts, and heads of relevant departments responsible for emissions monitoring, carbon asset management, and low-carbon technology deployment.

The **Department of Low-Carbon Development** plays a key role in implementing the climate strategy. It is responsible for developing and monitoring decarbonization roadmaps, coordinating efforts with subsidiaries and affiliates,

and promoting initiatives in renewable energy and carbon capture.

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In 2024, the Company also approved several new regulatory documents that reinforce its climate policy and emissions management framework, including the Methodology for Monitoring and Reporting Greenhouse Gas Emissions and the Methane Emissions Management Instruction. These documents formalize KMG's commitment to reducing its carbon footprint and establish a unified approach to managing climate-related factors across the Group.

INTEGRATION OF CLIMATE RISKS INTO THE RISK MANAGEMENT SYSTEM

Climate risks are integrated into KMG's Corporate Risk Management System (CRMS), enabling the Company to identify, assess, and mitigate the potential impacts of climate change in a timely manner.

Under this approach, the Company:

- Identifies physical and transition climate risks, taking into account various climate scenarios;
- Develops risk maps and management plans, including adaptation measures and mitigation of climate impacts;
- Conducts regular monitoring of climate risks and includes them in the Company's Risk Register and Risk Map, as well as in annual reporting.

To manage identified risks, KMG develops adaptation strategies, including improving energy efficiency of its assets, expanding renewable energy, deploying carbon capture, utilization and storage (CCUS) technologies, and reducing methane emissions.

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Transparency and disclosure play a key role in KMG's approach to climate risk management. The Company regularly discloses information on climate risks and its carbon footprint in accordance with international standards, including TCFD, GRI Standards, CDP, and ISO 14064.

By integrating climate aspects into corporate governance and risk management, KMG strengthens its resilience to climate challenges and enhances its competitiveness in the energy transition era.

CLIMATE RISK MANAGEMENT STRATEGY

The Company implements the Low-Carbon Development Program to 2060 (LCDP-2060), which outlines the key priorities, focus areas, and instruments for reducing its carbon footprint.

The main elements of the strategy include:

- Integrating climate-related considerations into business processes, including investment decisions, production operations, and risk management;
- Gradually reducing greenhouse gas (GHG) emissions and transitioning to a low-carbon economy using advanced technologies and international standards:
- Expanding renewable energy, implementing energy efficiency solutions, and reducing methane leaks:
- Applying CCUS mechanisms and implementing forest-climate offset projects;
- Systematic monitoring and reporting aligned with international standards.

KMG's strategy aims at long-term climate risk reduction and creating opportunities for sustainable development, considering global trends and Kazakhstan's national commitments to achieve carbon neutrality by 2060.

TIME HORIZONS

The Company has defined three time horizons for climate-related planning:

- Short-term (0-1 year): Includes annual budgeting and operational planning, analysis of current risks and opportunities;
- Medium-term (1-10 years): Aligns with KMG Group's Development Plan and business plans of subsidiaries and affiliates, considering Kazakhstan's Nationally Determined Contributions (NDCs) to global climate initiatives:
- Long-term (10-35 years): Covers the Company's strategic goals, including LCDP-2060 implementation, development of low-carbon projects, and alignment with international decarbonization standards. It also reflects the goals and principles of the Republic of Kazakhstan's Carbon Neutrality Strategy to 2060.

DECARBONIZATION SCENARIOS

As part of its climate strategy, KMG applies various scenarios to assess potential development pathways and adaptation to changing conditions. These scenarios help forecast the impact of climate risks and determine optimal response measures.

1. Realistic Scenario

Assumes a reduction in carbon footprint through:

- Implementation of energy efficiency and energy saving measures at production facilities:
- Deployment of two large-scale renewable energy projects with a total capacity of 1.2 GW in the Mangystau and Zhambyl regions.

2. Green Development Scenario

This scenario is aimed at achieving decarbonization targets and includes:

- Implementation of energy efficiency measures:
- Increasing the share of renewable energy in the energy mix sufficient to meet the Company's climate targets;
- Implementation of a forest-climate offset project to compensate part of the greenhouse gas emissions.

Under this scenario, KMG focuses on two key approaches to reducing greenhouse gas emissions:

• Organic emission reductions achieved through improved operational efficiency and modernization of production assets, considering potential changes in production

• Inorganic emission reductions through the implementation of new technological solutions at the corporate level, including the construction of renewable energy facilities and the purchase of renewable electricity for industrial needs, allocated among the Company's enterprises via intragroup agreements.

3. Deep Decarbonization Scenario

Envisions a 64% reduction in greenhouse gas emissions from 2019 levels by:

- Large-scale deployment of carbon capture, utilization, and storage (CCUS) technologies;
- Active offset policy, including forest-climate projects and development of hydrogen energy.

KMG plans to define its carbon neutrality targets by 2030 following pilot testing of these directions.

These scenarios enable KMG to respond flexibly to changes in regulation, economic trends, and technological advancements, ensuring sustainable business development and compliance with climate commitments.

CLIMATE RISK ASSESSMENT

APPROACH TO CLIMATE RISK ASSESSMENT (SCENARIO ANALYSIS)

KMG applies two main approaches for analyzing climate risks:

- Analysis of physical climate risks related to changes in the natural environment and their impact on the Company's operations;
- Assessment of transition risks associated with economic transformation, regulatory developments, and market demand shifts during the global energy transition.

When evaluating physical risks, KMG uses Representative Concentration Pathways (RCPs) developed by the Intergovernmental Panel on Climate Change (IPCC):

• RCP 2.6 – a low-emission scenario where global temperatures stabilize due to strict climate policies;







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- RCP 4.5 a medium pathway assuming moderate mitigation efforts;
- **RCP 8.5** a high-emission scenario with no significant measures to limit emissions.

To assess transition risks. KMG uses scenarios developed by the Network for Greening the Financial System (NGFS):

- Nationally determined contributions (NDC) assumes all announced policy measures are implemented, even if not yet enacted;
- "Below 2°C" Scenario a moderate transition path that gradually strengthens climate policy to keep warming below 2°C;

- Delayed Transition Scenario assumes delayed action until 2030, requiring abrupt and more drastic measures thereafter;
- Net Zero by 2050 Scenario an ambitious path where strong policy and technological innovation achieve carbon neutrality.

Based on these scenarios, KMG conducts climate risk assessments at both the corporate and asset levels, allowing for the development of effective adaptation strategies.

KEY CLIMATE RISKS AND MITIGATION MEASURES GRI 201-2

Physical Climate Risks

Sharp changes in temperature conditions

Potential consequences:

- Deterioration of employee health, increased risk of injuries and fatalities;
- Reduced labor productivity and increased personnel costs;
- Increased energy consumption for heating and cooling of production facilities;
- Higher load on equipment and infrastructure.

dust storms)

Potential consequences:

- Damage to production assets and equipment;
- Disruption of operations, shutdowns in extraction and processing;
- Increased costs for infrastructure restoration.

Planned and Ongoing Mitigation Measures

- Improving thermal insulation of industrial and administrative buildings;
- Developing energy-efficient heating and air conditioning
- Regular maintenance of equipment to prevent overheating or freezing;
- Introducing adaptive work schedules during extreme temperatures.
- **Extreme weather events (floods, hurricanes, storms,** Enhancing the resilience of critical facilities to extreme weather conditions;
 - Developing emergency response plans and scenarios;
 - Improving early warning systems and meteorological
 - Training personnel in emergency response methods.



Drought and water shortages

Potential consequences:

- Restrictions in water supply for technological processes;
- Increased extraction and processing costs;
- Environmental impacts on adjacent ecosystems.
- · Introducing water reuse technologies;
- Developing water treatment and recycling systems;
- Optimizing water use at production facilities;
- Training employees in efficient and responsible water use;
- Developing emergency water supply plans;
- Cooperating with government bodies on water supply
- Organizing environmental campaigns to reduce water use among the public and other companies.

Transition Climate Risks

Tightening greenhouse gas emission regulations

Potential consequences:

- Increased costs for acquiring carbon quotas;
- Introduction of additional taxes and levies;
- Restrictions on the use of carbon-intensive technologies.

Planned and Ongoing Mitigation Measures

- Monitoring greenhouse gas emissions in line with international standards;
- Investing in emission reduction projects;
- Expanding methane emission reporting under OGMP 2.0 and implementing methane reduction measures;
- Developing an internal carbon pricing (ICP) system;
- Maintaining dialogue with regulators and participating in the development of new standards;
- · Monitoring international trends and proactively adapting to legislative changes.

Declining demand for oil and petroleum products

Potential consequences:

- Decreased revenue from traditional oil and gas activities;
- Risk of product oversupply.

- Developing and implementing low-carbon products and
- Optimizing production processes and introducing new solutions to reduce carbon intensity;
- Improving marketing strategies with a focus on environmentally friendly products;
- Training and reskilling staff for new technologies and products;
- Engaging with government and civil society on creating and implementing environmental production standards;
- Continuously monitoring market trends to promptly adapt Company strategies to evolving customer needs.



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Rising raw material and energy prices

Potential consequences:

- Increased operating costs for the Company;
- Reduced competitiveness amid rising energy prices.
- Diversifying supply sources;
- Optimizing energy use through energy-efficient technologies;
- Long-term contracts with suppliers to stabilize pricing;
- Adapting marketing strategies and customer relations.

Potential consequences:

- Delays in implementing RES, CCUS, and hydrogen energy projects;
- Uncertainty in emissions offset mechanisms.
- Lack of regulatory framework for low-carbon projects Active engagement with government authorities on standard development;
 - Participation in international emissions reduction and technology deployment initiatives;
 - Developing internal guidelines and methodologies for evaluating low-carbon projects.

KEY PROJECTS WITHIN THE CLIMATE STRATEGY

1. Enhancing Energy Efficiency and Reducing **Emissions**

One of the key decarbonization areas is the reduction of direct emissions (Scope 1) through improved operational efficiency and the implementation of energy-saving technologies.

Work completed in 2024:

- 70 activities were implemented under the Low-Carbon Development Plan:
- Annual savings of fuel and energy resources amounted to 2.36 million GJ, equivalent to a reduction of 174.9 thousand tonnes of CO₂ emissions:
- Energy consumption at production facilities was optimized through equipment upgrades and automation of technological processes.

2. Development of Renewable Energy

KMG is implementing large-scale renewable energy projects (RES) to replace traditional carbonintensive energy sources and increase the share of clean energy in the energy mix.

Key projects:

- Construction of a 1 GW wind power plant with an energy storage system (Zhambyl region) partner: Total Eren, implementation period: 2023-2027;
- 247 MW hybrid renewable power plant in Zhanaozen (Mangystau region) – partner: Eni S.p.A, implementation period: 2023-2026.

Work completed in 2024:

- Feasibility studies for the projects were completed:
- Wind potential in the Zhambyl region was assessed:
- Work is underway to select the main equipment supplier for the wind power plant;
- In December 2024, early works were completed at the solar power plant site, and installation of major equipment began.

3. Carbon Capture, Utilization, and Storage (CCUS)

KMG considers carbon capture and storage (CCUS) a key tool for reducing CO₂ emissions and enhancing oil recovery at fields. After 2040, a fullscale CCUS project is planned, with an estimated annual injection volume of up to 412 thousand tonnes of CO₂.

Work completed in 2024:

- CO₂ emissions screening was completed in the Atyrau and Mangystau regions – key emission sources totaling 412 thousand tonnes of CO₂ were identified;
- Infrastructure for CO₂ utilization was assessed;
- A concept was developed for a pilot CCUS project with a capacity of 10-20 thousand tonnes of CO, per year at the Prorva group of fields CPF operated by Embamunaigas JSC.

4. Development of Hydrogen Energy

KMG strategically positions itself in the hydrogen production market as a promising lowcarbon energy source. Key focus areas include the production of blue hydrogen with carbon capture, the use of renewables for green hydrogen, scientific research, and the development of new storage and transportation technologies.

Work completed in 2024:

- Feasibility studies were conducted for the production of blue hydrogen, low-carbon ammonia, and methanol:
- A Water Resources Atlas was developed to assess the potential for green hydrogen production in western Kazakhstan;
- A pilot project on green hydrogen production and application is underway;
- An analytical calculator was developed to assess the cost of green hydrogen production;
- First laboratory samples of iron and titanium alloys were obtained for the safe storage and transport of hydrogen.

Successful completion of the project will enable NC KazMunayGas JSC to acquire a hydrogen transport technology for both domestic use and international export.

5. Production of Sustainable Aviation Fuel (SAF)

KMG is considering the production of SAF as an alternative to conventional Jet-1 aviation fuel, which would significantly reduce the carbon footprint of the aviation sector.

Work completed in 2024:

- A study on the potential for SAF production in Kazakhstan was completed by ICF SH&E
- Key export markets were identified, including the European Union;
- Preliminary technological solutions and capacity of the first plant were developed: 40,000 tonnes of SAF per year requiring 72,000 tonnes of bioethanol;
- A feasibility study (FS) is scheduled for 2025.

6. Implementation of Forest-Based Carbon Offset **Projects**

KMG views forest-climate projects as an effective mechanism to offset CO₂ emissions.

Work completed in 2024:

- A project to create a green zone around the city of Pavlodar covering 1,600 hectares is being implemented jointly with Chevron;
- Field research and soil analysis were carried out to assess CO₂ absorption potential, and a Working Project for the creation of green plantations was developed and passed the state environmental review.

Six forest-climate projects are planned under the LCPD-2060.

7. Methane Emissions Management

Reducing methane emissions is one of KMG's top priorities within global climate initiatives.

Work completed in 2024:

- In May 2024, KMG submitted its first methane emissions report under the OGMP 2.0 framework;
- Methodological support for report preparation was provided in cooperation with IFC and Carbon Limits:

- In June 2024, Tetra Tech ES, Inc. conducted a methane measurement campaign at Ozenmunaigas JSC and KazGPZ LLP facilities;
- A series of trainings and seminars on methane leak detection and repair (LDAR) technologies were held for production personnel.

Given Kazakhstan's accession to the Global Methane Pledge and the expected tightening of methane emissions regulation in the short term, NC KazMunayGas JSC is actively working on inventorying (baseline determination) and reducing methane emissions at its facilities.

GREENHOUSE GAS EMISSIONS

APPROACH TO CALCULATION

NC KazMunayGas JSC has adopted a comprehensive approach to the monitoring, accounting, and verification of greenhouse gas (GHG) emissions in accordance with leading international standards. The Company systematically analyzes its direct (Scope 1), indirect (Scope 2), and other material emissions (Scope 3), ensuring transparency and accuracy in its reporting.

Emissions Accounting Methodology

KMG is guided by the following international standards and methodologies:

- ISO 14064 a standard for greenhouse gas emissions verification;
- GHG Protocol methodology for calculating Scope 1, 2, and 3 emissions;
- IPCC Guidelines for national greenhouse gas inventories:
- UNFCCC United Nations Framework Convention on Climate Change;
- Order of the Minister of Ecology and Natural Resources of the Republic of Kazakhstan dated January 17, 2023, No. 9 - National Methodological Guidelines.

The Company has also developed and approved a Methodology for Monitoring and Reporting Greenhouse Gas Emissions, which standardizes emissions accounting processes across the entire KMG Group.

Emissions Inventory

As part of its climate strategy, KMG conducts a greenhouse gas emissions inventory in the following categories:

- Scope 1 (direct emissions) emissions from fuel combustion at production facilities (oil and gas extraction, processing, transportation);
- Scope 2 (indirect emissions from energy consumption) - emissions associated with the consumption of electricity and thermal energy purchased from third-party suppliers;
- Scope 3 (indirect emissions across the entire value chain) – includes emissions from the use of sold products, transportation, employee business travel, and other sources.

Since 2023, KMG has expanded its Scope 3 reporting to include five key categories:

- Other indirect emissions from energy consumption (electricity transmission losses);
- Emissions from employee business travel;
- Emissions from employee commuting;
- Emissions from transportation and delivery of finished products;
- Emissions from the use of sold goods and services.

Implementation of Internal Carbon Pricing

To account for the impact of climate-related factors on business and to stimulate emissions reduction. KMG is implementing a system of internal carbon pricing (ICP). This mechanism allows the Company to:

- Assess financial risks associated with tightening carbon regulations;
- Reallocate investments from carbon-intensive projects to low-carbon initiatives;
- Determine a "shadow price" for CO₂ emissions to evaluate the sustainability of projects.

Since 2022, calculating the carbon footprint and related financial aspects has been a mandatory part of feasibility studies (FS) for new capital projects.

Transparency and Reporting

KMG regularly discloses information on its emissions and climate risks in line with advanced international reporting standards:

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- CDP (Carbon Disclosure Project) reporting on emissions and climate risks:
- GRI (GRI Sustainability Reporting Standards) sustainability reporting;
- TCFD (Task Force on Climate-related Financial Disclosures) – climate risk disclosure.

The adopted approaches to GHG emissions accounting ensure reliable and accurate reporting, enabling KMG to effectively manage its carbon footprint and adapt to changing climate-related requirements.

GREENHOUSE GAS EMISSIONS VOLUME

GRI 305-1, GRI 305-2, GRI 305-3, GRI 305-4, GRI 305-5

The volume of direct greenhouse gas emissions (CO₂) for 2024 by the Group of Companies of NC KazMunayGas JSC amounted to 7.7 million tonnes of CO_2 (9.06 million tonnes of CO_2 -equivalent)².

The calculation includes carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Direct greenhouse gas emissions data are verified by conclusions from independent accredited organizations for each subsidiary.





² CO₂-equivalent data are presented using the global warming potential (GWP) coefficients from the IPCC Fifth Assessment Report (methane - 28, nitrous oxide - 265).

GHG EMISSIONS INDICATORS

Scope 1. Direct Emissions		2022	2023	2024
Breakdown by business activity				
Production	million t CO ₂ / million t CO ₂ -eq	2.4/2.8	2.33/3.44	2.64/3.98
Processing	million t CO ₂ / million t CO ₂ -eq	5.1/5.2	5.01/5.03	4.92/4.94
Transportation	million t CO ₂ / million t CO ₂ -eq	0.1/0.1	0.1/0.1	0.14/0.14
Breakdown by countries				
Kazakhstan	million t CO ₂ / million t CO ₂ -eq	6.6/7.1	6.55/7.68	6.99/8.35
Romania	million t CO ₂ / million t CO ₂ -eq	0.9/0.9	0.88/0.88	0.69/0.69
Georgia	million t CO ₂ / million t CO ₂ -eq	0.02/0.02	0.02/0.02	0.02/0.02
Breakdown by type of greenhouse gas				
CO ₂	million t CO ₂	7.6	7.44	7.7
CH ₄	million t CO₂-eq	0.4	1.11	1.34
N ₂ 0	million t CO₂-eq	0.1	0.1	0.02
Scope 2 Indirect emissions (market-based)	million t CO ₂ / million t CO ₂ -eq	3.2/3.2	3.4/3.4	3.3/3.3
Scope 2 Indirect emissions (location-based)	million t CO ₂ / million t CO ₂ -eq	3.3/3.3	3.5/3.5	3.4/3.4
Scope 3 Use of sold products	million t CO ₂ / million t CO ₂ -eq	61.6/61.8	54.6/54.8	59.1/59.2

GHG EMISSIONS INTENSITY INDICATORS

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	Production		Tran	Transportation		Processing			
	2022	2023	2024	2022	2023	2024	2022	2023	2024
Scope 1 emissions intensity									
Scope 1 Emissions Intensity (tonnes of CO ₂ per KZT million of revenue)	0.28	0.28	0.32	0.01	0.01	0.02	0.59	0.60	0.59
Scope 2 emissions intensity									
Scope 2 Emissions Intensity (location-based) (tonnes of CO ₂ -eq per KZT million of revenue)	-	-	0.15	-	-	0.03	-	-	0.24
Scope 2 Emissions Intensity (market-based) (tonnes of CO ₂ -eq per KZT million of revenue)	-	-	0.15	-	-	0.03	-	-	0.23

ENERGY SAVING AND EFFICIENCY IMPROVEMENT PROGRAMS

ENERGY EFFICIENCY MANAGEMENT

KMG applies energy saving and efficiency improvement principles based on the methodology of the international ISO 50001 standard "Energy Management Systems," which is recognized as a global best practice for systematic energy use management.

As part of its Low-Carbon Development Program, KMG has approved key internal regulatory documents that ensure a comprehensive approach to managing energy consumption:

- Energy Policy of NC KazMunayGas JSC;
- Regulation on Energy Saving and Energy Efficiency Management within the KMG Group, applicable to subsidiaries, affiliates, and contractor companies.

In addition to these measures, a targeted energy audit of process furnaces and boiler equipment at oil production enterprises was conducted within the KMG Group. Separate regulations on energy saving and efficiency were adopted at the level of individual subsidiaries (KBM, KGM, KOA, KTM, Pavlodar Refinery, PKOP, Caspi Bitum).

STRATEGIC GOALS

In 2024, KMG approved the Low-Carbon Development Program through 2060, which outlines the following key strategic priorities in energy efficiency and resource conservation:

• Long-term planning – development of integrated energy efficiency plans across the Group;

- Effective energy management ensuring transparent management of energy flows based on reliable and measurable data;
- Centralized monitoring implementation of a unified system for monitoring and managing energy efficiency processes;

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- Engagement with government agencies ongoing cooperation on energy-saving initiatives;
- Replication of best practices scaling up successful cases throughout the organization;
- Cost optimization identification and elimination of inefficient expenditures through rational use of resources:
- Profitability improvement reduction of fuel and energy losses and minimization of inefficient expenses;
- Improved financial performance enhanced economic efficiency through reduced energy consumption.

These measures are expected to ensure a sustainable reduction in energy costs, improve operational efficiency, and support the Company's decarbonization goals.

ENERGY CONSUMPTION

GRI 302-1

In 2024, total fuel and energy resource (FER) consumption across the KMG Group amounted to 129.4 million GJ, a 4% increase compared to 2023 (124.1 million GJ). The increase in energy consumption was driven by the commissioning of new subsidiaries and dependent entities - Dunga, Urikhtau Operating, Ural Oil and Gas, and KPI.



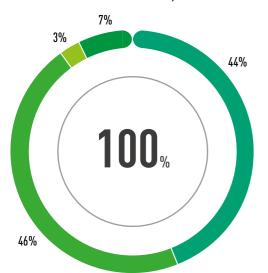
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Breakdown of energy consumption:

- Electricity 15.1 million GJ
- Thermal energy 3.9 million GJ
- Motor fuel³ 1.8 million GJ
- Boiler and furnace fuel⁴ 108.5 million GJ

In 2024, the Group's own generation amounted to 737.5 million kWh of electricity and 5,440.6 thousand Gcal of thermal energy.

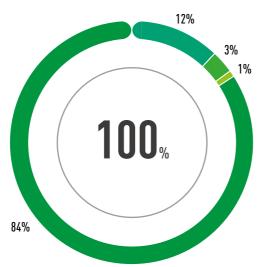
ENERGY CONSUMPTION BY SEGMENTS, THOUSANDS OF GJ



- Exploration and Production of Oil and Gas
- Oil and Gas Refining
- Oil Transportation
- Oil and Gas Chemistry (KPI)

As part of support for renewable energy sources (RES), Pavlodar Refinery and MMG purchased 10,832 thousand kWh of electricity produced by RES facilities via the Settlement and Financial Center for RES Support LLP. In addition, PKOP and Caspi Bitum LLP provided street lighting powered by solar panels, generating 149.5 thousand kWh of electricity in 2024.

STRUCTURE OF ENERGY CONSUMPTION



- Electric Energy
- Heat Energy
- Motor Fuel
- Boiler and Furnace Fuel

ENERGY CONSUMPTION REDUCTION

GRI 302-4

KazMunayGas is consistently implementing energy efficiency measures aimed at optimizing energy resource consumption and reducing its carbon footprint.

In 2024, the KMG Group implemented 70 equipment modernization initiatives, including:

- Replacement of gas burners in process furnaces;
- Introduction of energy-saving technologies;
- Optimization of heat generation and consumption;
- Modernization of lighting systems.

Economic and environmental outcomes:

- Annual energy savings: 2,361 thousand GJ;
- Greenhouse gas emissions reduction equivalent: 174.9 thousand tonnes of CO₂.

Breakdown of reduced consumption:

- Electricity 48,114 thousand kWh (173 thousand GJ)
- Thermal energy 22,334 Gcal (94 thousand GJ)
- Boiler and furnace fuel⁵ 21,188 tonnes (887 thousand GJ)
- Dry de-ethanized gas 5,238 thousand m³ (226 thousand GJ)
- Natural gas 29,003 thousand m³ (980 thousand GJ)
- Diesel fuel 36 tonnes (2 thousand GJ)

Total investment in energy efficiency measures in 2024 amounted to 5.930 KZT million.

The measures taken not only helped reduce energy consumption, but also improved operational efficiency by reducing costs and minimizing environmental impact.

ENERGY INTENSITY

GRI 302-3

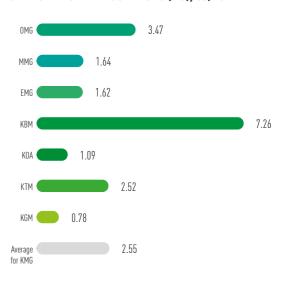
In 2024, the specific energy consumption in the hydrocarbon production segment of the KMG Group was 2.55 GJ per tonne of produced hydrocarbons (HC), which is 70% higher than the global average benchmark of 1.5 GJ/t set by IOGP.

However, the average value for the KMG Group is not fully representative due to significant variations in energy intensity across enterprises. Substantial impact comes from Ozenmunaygas (OMG) and Karazhanbasmunay (KBM), where specific energy consumption significantly exceeds industry norms.

KBM consumes five times more energy than the global IOGP average. This is due to the specific conditions at the Karazhanbas field, where oil is extracted using steam and hot water injection. This method is necessary due to the high paraffin content and unique rheological properties of the oil, requiring heating not only during winter but also in summer.

OMG shows more than double the energy consumption per production unit compared to industry standards. In 2024, the company introduced a well treatment technology using hot oil, which further increased energy consumption.

SPECIFIC ENERGY CONSUMPTION FOR THE PRODUCTION OF 1 TONNE OF HYDROCARBONS (HC), GJ/TONNE



GRI 302-3. Specific energy consumption (by segment)	Units	2024
Oil & gas exploration and production	thousand GJ/t of produced hydrocarbons	2.55
Oil & gas processing	thousand GJ/t of processed hydrocarbons	3.41
Oil transportation	thousand GJ/t	0.09

fuel oil, refinery gas

(10

³Gasoline, diesel fuel

⁴Furnace fuel, oil, fuel oil, refinery gas, associated petroleum gas, natural gas, defeminized gas, LPG.

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ENVIRONMENTAL IMPACT MANAGEMENT

MANAGEMENT APPROACHES

Environmental responsibility is one of the Company's key priorities. A comprehensive set of measures is being implemented to enhance environmental safety and reduce environmental impacts.

KMG's environmental policy is integrated into its Development Strategy through 2031. Within the framework of its environmental strategic initiatives, the Company is focused on achieving a "zero impact" approach-preventing negative environmental impacts. The implementation of effective internal standards and technological solutions, promotion of environmental awareness, and continuous improvement of the management system contribute to significant progress in this area.

Key areas of activity include:

- Management of air pollutant emissions;
- Reduction of raw gas flaring;
- Water resource management;
- Waste management and land reclamation;
- Biodiversity conservation.

KMG and its subsidiaries follow a zero-tolerance principle regarding environmental pollution. In its operations, the Company is guided by the Environmental Code of the Republic of Kazakhstan and its internal Environmental Policy, ensuring the collection, analysis, and dissemination of environmental information.

Transition to Best Available Techniques (BAT)

In line with the requirements of Kazakhstan's new environmental legislation, KMG is actively involved in the reform to transition to Best Available Techniques (BAT). As part of this initiative, BAT reference documents for oil and gas extraction and processing have been

developed, and enterprises included in the list of the 50 largest polluters have begun the process of obtaining Integrated Environmental Permits (IEPs). The following KMG Group companies are on the list: Atyrau Refinery, Pavlodar Refinery, PKOP,

Environmental Dialogue and Engagement

KMG actively participates in industry initiatives and engages in dialogue with government authorities and the expert community. On November 9, 2024, a roundtable was held in Atyrau on environmental regulation in the oil and gas sector with the participation of the Ministry of Ecology and Natural Resources of Kazakhstan, the KAZENERGY Association, and oil and gas companies. Key topics included obtaining IEPs, implementing Automated Monitoring Systems (AMS), and improving environmental legislation.

As part of the dialogue, representatives of the Ministry of Ecology and Natural Resources and the KAZENERGY Association visited the facilities of Atyrau Oil Refinery LLP and Kazakhstan Petrochemical Industries Inc. (KPI) to familiarize themselves with their environmental programs, monitoring systems, and treatment

Automated Environmental Monitoring Information System (AEMIS)

KMG is implementing an AEMIS aimed at creating a unified information space in the field of environmental protection.

The main goal of the project is to increase transparency in environmental monitoring, minimize human error, and ensure real-time control over compliance with environmental standards, thereby reducing the risk of fines and sanctions.

Key AEMIS functions include:

- Automation of reporting to government authorities:
- Maintenance of a database of permitting documents and emission fee calculations;
- Real-time response to potential exceedances of regulatory thresholds and adjustment of technological processes;

- Environmental status monitoring based on data from industrial environmental control:
- Generation of corporate reports through integration with the HSE KMG system.

The implementation of AEMIS will improve the efficiency of environmental management across KMG's operations and strengthen compliance with environmental protection requirements.

KEY ENVIRONMENTAL PERFORMANCE INDICATORS

SOx emission intensity (IOGP - 0.09)

of associated formation water reinjected into reservoirs

1.45

Raw gas flaring intensity (IOGP - 8.8)

CDP: "B"

Climate rating

NOx emission intensity (IOGP - 0.36)

1.099 thousand tonnes

Remediated historical waste and oilcontaminated land (2023 – 1,145 thousand tonnes)

Raw gas utilization rate

CDP: "B"

Water security rating



5

The Company continues to improve its environmental management system by implementing comprehensive environmental protection programs and increasing employee awareness of environmental safety.

WATER RESOURCE MANAGEMENT

MANAGEMENT APPROACH

GRI 303-1, GRI 303-2

In the context of climate change, water resources are becoming increasingly vulnerable, significantly impacting ecosystems, economies, human health, and communities. KMG acknowledges its responsibility for the rational use of water resources and is taking action to reduce its negative impact on aquatic ecosystems.

Strategic Approach to Water Resource Management

KMG's approach aligns with international sustainable development principles, including SDG 6 ("Clean Water and Sanitation"). The Company is committed to ensuring access to and rational use of water resources, as well as reducing pollution of water bodies.

In line with its Environmental Policy, KMG and its subsidiaries and dependent entities recognize environmental protection and the prevention of negative impacts on water resources as key priorities. The Company is committed to continuously improving water usage processes, including implementing water-saving projects, increasing the share of water recycling, and managing risks related to water scarcity.

To systematize activities in this area, a 10-year Water Resource Management Program has been developed. It focuses on:

- · Preventing water resource shortages;
- Protecting ecosystems and reducing environmental impact:
- Improving water use management systems across KMG Group.

The Program covers major operating subsidiaries and includes the assessment of investment projects in terms of water use. As part of the Program, KMG conducted a water footprint assessment, identified key risks, and developed recommendations for their mitigation.

Water Conservation and Rational Water Use

KMG strives to reduce freshwater consumption and increase the volumes of recycled and reused treated wastewater. As part of its corporate water resource management, in 2018 the Company approved a Corporate Water Resource Management Standard based on the "eight water principles." The Standard regulates water use practices across subsidiaries and helps foster commitment among executives and staff to conserving water resources. An updated version of the Standard is planned for 2025 to reflect the approaches of the Water Resource Management Program.

KMG operates in full compliance with international standards, and Kazakhstan's environmental and water legislation. The Company has implemented processes for developing pollutant discharge limits and obtaining environmental permits, including those for discharges and water use.

KMG WATER PRINCIPLES

Water is the basis of life, the source of all things existing.

The stability and security of the state is determined by the abundance of clean fresh water, and the success and sustainability of business - by responsible, caring attitude to it. These principles express the Company's commitment and demonstrate its intention to conserve water resources for people, nature and well-being of current and future generations of our country.

We constantly use water - from daily needs to the extraction and processing of oil. And at the same time, within the daily routine, we must not forget how much water is priceless. Every employee of the Company can and should contribute to its preservation.

KazMunayGas NC JSC CEO

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ACCEPT THE VALUE OF



LEGAL REQUIREMENTS AND INTERNATIONA
BEST PRACTICES



THE INITIAL SOURCES





100% INSTRUMENT OF WATER INTAKE



WATER CIRCULATION AND WATER SAVING



WATER

Water Use Monitoring and Assessment

The Company ensures transparency in its environmental activities by providing open access to environmental information for shareholders. government agencies, and the public.

Since 2020, KMG has calculated its water footprint and annually discloses water use data via the Carbon Disclosure Project (CDP) water security questionnaire. In 2024, based on its 2023 disclosure, KMG's water management efforts were rated "B" (up from "C" in 2023).



In 2024, KMG was recognized among the top performers in the first RAEX ESG water efficiency rating. The rating analyzed water use indicators of 144 companies from Russia, Kazakhstan, and Mongolia, assessing not only consumption volumes but also corporate strategies and risk mitigation mechanisms. KMG ranked among the top 10 companies for the most efficient water use.

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The Company continues improving water technologies and optimizing water use, which is a key part of its sustainable development strategy.

Environmental and Social Water Use Projects

KMG and its subsidiaries implement a wide range of measures to improve water use efficiency. Key initiatives include modernization of wastewater treatment facilities, development of water infrastructure in regions of operation, and deployment of innovative desalination technologies.

"TAZALYK" PROJECT – MODERNIZATION OF ATYRAU REFINERY WASTEWATER TREATMENT FACILITIES

One of the largest environmental projects is the "Tazalyk" Project, implemented by Atyrau Oil Refinery LLP. The goal is to reconstruct evaporation ponds, mechanical and biological treatment units, and build an advanced wastewater treatment facility.

Key environmental outcomes of the project include:

- Improved wastewater treatment quality;
- Elimination of harmful emissions from open reservoirs;
- Reduced environmental impact from evaporation fields.

As part of this project, the capacity of the mechanical treatment facilities is planned to be doubled. Notable achievements include:

- Commissioning of two phases of mechanical treatment plant reconstruction (Phase I – end of 2023, Phase II – May 2024);
- Increased mechanical treatment capacity to 1,000 m³/hour, with oil sludge processing reaching 12,000 m³/month;

- Elimination of open ponds, minimizing hydrocarbon evaporation;
- Completion of pipeline construction to redirect treated water to municipal sewerage, preventing pollutant discharge into the environment.

Ongoing reclamation work on the evaporation fields includes:

- Drainage of sections;
- Reed cutting;
- Deep ploughing and bioremediation;
- A three-stage reclamation process.

DEVELOPMENT OF WATER INFRASTRUCTURE IN OPERATIONAL REGIONS

KMG pays special attention to providing water resources to communities in its regions of operation. Two major strategic projects are underway in this area: the reconstruction of the Astrakhan – Mangystau main water pipeline and the construction of a desalination plant in Kenderli.

Reconstruction of the Astrakhan – Mangystau water pipeline aims to increase throughput capacity from 110,000 m³/day to 170,000 m³/day, ensuring water supply to the population, agriculture, industry, and oil and gas facilities in Atyrau and Mangystau regions. The pipeline is a critical water source for Kurmangazy, Isatai, and Zhylyoi districts of Atyrau region, as well as Zhanaozen, Beineu, Mangystau, Karakiya, and Tupkaragan districts of Mangystau region. With annual population water consumption growing by 4–5%, the project is a crucial step toward regional water security.

Another significant project is the **construction of** a **desalination plant in Kenderli** with a capacity of 50,000 m³ per day. The facility will address the shortage of drinking water in Zhanaozen and ensure a stable water supply to support the development of tourism, entrepreneurship, and agriculture in the region.

At present, the main construction works have been completed, including the installation of a 201 km main water pipeline to deliver desalinated water to Zhanaozen, 83 km of power transmission lines, and 40 km of roads.

Work is nearing completion on a 46 km gas pipeline, which is now 97% complete.

The plant is scheduled to be commissioned in 2025, which will significantly improve the quality of life for the local population and support the region's economic activity.

INNOVATIVE WATER TREATMENT AND DESALINATION TECHNOLOGIES

Karazhanbasmunai JSC has implemented a project for a produced water desalination plant at the Karazhanbas field in the Mangystau region.

Once operating at full capacity, the plant will allow:

- Treatment of 42.5 thousand m³/day of produced water;
- Production of 17 thousand m³/day of desalinated water;
- Reduction in freshwater withdrawal.

Implementation results to date:

- In 2023, water withdrawal was reduced by 2.6 million m³;
- In 2024, water withdrawal decreased by 4.07 million m³, compared to 6.3 million m³ in 2022.

WATER TREATMENT AND IMPROVED WORKING CONDITIONS

KazTransOil JSC completed a project to install mobile water purification units at the Kalamkas GNPS and Karazhanbas NPS facilities. Project goals include:

- Providing workers with clean drinking water;
- Improving employee working conditions;
- Enhancing social and environmental resilience of production sites.

Previously, these sites relied on drinking water purchased from the Kiyakty village pumping station, which required significant financial resources. Following the installation of the purification units:

- Volga water (technical water) is treated to meet drinking water standards of the Republic of Kazakhstan;
- The Company significantly reduced water supply costs;
- Environmental safety at the sites has been improved.

KMG and its subsidiaries are consistently implementing major infrastructure projects aimed at reducing water intake, improving wastewater treatment quality, and ensuring access to drinking water for the population. The implementation of modern technologies minimizes environmental impact and strengthens water security in the Company's regions of operation.

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WATER FOOTPRINT

WATER WITHDRAWAL

GRI 303-3

In 2024, KMG Group's total water withdrawal amounted to 83.1 million m³. The main sources were surface water, groundwater, and seawater.

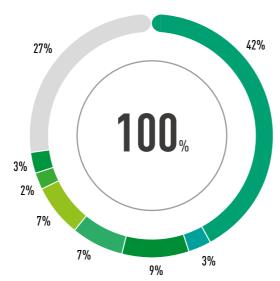
It is important to note that this total includes 24.08 million m³ withdrawn by a subsidiary providing technical freshwater supply services to consumers in the Atyrau and Mangystau regions – this volume is not used by KMG for its own domestic or production purposes. Excluding this volume, KMG Group's own operational water use in 2024 amounted to 58.99 million m³.

TOTAL WATER WITHDRAWAL, THOUSAND M³



According to the World Resources Institute (WRI)⁶, Kazakhstan is located in a region of critical water scarcity, and a high level of water stress is projected over the next 15–20 years. KMG conducts a water use assessment in six of its subsidiaries located in regions facing elevated water scarcity, based on the WRI Aqueduct water stress indicator, including the Caspian Sea basin and the Syrdarya and Ural river basins. In 2024, the total water withdrawal in these regions amounted to 27.3 million m³.

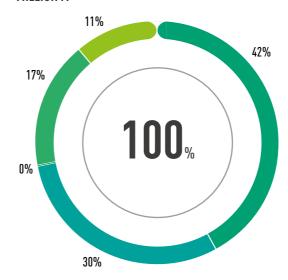
WATER USAGE STRUCTURE BY TYPE OF OPERATIONS



- Reservoir Pressure Maintenance (PPM)
- Drilling, completion, major repairs of wells and hydraulic fracturing
- Other production needs
- Return water supply to the oil refinery
- Steam generation at refineries
- Inst
- Domestic and potable
- Transferred without use

To minimize water shortages in these regions, KMG is implementing measures to reduce freshwater consumption, increase water recycling, and strengthen water use monitoring. At the same time, it is important to note that water availability is a critical factor for the Company's operational activities.

WATER INTAKE STRUCTURE BY SOURCES FOR 2024, MILLION M³



- Surface sources
- Groundwater sources
- Water from third-party organizations
- Seawater
- Municipal water systems

WASTEWATER DISCHARGE AND REUSE

GRI 303-4

In 2024, the total volume of discharged wastewater amounted to 11.3 million m³. Treated wastewater is routed to specialized recipients, such as holding ponds, evaporation fields, and filtration fields. There is no direct discharge into surface water bodies or onto natural terrain.

Enterprises without their own storage facilities transfer wastewater to specialized companies for treatment. In 2024, the volume of such transferred wastewater amounted to 0.8 million m³ (all of which had a salinity level above 1,000 mg/l).

TOTAL VOLUME OF WATER DISCHARGES, THOUSAND M3



The wastewater discharge from KMG enterprises in water-stressed regions amounted to 2.98 million m³, of which 2.95 million m³ were directed to on-site wastewater recipients, and 0.03 million m³ were transferred to specialized treatment companies.

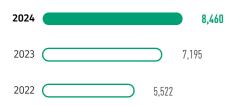
KMG considers wastewater not only as waste, but also as a potential resource for further use. The treatment facilities of the Company's enterprises are equipped with technologies for removing petroleum products and suspended solids. For example, at refineries, wastewater undergoes mechanical and physicochemical treatment in grit chambers, oil traps, radial settling tanks, and flotation units, followed by biological treatment.

One of KMG's key goals is to increase the reuse of treated wastewater. Water is reused in technological processes, irrigation of green areas, dust suppression at construction sites and roads, vehicle washing, and fire protection system replenishment. In 2024, a total of 8.5 million m³ of treated wastewater was reused.

A significant portion of treated wastewater is reused at refineries – 4.1 million m³ in 2024, which represents about a quarter of the total water withdrawal by KMG refineries.

In recirculating water systems at KMG's refineries, a total of 535.5 million m³ of water circulated in 2024.

VOLUME OF WATER REUSED (AFTER TREATMENT), THOUSAND M³



VOLUME OF CIRCULATING WATER, THOUSAND M³



PRODUCED WATER MANAGEMENT IN OIL PRODUCTION

Oil extraction generates significant volumes of produced water. This water is brought to the surface along with the oil in the form of a water-oil emulsion, which is then separated by gravity. The treated water is injected back into the reservoir to maintain reservoir pressure.

In 2024, the total volume of produced water amounted to 140.5 million m³, of which 98% was reinjected. This demonstrates a high level of produced water utilization and minimization of impact on surface and groundwater resources.

VOLUME OF PRODUCED ASSOCIATED WATER, THOUSAND M³



SHARE OF ASSOCIATED WATER INJECTED BACK INTO RESERVOIR, %



ENVIRONMENTAL MONITORING AND PROTECTION OF WATER BODIES

The production activities of KMG have the greatest impact on water bodies in the western region of Kazakhstan, including the Ural and Kigach rivers, as well as the unique Kokzhide sand ecosystem. These areas are of special environmental, economic, and cultural value.

To prevent negative impacts on these sensitive ecosystems, KMG implements comprehensive environmental monitoring, including continuous observation of the environmental condition and control of water quality. The Company's activities in this area comply with national environmental legislation requirements and international sustainable water use standards.

AIR PROTECTION

KMG places top priority on air protection, as pollution levels directly affect public health and the environment. As part of its environmental policy, the Company consistently reduces pollutant

emissions, implements modern technological solutions and automated monitoring systems, and carries out measures to reduce gas flaring.

EMISSIONS MANAGEMENT AND EQUIPMENT MODERNIZATION

A key area of KMG's environmental activity is reducing atmospheric emissions through equipment modernization and the implementation of environmentally efficient technologies. This includes replacing fuel oil with natural gas in process furnaces, using next-generation additives, and implementing landscaping and site improvement programs.

Additional work includes burner modernization, optimizing equipment operation modes, and reducing equipment runtime. Cleaning of exhaust gases from harmful compounds, expanding gas processing capacity, and constructing appropriate facilities help reduce pollution levels. Regular monitoring detects potential leaks, ensuring prompt response.

One of the key measures is the installation of floating roofs on storage tanks, which minimize the formation of volatile fractions by eliminating free space above the stored product. As part of a technical upgrade program at the **Atyrau Oil Refinery**, 36 burners were replaced in 2024 on the EDP-AVT-2 (Electric desalination plant, atmospheric-vacuum tube) processing unit. The new burners, produced by International Combustion Equipment S.r.l., are equipped with ignition systems and flame monitoring sensors, increasing efficiency and reducing pollutant emissions. Additionally, new flow meters, electric-drive dampers, gas filters, oxygen analyzers, and variable-frequency draft fan drives were installed, optimizing combustion and reducing emissions.

KazTransOil JSC completed the installation of a pontoon in a 20,000 m³ tank at the Kasymov oil refinery. This device isolates the oil surface from the gas space, reducing hydrocarbon evaporation and decreasing air pollutant emissions by 80%. Overall, in 2024, KazTransOil JSC reduced pollutant emissions at its facilities by 7% compared to 2023.

NVESTING IN THE FUTURE SU

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EMISSIONS MONITORING AND AUTOMATED CONTROL SYSTEMS

KMG conducts comprehensive environmental monitoring, including air, water, and soil quality control, to minimize the environmental impact of its operations. The Company regularly performs production environmental control, and measurement results are submitted quarterly to government supervisory authorities.

Special attention is paid to air quality monitoring in areas near production facilities, including installing stationary observation posts at the boundaries of sanitary protection zones. These measures ensure timely response to pollution level changes and enable corrective actions.

In accordance with the Environmental Code of the Republic of Kazakhstan, since January 1, 2023, facilities in Category I are required to have an Automated Emissions Monitoring System (AEMS). AEMS allows real-time tracking of emissions from major stationary sources and transmits data to government authorities.

AEMS has been implemented at KOA, MMG, Atyrau Refinery, Pavlodar Refinery, and PKOP facilities, and installation and commissioning are nearing completion at KPI. Environmental monitoring instruments measure the concentrations of sulfur oxides/sulfur dioxide, nitrogen oxides, soot, and carbon monoxide in the emissions of furnaces and boilers.

Data is updated every 20 minutes and sent to government regulatory bodies.

The implementation of automated monitoring systems enables real-time emissions control and adjustment of equipment operation parameters to reduce environmental impact. In this way, KMG applies a comprehensive approach to air protection by combining production modernization with enhanced emissions control.

AIR POLLUTANT EMISSIONS

GRI 305-7

In 2024, KMG continued to implement measures to reduce atmospheric pollutant emissions, leading to further reductions. Total emissions across the Group amounted to 116.765 thousand tonnes, a 2% decrease compared to 2023.

- Nitrogen oxides (NOx): Emissions totaled 15.218 thousand tonnes, maintaining the previous year's level.
- Sulfur dioxide (SOx): Emissions increased to 11.686 thousand tonnes due to changes in operation modes of some production units.
- Carbon monoxide (CO): Emissions decreased by 6% to 21.500 thousand tonnes due to process optimization.
- Other pollutants: Emissions amounted to 68.361 thousand tonnes, showing a steady decline due to the implementation of environmental protection measures.

VOLUME OF AIR POLLUTANT EMISSIONS, THOUSAND TONNES⁷

Volume of Air Pollutant Emissions, thousand tonnes	2022	2023	2024
Nitrogen oxides (NOx)	16.00	15.27	15.22
Sulfur dioxide (SOx)	10.50	10.99	11.69
Carbon monoxide (CO)	13.71	22.96	21.50
Particulate matter (PM)	0.52	1.31	1.97
Other	79.86	68.93	66.38

SPECIFIC AIR POLLUTANT EMISSIONS IN THE KMG GROUP

Indicator	2022	2023	2024
Oil and gas production, t / 1,000 tonnes of produced hydrocarbons	2.1	2.2	2.2
Oil refining, t / 1,000 tonnes of processed crude oil	3.1	3.0	2.9
Oil transportation, t / 1,000 tonnes of transported oil	0.5	0.4	0.4

In 2024, the average ratio of NOx emissions to the total volume of hydrocarbon production in oil equivalent across the KMG Group amounted to 0.39 tonnes per thousand tonnes of hydrocarbon production, while the average IOGP benchmark was 0.36. Compared to 2023, the specific NOx emissions increased, which was due to the addition of new emission sources from new operators as well as activities of contracting organizations.

The average ratio of SOx emissions to the total volume of hydrocarbon production in oil equivalent across the KMG Group amounted to 0.23 tonnes per thousand tonnes of hydrocarbon production, while the average IOGP benchmark was 0.09. This KMG indicator remained at the same level as in 2023.

EFFICIENT USE OF ASSOCIATED GAS

KMG and its subsidiaries adhere to the principles of environmental responsibility by implementing comprehensive measures to control emissions of pollutants and greenhouse gases. One of the Company's priorities is the reduction of flaring of associated gas, in line with the goals of KMG's Environmental Policy and international sustainable development standards.

As part of its strategy to minimize flaring of associated petroleum gas, KMG actively develops programs for its utilization and beneficial use. As a result of these efforts, in 2024, the associated gas utilization rate reached 98.9%. The gas flaring intensity amounted to 1.45 tonnes per 1,000 tonnes of hydrocarbon production (HCP), which corresponds to the 2023 level (1.4) and shows a decrease compared to 2022 (1.5). This indicator remains 84% below the industry average established by the International Association of Oil & Gas Producers (IOGP), where the average gas flaring level is 8.8.

⁷The Company does not emit persistent organic pollutants in its operations.

КазМунайГаз матолац сомрану улутых компаниясы

A slight increase in the volume of gas flaring in 2024 compared to the previous year is attributed to the commissioning of new fields in the Aktobe, Mangystau, and West Kazakhstan regions.

At the same time, the Company continues to work on further reducing flaring volumes through the expansion of gas processing infrastructure and its efficient use.

Volume of Raw Gas Flaring	2022	2023	2024
Total volume of raw gas flared, million m ³	35.7	33.35	35.2
Associated gas utilization rate, %	98.8	98.9	98.9
Flaring intensity, tonnes per 1,000 tonnes of HCP	1.5	1.4	1.45

KMG also participates in global initiatives to reduce gas flaring. Since 2015, the Company has supported the World Bank's "Zero Routine Flaring by 2030" initiative, which aims to minimize emissions and promote the rational use of resources. As part of this initiative, KMG annually reports its raw gas flaring volumes to the World Bank Representative Office in Kazakhstan.

The Company continues implementing projects for processing associated petroleum gas for use in production processes, including heat and power generation. These efforts not only reduce pollutant emissions but also improve production energy efficiency.

WASTE MANAGEMENT AND LAND RECLAMATION

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

KMG's production activities generate various types of waste, including drilling waste, oil-containing waste, spent catalysts, chemical reagents, construction waste, used oils, and oily rags. In line with Kazakhstan's national environmental policy and KMG's Environmental Policy, the Company implements a comprehensive set of measures to reduce waste generation, ensure safe waste handling, and adopt environmentally friendly technologies.

In 2024, KMG approved a Corporate Standard on Waste Management, which sets out step-by-step responsibilities for subsidiaries and dependent entities in waste management. The document was developed to align KMG operations with the environmental legislation of the Republic of Kazakhstan and to improve waste management efficiency.

WASTE ACCOUNTING AND MANAGEMENT SYSTEM

KMG maintains strict control over waste at all stages–from generation to disposal. A separate waste collection system has been introduced, taking into account the properties and volumes of waste. Waste tracking results are submitted to the authorized environmental protection authority and recorded in the HSE KMG information system.

The waste management process includes accumulation, landfilling, disposal, or transfer to specialized licensed contractors authorized for waste treatment and disposal. To reduce environmental impact from transportation,

subsidiaries and dependent entities are encouraged to process waste on site or reduce movement where possible.

Waste treatment and recovery activities carried out by specialized contractors are monitored by KMG to ensure compliance with contract requirements and project specifications. If necessary, control laboratory tests are conducted on recovered waste.

In 2024, KMG allocated KZT 18.9 billion for waste treatment and recovery activities.

WASTE MANAGEMENT INDICATORS IN 2024, THOUSAND TONNES

Type of Waste	Generated Waste	Waste Sent for Processing/ Utilization	Waste Sent for Disposal and Placement
Hazardous Waste	358.0 ⁸	1,452.9°	-
of which drilling waste (drilling mud and cuttings)	179.6	179.6	-
Non-Hazardous Waste	79.7	54.7	16.5
Total:	437.7	1,507.6	16.5

RATIO OF THE AMOUNT OF WASTE RECYCLED TO THE AMOUNT OF NEWLY GENERATED WASTE, T/T



RATIO OF THE AMOUNT OF RECYCLED WASTE TO THE AMOUNT OF ACCUMULATED AND NEWLY GENERATED WASTE. T/T



The amount of generated waste is presented, taking into account the volumes of waste generated by contractors performing work at the facilities of KMG subsidiaries.

Taking into account the volumes of historical waste recycling, as well as the carryover volume from the previous year.

REMEDIATION OF HISTORICAL POLLUTION AND LAND RECLAMATION

KMG continues its efforts to dispose of historical oil-containing waste and clean up contaminated land at MMG, OMG, KBM, and EMG facilities.

In 2024, 1,099 thousand tonnes of historical waste were disposed of, the areas where the waste had been stored were reclaimed, and work began to assess the remaining volumes of oil waste. The total area of reclaimed disturbed land amounted to 172 hectares.

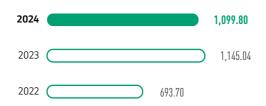
KBM has fully eliminated historical pollution within its contract territory, having disposed of 518,879 tonnes of historical oil waste during the 2021–2024 period.

A waste pit in the coastal zone of the Caspian Sea was eliminated, along with three land pits, and 246 oil-contaminated sites were cleaned up within the Karazhanbasmunai contract area.

EMG also completed the remediation of historical oil-contaminated land within its contract areas and continues eliminating pollution beyond those boundaries in accordance with the approved land reclamation project and the conclusion of the State Environmental Expertise.

KMG continues to implement comprehensive measures aimed at reducing the volume of waste, increasing the level of waste recycling, and minimizing environmental impact – an essential component of the company's sustainable development strategy.

HISTORICAL WASTE RECYCLED, THOUSAND TONNES



RATIO OF THE AREA OF CONTAMINATED LAND AT THE END OF THE YEAR TO THE AREA AT THE BEGINNING OF THE YEAR, HA/HA



RATIO OF THE AREA OF LAND RECLAIMED DURING THE YEAR TO THE AREA OF CONTAMINATED LAND DURING THE YEAR, HA/HA



PREVENTION AND RESPONSE TO OIL SPILLS

GRI 306-3

KMG considers continuous preparedness for oil spill response (OSR) one of the key priorities of environmental safety, especially in offshore operations in the Caspian Sea – a highly vulnerable ecosystem due to its landlocked nature.

The Company enforces strict environmental requirements during offshore oil operations, conducts baseline environmental monitoring prior to the start of activities, and assesses potential social and environmental impacts. Impact monitoring, emission monitoring, and emergency monitoring are carried out during and after operations.

Before the start of offshore drilling, KMG ensures full preparedness for responding to all potential oil spill emergencies. Upon completion of operations, continuous environmental monitoring of the plugged wells is conducted, which includes:

- Air quality control:
- Monitoring of marine water and bottom sediment contamination;
- Observation of biodiversity status;
- Laboratory analysis of samples;
- Photo and video documentation of plugged wellheads

During offshore operations, KMG strictly adheres to the following principles:

- Strict compliance with design solutions to prevent deviations from approved environmental standards;
- Zero discharge principle all waste and wastewater are brought ashore;

- All vessels are equipped with fish protection devices and are prohibited from discharging bilge water;
- Ban on operations during spawning season (from April 1 to July 15) to preserve marine bioresources;
- Ban on fishing from operational vessels in oil production zones;
- Ban on well testing and flaring of hydrocarbons during nighttime to minimize environmental impacts;
- Adherence to a special environmental regime in marine contract territories.

In 2024, a total of 351 oil spills were recorded onshore, with a total volume of 284 tonnes. The main cause of spills was pipeline ruptures due to corrosion. These spills occurred at onshore facilities during the production and transportation of hydrocarbons, primarily due to wear and tear of steel pipelines and collector depressurization. No offshore oil spills were recorded.

The Company is systematically working to reduce the number of accidents and ruptures in field pipelines. Key measures include timely diagnostics, reconstruction, equipment replacement, use of corrosion inhibitors, and pipeline cleaning. These actions are aimed at improving the integrity and reliability of the pipeline infrastructure.

KazTransOil JSC, in close cooperation with law enforcement authorities, has successfully eliminated criminal illegal taps into trunk oil pipelines. While two cases of illegal tapping were recorded in 2019 with damages totaling



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KZT 6.4 million, no such incidents were reported from 2020 to 2024. This achievement was made possible through:

- Enhanced monitoring of mobile teams using GPS systems and regular pipeline patrolling;
- Implementation of the "Optosense" monitoring system for pipeline protection.

The Company also pays particular attention to maintaining constant readiness for OSR, treating this area as an unconditional priority.

KMG continues to improve its oil spill prevention and response systems, enhancing the environmental safety of its offshore operations and reducing potential risks to the environment.



Development of Volunteer Engagement within OSR

As part of the Oil Spill Response (OSR) Volunteer Development Program, KMG Systems & Services LLP organized a training session on June 22, 2024, for the 16th and 17th groups of volunteers. University students from the city of Aktau participated in the training. The program is aimed at developing oil spill response skills and increasing public engagement in the region's environmental safety.

BIODIVERSITY PROTECTION

GRI 306-2, GRI 306-3, GRI 306-4, GRI 306-5

MANAGEMENT APPROACH

KMG has committed to biodiversity conservation and minimizing impacts on ecosystems as part of its Environmental Policy. The Company adheres to the principles of responsible natural resource use

and implements measures to prevent and mitigate the negative consequences of its industrial activities on the environment.

Subsidiary	Projects	Volume of expenses, thous. KZT
KMG System&Servises LLP	compensation of fishery losses in the Ural River	9,856
Kalamkas-Khazar Operating LLP	fish stocking of the Ural River	58,399.45
Magistralny Vodovod LLP	fish stocking of the Kigash River	23,211.517

KMG'S PRINCIPLES AND COMMITMENTS

In its operations, the Company is guided by the following principles:

- Prohibition of activities in specially protected natural areas that are critical habitats for rare and endangered species. Risk assessments are conducted before beginning work in ecologically sensitive areas.
- Application of the mitigation hierarchy, including avoidance, minimization, restoration, and compensation of potential significant impacts.
- Participation in research programs and industry partnerships to develop innovative solutions for environmental protection and biodiversity conservation.
- Prohibition of illegal hunting, fishing, and other use of natural resources by KMG employees and contractors within contract areas.

In 2025, KMG plans to develop a long-term Biodiversity Conservation Program, which will cover all Group entities and include comprehensive ecosystem protection measures.

TRAINING ON BIODIVERSITY IMPACT MANAGEMENT

In September 2024, KMG's Corporate Center organized training for specialists from its subsidiaries and dependent entities on biodiversity impact management. Ecologists and engineers from the Corporate Center and KMG Group companies participated in the program.

The training aimed to build a deep understanding of biodiversity issues in the context of corporate management. Participants studied key aspects of industrial impact on the environment and biodiversity, methods of minimizing such impact, and requirements for accounting and reporting.

Special attention was given to:

 Assessing biodiversity impacts, analyzing indicators and bioindicators in accordance with international standards and best practices;

- Recommendations from the Task Force on Nature-related Financial Disclosures (TNFD) and the GRI Sustainability Reporting Standards (GRI);
- The mitigation hierarchy principles including four key actions: avoidance, preservation, restoration, and compensation of potential impacts.

This approach supports the integration of biodiversity considerations into KMG's management system, ensuring sustainable development and compliance with international environmental standards.

MONITORING AND ASSESSMENT OF ECOSYSTEM **IMPACTS**

In areas located within the North Caspian State Reserve Zone, baseline environmental studies, drilling, and well testing have been conducted. At present, anthropogenic impact in these areas remains minimal and does not interfere with the migration of animals and birds.

The main environmental impact factors during offshore operations include:

- Increased suspended particles in water during construction:
- Alteration of seabed sediment structure due to intensive navigation;
- Physical noise impact during drilling and operations.

To monitor the environmental state, KMG conducts industrial environmental monitoring, including surveillance of decommissioned wells and scientific research (R&D) in hydrology, hydrochemistry, hydrobiology, and ichthyology. These studies also serve as compensatory measures for the unavoidable impacts on fish resources.



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Indicator **Onshore Operations Offshore Operations** 2022 2023 2024 2022 2023 2024 100 Sites where biodiversity is covered by an EIA or similar 100 100 100 100 document (%) Sites where regular environmental monitoring is conducted 100 100 100 100 100 100 Sites with decommissioned wells where regular monitoring is 100 100 100 100 100 conducted (%)



Case Example

Magistralny Vodovod LLP carried out the restocking of the Kigach River, releasing 23.6 thousand juvenile beluga sturgeon to help preserve the biodiversity of the Caspian Sea and its coastal zone.

For the same purpose, in 2024, Kalamkas-Khazar Operating LLP released 70 thousand juvenile Russian sturgeon and sterlet into the Ural River as part of its compensation measures, while KMG Systems & Services LLP released 18.8 thousand juvenile sturgeon.

IMPACT OF POWER TRANSMISSION LINES ON AVIFAUNA

One of the significant environmental challenges associated with industrial activities is bird mortality caused by collisions with power transmission lines (PTLs) and electrocution. This is particularly relevant in steppe and semi-desert regions, where the absence of tree cover makes PTL poles attractive for nesting and resting by birds of prey.

KMG monitors high-risk areas for birds, identifying critical zones through special studies and production environmental control. The company implements measures to reduce negative impacts, including the installation of visual markers on PTLs and the application of other protective mechanisms.

STRATEGIC APPROACH TO BIODIVERSITY CONSERVATION

KMG implements nature conservation measures both within and beyond protected natural areas. The biodiversity conservation policy includes:

- Preservation of habitats and animal migration routes:
- Minimization and compensation of potential harm to ecosystems;
- Reduction of disturbed areas through restoration efforts.

To mitigate the impact on biodiversity, measures are taken to optimize the duration, intensity, and levels of industrial activity at oil production and transportation sites.

KMG is open to new initiatives and proposals in the field of biodiversity conservation and invites interested parties to submit their ideas to: hse@kmg.kz.

PROTECTED NATURAL AREAS AND BIODIVERSITY IN KMG'S REGIONS OF OPERATION

NORTHERN CASPIAN ECOSYSTEM

The Northern Caspian is the most biologically productive part of the Caspian Sea, rich in biological resources. The region's waters are home to 25 fish species, including sturgeon, which accounts for 70–80% of the global reserves in this basin.

The eastern part of the Northern Caspian and the deltas of the Volga, Ural, and Emba rivers are part of protected natural areas. These wetlands are key to Eurasian biodiversity, serving as breeding, molting, migration, and wintering grounds for millions of waterfowl and semi-aquatic birds. The Northern Caspian lies along the Siberian–Black Sea–Mediterranean migratory route, one of the largest flyways in Eurasia.

Background ecological research indicates that over 70 bird species migrate through the northeastern Caspian. Among them are five rare species listed in the Red Book of Kazakhstan.

Five species listed in the Red Book of the Republic of Kazakhstan also nest in the region's terrestrial habitats. The most numerous is the steppe eagle. Other notable species include the pied avocet, magpie, and little egret.

The Caspian seal (Phoca caspica) is the only large marine mammal endemic to the Caspian Sea. Its population migrates seasonally: breeding occurs in the northern part during winter, followed by a move to the central and southern areas in spring and summer, and a return to the northern shallows in autumn.

PROTECTED AREAS AND ECOSYSTEM MONITORING

KMG actively conducts environmental monitoring on its contract areas, tracking the condition of flora and fauna, marine water pollution levels, seabed sediment, and air quality.

- The "Isatay" block is located in the northern Caspian Sea, 45 km from the Buzachi Peninsula (Mangystau Region), near protected natural areas.
- The "Abay" block lies in the northwestern part of Kazakhstan's Caspian Sea sector, 60–70 km offshore from the Buzachi Peninsula (Atyrau Region), and is part of the Caspian protected zone.
- The "Al-Farabi" block is located in the southern part of Kazakhstan's Caspian sector, with its western boundary adjacent to Kazakhstan's state border with Russia in the Mid-Caspian Sea.

FUTURE SUSTAINABLE DEVELOPM

(5)



PROTECTED AREAS OF MANGYSTAU REGION

Mangystau Region is rich in specially protected natural areas, including:

- Ustyurt State Nature Reserve;
- Kendirli-Kayasan Republican-level Protected
- Eight wildlife reserves and a regional nature park.

Rare animal species inhabit the region, including the Elaphe sauromates (blotched snake), listed in the Red Book of Kazakhstan. The Central Asian tortoise, which is widely found in the region, is considered threatened according to IUCN classification.

The Kendirli-Kayasan protected zone was established to preserve the habitat of the houbara bustard and the saker falcon, which are under special protection. The zone is governed by three regimes of nature use: strict reserve, wildlife reserve, and regulated use.

PROTECTED AREAS OF AKTOBE REGION

State nature complex wildlife reserve of local significance "Kokzhide-Kumzhargan." The territory includes two sites of the state nature reserve fund of republican significance: the Kokzhide Sands and the Kokzhide Groundwater, which are listed among the geological sites of the national and international nature reserve fund.

ENVIRONMENTAL MONITORING AND CONSERVATION OF UNIQUE ECOSYSTEMS

KMG maintains strict environmental control over oil production areas, especially those near unique natural sites:

- The Urikhtau, Alibekmola, and Kozhasai fields (Aktobe Region) are located near the "Kokzhide-Kumzhargan" reserve. To prevent contamination of groundwater, constant monitoring of the environmental condition is carried out, including in the Kokzhide sand massif.
- The Karazhanbas field, located in the northwestern part of the Buzachi Peninsula, borders the North Caspian State Protected Zone. At this site, biannual monitoring of flora and fauna is conducted as part of industrial environmental control.

ENVIRONMENTAL ASSESSMENT OF PLANNED **ECONOMIC ACTIVITIES**

KMG implements a comprehensive approach to environmental impact assessment of economic activities, ensuring identification, analysis, and mitigation of potential environmental risks.

Within this framework, environmental reviews are conducted for all new projects, with mandatory public input and an assessment of possible impacts on ecosystems.

ENVIRONMENTAL ASSESSMENT PROCEDURE AND PUBLIC PARTICIPATION

The environmental assessment includes an analysis of the potential environmental impacts of planned projects and enables early identification and prevention of negative effects. Public participation is an essential part of this process and is carried out through:

 Informal meetings and discussions with stakeholders:

• Collection of written and verbal proposals from the public;

Open meetings and public hearings.

organizations, government agencies, members of the public, and other stakeholders. Hearings are conducted in an open format, and the outcomes are documented and made publicly available.

All significant projects are submitted for

public hearings involving non-governmental

In 2024, KMG held 18 meetings with community representatives and conducted 100 public hearings.





(5)





Case Examples

- On October 23, 2024, Embamunaigas JSC organized a site visit to the production facilities of the Dossormunaigas Oil and Gas Production Department at the request of community representatives. During the visit, participants received answers to questions concerning environmental protection and other aspects of the company's operations.
- On August 8, 2024, a meeting of the Public Environmental Council was held at the Atyrau Oil Refinery. Participants were presented with the plant's plans to minimize environmental impact, including a project for the construction of a comprehensive wastewater treatment and feedwater preparation facility. The implementation of this project will:
- Reduce water intake from the Ural River by up to 50%;
- Enable the reuse of wastewater, reducing discharge volume by 70%.

During the Q&A session, key environmental issues were discussed, including the permit for discharging wastewater into the Atyrau city wastewater treatment facilities and the expansion of the plant's sanitary protection zone.

- On the same day, an open house was held at the Atyrau Refinery to mark the 125th anniversary of Kazakhstan's oil industry. The event was attended by eco-activists, government officials, members of the public, and the media. Participants were introduced to the refinery's environmental initiatives, including the launch of an automated emissions monitoring system (AEMS) on the reforming unit's stack, and toured the mechanical treatment facilities (MTF) following their reconstruction.

UPDATE OF CORPORATE STANDARDS IN 2024

In 2024, KMG updated its Corporate Environmental Assessment Standard, which establishes unified corporate principles for assessing the environmental impact of economic activities.

The standard regulates:

- the activities of employees and contractors of the KMG Group of companies,
- the work of design organizations involved in preparing technical documentation and environmental impact assessment (EIA) materials,

- the organization of public consultations and consideration of public opinion,
- the process of obtaining environmental permits.

The update of this standard is aimed at enhancing the environmental safety of all KMG projects and strengthening corporate oversight of compliance with environmental regulations.

CLOSURE AND RECLAMATION OF WORK SITES

In accordance with the legislation of the Republic of Kazakhstan and contract terms, NC KazMunayGas JSC is legally obligated to dismantle and decommission fixed assets and restore land plots at each of its oil and gas fields. These obligations include the phased closure of all non-productive wells, dismantling of pipelines and buildings, reclamation of contract areas, and remediation of environmental damage at production sites.

The company evaluates asset retirement obligations individually for each contract. As of December 31, 2024, the carrying amount of the Group's provision for decommissioning oil and gas assets amounted to 142,009 KZT million (as of December 31, 2023: 123,785 KZT million).

Reclamation and decommissioning procedures for contract areas are regulated by the Subsoil and Subsoil Use Code of the Republic of Kazakhstan. According to the Code, remediation of subsoil use consequences is carried out in accordance with an approved project that has passed the required expert reviews. Conservation of subsoil areas is also conducted based on an approved conservation project. Technological facilities are subject to liquidation or conservation

according to project documentation, with special rules in place for certain types of wells. Requirements for well abandonment are defined in regulations approved by Order No. 200 of the Minister of Energy of the Republic of Kazakhstan dated May 22, 2018.

With regard to trunk oil and gas pipelines, in accordance with the Law of the Republic of Kazakhstan "On the Main Pipeline," which came into force on July 4, 2012, KazTransOil JSC (KTO) has a legal obligation to decommission trunk pipelines after the end of their operation and to implement environmental restoration measures, including land reclamation. The reserve for pipeline decommissioning and land reclamation obligations is estimated based on the Group's cost calculation for performing the related work. As of December 31, 2024, the carrying amount of the Group's provision for pipeline decommissioning and land reclamation obligations amounted to 37,405 KZT million (as of December 31, 2023; KZT 45,649 million).

KMG continues its efforts to ensure environmental safety and compliance with regulatory requirements during the closure and reclamation of work sites, striving to minimize the environmental impact of its activities.



IMPLEMENTATION OF GREEN OFFICE PRINCIPLES

KMG adheres to the principles of a "Green Office," aimed at the rational use of resources, waste reduction, and increasing employees' environmental awareness. As part of this initiative, the Company has implemented a range of activities

that contribute to reducing its environmental footprint and fostering sustainable habits within the corporate culture. In 2024, efforts in this area were further strengthened as part of the national environmental campaign "Taza Kazakhstan."

GREENING OF OFFICE SPACE

As part of the waste segregation initiative, a reverse vending machine was installed in 2024 at the KMG headquarters for collecting plastic bottles, aluminum cans, and glass containers. Over the year, more than 25.3 thousand plastic bottles and nearly 8.2 thousand aluminum cans were collected for recycling. Since the machine's installation in February 2023, a total of 54,378 units of recyclable packaging have been collected.

The Company's headquarters is equipped with eco-bins and containers for the collection of paper, plastic, glass, metal, and used batteries. Additionally, special cabinets for the collection and storage of fluorescent lamps have been installed.

Other resource-saving measures include:

- Automated reminders for employees to turn off computers and equipment at the end of the workday;
- Informational materials encouraging reduced printing and the preservation of trees;
- Development of electronic document management to minimize paper use;
- A growing number of indoor plants employees gift live plants instead of bouquets on colleagues' birthdays.

To promote sustainable transport, bicycle parking is available at the KMG headquarters. In 2024, the number of parking spots was increased, and repairs to outdoor parking facilities were carried out.

ENVIRONMENTAL INITIATIVES AND CORPORATE CAMPAIGNS

KMG actively engages employees in environmental activities. In 2024, the "Bring Your Own Dish" campaign was launched, offering discounts at the office coffee shops, cafeteria, and canteen for employees using reusable containers.

The Company also supports initiatives to reduce $\mathrm{CO_2}$ emissions. Employees participated in the "Jasyl Jol" challenge organized by the Ministry of Environmental Protection, during which, from May 6 to June 5, 2024, they refrained from using personal cars to commute, opting instead for bicycles or walking.

Furthermore, since 2023, electric vehicle charging stations have been installed and used at KMG headquarters as part of a pilot project.

On World Environment Day, dedicated in 2024 to land restoration and combating desertification, the KMG Group organized an awareness campaign. UNEP video materials were posted on the internal portals, and eco-posters were displayed on employee monitors.

The Company traditionally supports the international "Earth Hour" campaign by switching off lights and household appliances for one hour. In 2024, KMG once again participated in the initiative, demonstrating its commitment to the global movement to reduce energy consumption.



"Taza Kazakhstan" Campaign



As part of the national environmental campaign "Taza Kazakhstan," a clean-up schedule was approved for the KMG Group of Companies, covering the period from July to October 2024. Every Saturday, at least two KMG subsidiaries and dependent entities participated in the events.

On August 24, the largest clean-up day was held, with over 2,800 employees from 34 KMG Group companies participating simultaneously, including senior executives. The event included representatives from subsidiaries based in Astana, as well as the Mangystau, Aktobe, Atyrau, Kyzylorda, Pavlodar, Turkestan, and West Kazakhstan regions.

Results of the beautification action plan implementation:

- 75 clean-up and improvement campaigns were held at historical and cultural monuments, schools, kindergartens, and other sites.
- 235 Saturday clean-ups were organized with the participation of over 10,000 people, resulting in the collection of 240 tonnes of waste.
- 60 whitewashing events were carried out for green spaces, covering approximately 170,000 trees.

KMG actively participates in the large-scale environmental initiative launched by the Head of State to plant 2 billion trees nationwide over five years. In 2024, KMG Group initially planned to plant 88,925 trees. However, thanks to additional efforts, the greening volume was increased, and a total of 97,218 trees and shrubs were planted.

On October 12, as part of the nationwide tree planting campaign, more than 12,000 trees were planted across the KMG Group. In particular, the KMG Corporate Center planted 125 three-meter-tall pine trees around School No. 111 in Astana and 5 trees near the office building. The initiative saw participation from the top executives of 28 subsidiaries and over 1,400 employees.

Through its consistent work in landscaping and greening, KMG makes a significant contribution to improving the environmental situation and creating green areas in its regions of operation.

ECO-QUIZZES AND EDUCATIONAL EVENTS

To enhance employees' environmental awareness, KMG organizes educational activities. On June 5, 2024, in honor of World Environment Day, an environmental guiz was held, and winners received prizes.

On August 7, 2024, an Eco-Thinking Master Class was held with over 120 employees participating (70 in person and 50 online). Environmentalist and eco-ambassador Assel Kuspanova gave a presentation on reducing resource consumption, waste separation, and recycling. Employees learned about local recycling drop-off points in Astana and received tips on conscious consumption. As part of the event, a book exchange market was organized by corporate volunteers.

In addition, KMG launched the "Paper-Free Thursdays" initiative: on this day, employees are encouraged to minimize paper use, with recommendations for digitalizing workflows distributed across offices.

Starting from September 1, 2024, a competition was launched within the KMG Group to encourage active use of the reverse vending machine for plastic bottle recycling. The goal of the contest is to promote the use of vending machines among employees and encourage waste segregation. Alongside increasing the volume of recycled plastic, the initiative aims to foster environmentally responsible behavior and raise awareness of the importance of resource conservation.

KMG continues to expand its "Green Office" initiatives, shaping a corporate culture focused on sustainable development and responsible resource consumption.

COMPLIANCE WITH LEGISLATION AND ENVIRONMENTAL EXPENDITURES

ENVIRONMENTAL PROTECTION EXPENDITURES

The Company's environmental expenditures include:

- Payment of taxes for permitted emissions,
- Costs of environmental protection measures,
- Environmental risk insurance,
- Compensation measures in the field of environmental protection,
- Investments in the prevention of environmental impacts.

In particular, investments in oil waste recycling have tripled since 2015.

In 2024, environmental protection expenditures amounted to KZT 45.4 billion. The main areas of funding included:

• Waste recovery (preparation for reuse, recycling, disposal) and elimination of historical contamination;

- Remediation of oil-contaminated sites:
- Implementation of production monitoring, including in marine areas;
- Modernization of treatment facilities to reduce emissions and discharges of pollutants;
- Repair of treatment facility infrastructure;
- Technical and organizational measures to reduce emissions, including replacement and installation of burners, filters, use of catalysts, and other technological solutions.

COMPLIANCE WITH ENVIRONMENTAL LEGISLATION

GRI 2-27

HTTPS://WWW.KMG.KZ/EN/

The Company systematically monitors compliance with environmental legislation of the Republic of Kazakhstan at its production facilities. As part of this work, potential non-conformities are identified, problem areas are analyzed, and environmental risks are managed, allowing timely preventive measures to be taken.

NVIRONMENTAL FINES, MILLION KZT



In 2024, fines in the amount of KZT 33,203,2 million were imposed, of which KZT 196 million has been paid. At the same time, one of KMG's subsidiaries was issued a fine of KZT 32.3 billion, which is currently being contested in court.

The Company continues its efforts to ensure full compliance with environmental requirements, minimize environmental risks, and implement the best available techniques to reduce environmental impact.







MANAGEMENT SYSTEM FOR INDUSTRIAL SAFETY, OCCUPATIONAL HEALTH, AND ENVIRONMENTAL PROTECTION

GRI 403-1, GRI 403-2, GRI 403-3, GRI 403-4

The management system for industrial safety, occupational health, and environmental protection (HSE) has been developed in accordance with the legislation of the Republic of Kazakhstan, international standards ISO 14001 and ISO 45001, and the Company's internal regulatory documents. The system incorporates best global practices, recommendations of the International Association of Oil & Gas Producers (IOGP), and industry standards. The HSE system includes 10 core elements based on fundamental principles: goal setting, leadership, risk management, and continuous improvement.

Since 2006, KMG has implemented an Integrated Management System (IMS) in the areas of quality, environmental protection, occupational health, and safety, in accordance with ISO 9001, ISO 14001, and ISO 45001. Subsidiaries and dependent entities with high energy consumption are certified to ISO 50001. The effectiveness of the IMS is confirmed through regular independent audits. To further improve the management system, certification according to ISO 45001 is ongoing.

The management system is aimed at effectively managing risks and opportunities in the HSE field. Its expected outcomes include injury prevention, minimizing harm to employees' health, and ensuring safe working conditions. One of the Company's top priorities is to eliminate or reduce risks in the area of industrial and occupational safety through the implementation of effective preventive measures.

To enhance the involvement of management and employees in health and safety matters, the Company operates a two-tier committee system:

- First level The Health, Safety, Environment and Sustainable Development Committee (HSESDC) of the KMG Board of Directors;
- Second level HSE committees in subsidiaries and dependent entities.

In 2024, as part of the improvement and updating of the management system, the following corporate HSE documents were approved and revised:

- Rules for Reporting on Key Industrial Safety Indicators for KMG Group and Contractors;
- Standard for Waste Management in the KMG Group of Companies;
- Standard for Environmental Impact Assessment (EIA) of Planned Activities in the KMG Group of Companies.

On a quarterly basis, HSE risks are monitored, including environmental risks as well as risks related to climate change and water scarcity. KMG analyzes environmental performance and benchmarks it against leading international oil and gas associations (IOGP, CDP). Particular attention is paid to environmental aspects and risk assessments.



Case Examples

IX Annual Forum "Leadership in Developing a Safety Culture"

On January 25, 2025, the IX annual forum of KMG's subsidiary general directors was held in Astana under the theme "Leadership in Developing a Safety Culture." The event was attended by KMG CEO Askhat Khassenov, heads of subsidiaries, and representatives of leading oil and gas companies – NCOC, Tengizchevroil, and Karachaganak Petroleum Operating.

The forum reviewed the 2024 results in industrial safety, occupational health, and environmental protection and discussed relevant issues. In his speech, A. Khassenov emphasized that ensuring safe working conditions, protecting employee health, and preserving environmental balance are Company priorities.

Representatives from NCOC, TCO, and KPO presented their practices in the field. Achievements of KMG subsidiaries in occupational health and industrial safety were recognized during the event.

"Qorgau" Program: Encouraging Best Practices

During the event, awards were given to the best "Qorğau" safety card observers for identifying potentially hazardous situations:

- Exploration and Production: Ruslan Azhgereyev Electrician of the Production and Technical Department, Ural Oil and Gas LLP;
- Transportation: Batyrzhan Aybekov Lead Mechanic for Motor Vehicles, Karazhanbas OPS, KazTransOil JSC:
- Processing: Amangeldi Demegen Head of Gas and Gas Condensate Transportation Unit, KazGPZ LLP;
- Oilfield Services: Anuarbek Sabikhov Senior Engineer of the Dispatch Group, Mangistauenergomunay LLP.

One of the key events is the annual forum of KMG Group CEOs in the field of HSE organised by the KMG HSE Department.

The Company continues to improve occupational health and environmental safety standards, implementing best practices and ensuring high engagement of leadership and staff in HSE risk management.

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KEY INDICATORS

GRI 403-9

NC KazMunayGas JSC places the highest priority on occupational health and safety, as well as the protection of the health of residents living in the regions where the company operates. Our employees acknowledge that the Company ensures safe working conditions and implements the highest standards for workplace safety.

In 2024, the number of work-related injuries decreased by 28% compared to the previous year - from 29 cases in 2023 to 21 cases in 2024. A significant reduction was also recorded in the number of road traffic accidents – down by 68% (from 19 cases in 2023 to 6 cases in 2024). As in 2023, no fires were registered.

One fatal occupational accident occurred in 2024. The incident took place at Ozenmunaigas JSC during tire inflation using a compressor unit. As a result of a lock ring being ejected from the wheel rim, the operator sustained fatal injuries.

The investigation revealed that the causes of the incident included negligence by the injured party, violation of safety requirements, and

unsatisfactory organization of the work process. In response to the incident, KMG implemented a comprehensive set of safety measures:

- Additional briefings and awareness sessions were conducted;
- Work sites were equipped with protective
- The tire inflation process was reviewed;
- Safety instructions and risk assessments were revised:
- Safety signs were installed, and a ban on tire inflation in undesignated areas was introduced.

Additionally, 57 "Wall"-type safety barriers were installed across 12 KMG subsidiaries to ensure safe tire inflation for vehicles and special equipment. Compressor units were equipped with quickrelease nozzles to enhance safety during tire

These measures are aimed at further reducing injury rates and creating safe working conditions for company employees.

KEY OCCUPATIONAL HEALTH AND INDUSTRIAL SAFETY INDICATORS

Key Occupational Health and Safety (OHS) Indicators	2022	2023	2024	Change 2024/2023	%
Accidents, No. of cases	35	28	21	-7	-25
Injured persons in accidents, No. of people	36	29	21	-8	-28
including fatalities, No. of people	1	2	1	-1	-50
Road traffic accidents, No. of cases	24	19	6	-13	-68
Fires, No. of cases	1	0	0	-	-

INJURY AND FATALITY RATES

Indicator	2022	2023	2024	IOGP ¹⁰
Lost Time Injury Rate (LTIR), per 1 million man-hours	0.36	0.30	0.22	0.22
Fatal Accident Rate (FAR), per 100 million man-hours	1.0	2.11	1.03	0.68
Road Traffic Accident Rate per 1 million kilometers traveled	0.26	0.25	0.08	0.10

SAFETY MANAGEMENT OF PRODUCTION **PROCESSES**

In 2024, as part of efforts to enhance process safety and prevent emergency situations, KazMunayGas Group continued to develop its Process Safety Management (PSM) system.

One of the key areas was the implementation of a Management of Change (MOC) system at downstream subsidiaries: Pavlodar Refinery, Atyrau Refinery, PetroKazakhstan Oil Products (PKOP), and Kazakhstan Petrochemical Industries Inc. (KPI). As part of this initiative, the following were developed and implemented:

- An MOC Regulation detailing business processes and workflows:
- A Change Management Procedure, including the functions of a Change Control Group;
- A Process Hazard Analysis (PHA) Procedure to improve the identification and evaluation of process risks.

At the end of 2024, a review of corporate documentation across KMG and its subsidiaries was conducted to align it with international standards. Based on the results, a documentation development plan was established, including a PSM Standard and the 20 elements of the CCPS RBPS (Center for Chemical Process Safety - Risk-Based Process Safety) methodology.

One of the highlights of 2025 will be obtaining corporate permission to use the CCPS RBPS standard, enabling the integration of global best practices into process safety management. Membership in the CCPS will grant access to international expertise and advanced risk analysis methodologies, enhancing industrial safety and minimizing the risk of major accidents.

As part of the MOC system, the following key databases are planned:

- PSI (Process Safety Information) process safety information, including technical documentation:
- Process Risk Register a database for assessing and classifying risks;
- MOC Database a centralized platform for managing change processes:
- Incident Register a system for tracking and analyzing incidents to prevent recurrence.

Additionally, a training plan will be developed for employees at subsidiaries on the new change management business process and HAZOP risk assessment methodology. The preparation and certification of functional consultants in the CCPS RBPS standard is also planned, who will train subsidiary personnel, supporting sustainable competency development within the company.

The comprehensive set of activities planned for 2025 aims to systematically improve safety management, implement modern risk assessment methodologies, and enhance the professional competencies of subsidiary employees in process safety.







¹⁰ Available IOGP indicators for 2023 (https://www.iogp.org).

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TRANSPORT SAFETY

In 2024, KMG continued to implement initiatives to improve transport safety, reduce road incidents, and foster a culture of safe driving.

As part of scaling the "Travel management" project, an automated vehicle monitoring system was deployed at Oil Services Company LLP. In Oil Transport Corporation LLP and Oil Construction Company LLP, the automation of vehicle requests and travel scheduling was completed, digitizing the transport request and management processes.

To raise employee awareness about the importance of wearing seat belts, two new "Convincer" crash simulators were purchased

and deployed, bringing the total number in KMG Group to five. As part of the "Stop Road Accidents" campaign, live demonstrations of the simulators were conducted, involving 19,755 employees.

An important component of enhancing transport safety was training in Defensive Driving, which was completed by 5,943 employees of subsidiaries and contractors, including certification under international RoSPA standards.

These measures contribute to lowering transportation risks, improving personnel awareness, and implementing advanced transport safety technologies.

FIRE SAFETY

In 2024, no fires were recorded at KMG facilities. However, there were 16 incidents of smoldering and 3 cases of combustion. In accordance with legislation, these events are classified separately and are not included in official fire statistics.

To strengthen fire protection, as part of the Comprehensive Fire Safety Plan for 2022-2024, scheduled fire tactical drills were conducted at KMG subsidiaries throughout 2024. These included joint exercises at Kazmortransflot LLP with the participation of Samruk-Kazyna JSC and the Ministry for Emergency Situations of the Republic of Kazakhstan.

At the KMG Corporate Center, two fire drills were conducted, including employee evacuation and response procedures for a simulated fire.

Throughout the year, subsidiaries received methodological guidelines to enhance fire safety during high-risk periods – such as the heating season and holidays – and clarifications on fire safety regulations.

Planned initiatives for 2025 include:

- Completion of the long-term activities under the Comprehensive Fire Safety Plan;
- Evaluation of subsidiaries' and private fire services' readiness to prevent and extinguish fires at Company facilities.

The implementation of these measures will minimize the risk of ignition and improve the overall level of fire safety across the KMG Group.

INTERACTION WITH CONTRACTORS

GRI 403-7

In 2024, KMG continued its efforts to improve contractor safety by focusing on the identification, assessment, and reduction of risks at production sites.

As part of this effort, a corporate standard for contractor interaction in the areas of industrial safety, occupational health, and environmental protection (HSE) was introduced and recommended for adoption by subsidiaries. This has established uniform safety requirements and clarified the functional responsibilities of contractors.

During the year, KMG's Health, Safety and Environment (HSE) Department conducted audits at 18 subsidiaries, issuing 824 recommendations to improve safety. A total of 5,883 safety inspections of contractors were carried out at subsidiary facilities and branches.

In 2024, 941 contractor organizations provided services and performed work for KMG subsidiaries. Main activity areas included:

- Equipment maintenance and repair 15.73%:
- Transport services 22.02%;
- Cleaning services 9.89%;
- Sanitary services 9.44%;
- Oilfield services 26.5%.

An HSE Forum with contractors was held on November 1, 2024, helping to strengthen partnerships and discuss key safety topics. Core issues addressed at the forum included:

- Engagement with contractors on industrial safety, labor protection, and environmental
- Analysis of process management challenges
- Tools to improve the efficiency of contractor collaboration

KMG's comprehensive approach to managing contractor safety aims to reduce risks, enhance the culture of safe work, and minimize accident rates at Company sites.

Key focus areas for working with contractors in

- Audits of subsidiaries for compliance with corporate requirements;
- Monitoring contractor compliance with industrial safety, occupational health, and environmental regulations as part of contractual obligations;
- Strengthening pre-mobilization audits of contractors:
- Advancing digitalization of contractor reporting;
- Ranking contractors based on their safety performance.



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OCCUPATIONAL INJURIES AMONG CONTRACTOR ORGANIZATIONS

Indicator	2022	2023	2024	IOGP ¹¹
Lost Time Injury Rate (LTIR) per 1 million man-hours	0.52	0.15	0.32	0.24
Fatal Accident Rate (FAR) per 100 million man-hours	1.28	5.08	3.86	0.90
Road Traffic Incident Rate per 1 million kilometers traveled	0.17	0.28	0.05	0.058

DIGITALIZATION IN THE FIELD OF INDUSTRIAL SAFETY, OCCUPATIONAL HEALTH AND **ENVIRONMENTAL PROTECTION**

In 2024, KMG continued its efforts to digitize processes in the areas of industrial safety (IS), labor protection (LP), and environmental protection (EP), with the aim of enhancing risk management efficiency and minimizing incidents.

As part of the phased implementation of the "Trip Management" project, an assessment of transportation processes within the oilfield service organizations - Oil Service Company, Oil Transport Corporation and Oil Construction Corporation – was conducted. Additionally, roadmaps for the project's rollout were developed and approved. In 2024, the "Trip Management" system was launched in pilot operation at Oil Service Company. The system is planned for implementation at Oil Transport Corporation, Oil Construction Corporation, and Ozenmunaiservice in 2025.

Furthermore, in 2023–2024, an electronic work permit system was successfully implemented at Embamunaigaz JSC and KazGerMunay LLP as part of the digitalization of industrial safety.

Additionally, in 2024, the development of an automated intelligent system for industrial safety, "TUMAR," was underway. This system is designed to prevent incidents during high-risk technological operations and well repairs.

Ongoing digitalization efforts in IS, LP, and EP will enable KMG to enhance safety oversight at production facilities, reduce human error, and implement advanced technologies in industrial safety management.

OCCUPATIONAL HYGIENE AND INDUSTRIAL **SANITATION**

GRI 403-6, GRI 403-8, GRI 403-10

KMG manages employee health protection in accordance with the legislation of the Republic of Kazakhstan and international standards. The company implements comprehensive

measures to protect employee health, prevent occupational diseases, and improve working conditions.

In 2024, KMG held working meetings with

the Ministry of Health of the Republic of

regulatory improvements.

EMPLOYEE HEALTH MANAGEMENT PROGRAM

As part of the strategic initiative "Employee Health Management," a dedicated program is being implemented, aimed at:

- Improving medical services at production
- Promoting healthy lifestyles among employees;
- Enhancing working and rest conditions.

A roadmap for the 2025–2027 wellness program has been approved, focusing on:

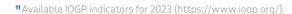
- Preventing occupational diseases and monitoring employee health;
- Comprehensive wellness activities;
- Improving working conditions; Health education campaigns.

On November 1, 2024, KMG hosted the seminar "Health Matters: Sanitary Control and Medical Support in the Oil and Gas Industry" with

Kazakhstan and industry associations to discuss

representatives from subsidiaries and medical organizations.

15,126 employees were trained in first aid skills.





OCCUPATIONAL SANITATION AUDITS

In 2024, 26 subsidiaries underwent audits for compliance with occupational hygiene and sanitation standards. A total of 168 non-conformities were identified, of which 42 (25%)

were resolved and 92 (55%) were in the process of being addressed. The audits helped improve oversight of medical services and health protection standards.

MEDICAL EMERGENCY DRILLS (MED)

To enhance preparedness for first aid, 91 medical drills were conducted. These included scenarios such as falls, unconsciousness, poisoning, and

cardiac arrest. Emergency response units and ambulance crews participated in the exercises.

ELECTRONIC MEDICAL EXAMINATION SYSTEM (EMES)

Since 2021, subsidiaries have been implementing the Electronic Medical Examination System (EMES) to automate health monitoring. In 2024, 64 EMES units were installed across KTO, Atyrau Refinery, Pavlodar Refinery, PKOP, KazGPZ, Caspi Bitum, MEM, EMG, KBM, KGM, MMG, KTM, and KOA.

EMES advantages:

- High-quality pre- and post-shift medical check-ups.
- Elimination of human error and inaccurate data.
- Reduced examination time.
- Electronic records with photo and video documentation.

MONITORING OF OCCUPATIONAL HAZARDS AND DISEASE PREVENTION

KMG monitors harmful occupational factors (e.g., noise, vibration, microclimate, aerosols) and their health effects. In 2024, KMG adopted a unified occupational sanitary control program aligned with Ministry of Health requirements.

2024 results:

- No occupational diseases reported.
- No health or safety non-compliances related to products and services reported.

Plans for 2025:

- Approval of the Employee Wellness Program.
- Signing a memorandum with the Ministry of Health on radiation safety.
- Conducting medical emergency drills at subsidiaries.
- Implementing a pilot project for digital health monitoring of employees at EMG JSC.

These initiatives will support the development of KMG's employee health protection system and improve the efficiency of medical services across the Group.



























Principle 1. Businesses should support and respect the protection of internationally proclaimed

Principle 2. Businesses should make sure that they are not complicit in human rights abuses Principle 3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining

Principle 4. Businesses should uphold the elimination of all forms of forced and compulsory labour

Principle 5. Businesses should uphold the effective abolition of child labour

Principle 6. Businesses should uphold the elimination of discrimination in respect of employment and occupation

HUMAN RESOURCE MANAGEMENT

GRI 402-1

The human resources policy of NC KazMunayGas JSC was updated in 2024 and serves as a strategic document outlining the key principles, objectives, and directions for managing human capital within the Company. The policy was developed in accordance with the Labor Code of the Republic of Kazakhstan, corporate standards of Samruk-Kazyna JSC, and KMG's Development Strategy for 2022–2031.

Core principles of KMG's HR policy:

- Meritocracy and fairness ensuring transparency in HR processes and supporting high-potential employees.
- Fostering an engaged culture collaborative work towards the Company's strategic goals at all levels.
- Social responsibility upholding labor rights, ensuring safe working conditions, and supporting employees' social well-being.
- Teamwork and creativity promoting team spirit, initiative, and a creative approach to problem-solving.
- Openness nurturing a corporate culture of constructive dialogue and feedback.

- Continuous learning ongoing enhancement of employees' knowledge and skills.
- Gender equality and inclusion providing equal opportunities and conditions for all emplovees.
- Succession planning ensuring knowledge, experience, and values are passed from one generation of employees to the next.

KMG adheres to international labor standards. including the UN Guiding Principles on Business and Human Rights, ILO standards, and the principles of sustainable development.

In case of changes in working conditions, the Company provides written notice to the employee no later than fifteen calendar days in advance. The minimum notification period for significant business changes is four weeks.

The effectiveness of the HR policy is evaluated using indicators such as labor productivity, employee turnover, engagement index, internal promotions, training and development levels, gender balance in management bodies, and other relevant metrics.

WORKFORCE SIZE AND STRUCTURE

GRI 2-7, GRI 2-8, GRI 202-2, GRI 405-1

As of the end of 2024, the total headcount of KMG Group amounted to 49.243¹² employees. representing a 2% increase compared to 2023. By gender, 81% of employees are men and 19% are women, which reflects the specifics of the oil and gas industry, traditionally associated with physically demanding work.

Among administrative and managerial staff, 48% are men and 52% are women. In contrast, among production personnel, women account for only 16%, while men comprise 84%.

The share of senior executives¹³ in regions of operation hired from the local population is 90% (compared to 83% in 2023).

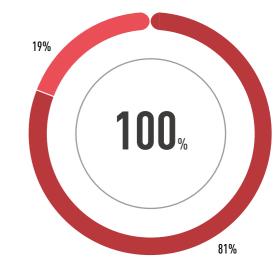
The regions with the highest concentration of personnel are: Mangystau Region (22,026 employees), Atyrau Region (10,605 employees), Pavlodar Region (3,119 employees), and the city of Astana (2,120 employees). A significant number of employees (6,910) work in KMG Group companies located outside the Republic of Kazakhstan.

In 2024, 3,357 individuals were employed under outsourcing arrangements.

STAFF HEADCOUNT

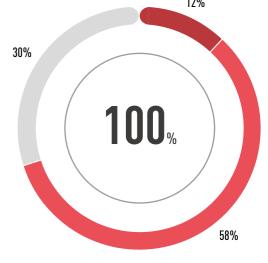


STAFF STRUCTURE BY GENDER GROUPS AS OF THE END OF 2024



Men Women

STAFF STRUCTURE BY AGE GROUPS AS OF THE END OF 2024



- Under 30 years old 30-50 years old
- Over 50 years old

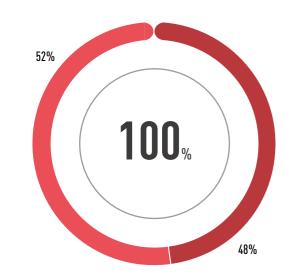
¹² Starting from 2024, the KMG Group accounts for the headcount based on the payroll. In previous reporting periods, the actual headcount was considered. As a result, historical personnel data may differ.

¹³ Senior executive – the first manager and his deputies.

¹⁴ Region of operations – region (region, district) of operational activities.

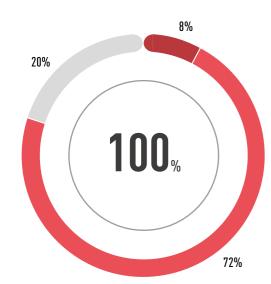
STRUCTURE OF ADMINISTRATIVE AND MANAGERIAL PERSONNEL AS OF THE END OF 2024

BY GENDER GROUPS



Men Women

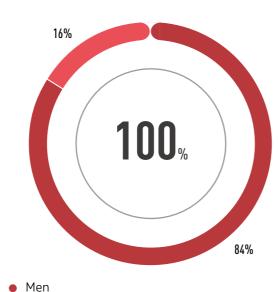
BY AGE GROUPS



Under 30 years old • 30-50 years old Over 50 years old

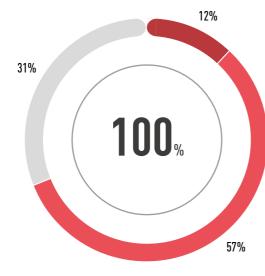
STRUCTURE OF PRODUCTION PERSONNEL AS OF THE END OF 2024

BY GENDER GROUPS



BY AGE GROUPS

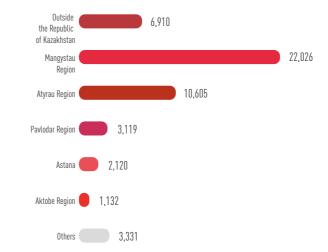
Women



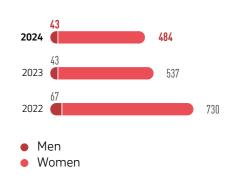
• Under 30 years old 30-50 years old

Over 50 years old

EMPLOYEE HEADCOUNT BY REGION AS OF THE END OF 2024, PERSONS



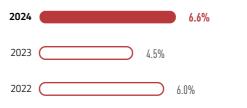
NUMBER OF EMPLOYEES WHO TOOK MATERNITY LEAVE AND CHILD CARE LEAVE



The staff turnover rate at the end of 2024 was 6.6%¹⁵. A total of 3,272 employment contracts were terminated.

As of the end of 2024, a total of 527 employees were on maternity and parental leave, including 484 women and 43 men. In accordance with the labor legislation of the Republic of Kazakhstan, all employees are entitled to parental leave.

STAFF TURNOVER RATE



RECRUITMENT AND ONBOARDING

GRI 401-1

Effective human resource management at KMG is based on systematic forecasting of staffing needs, taking into account the Company's strategic plans (in the areas of petrochemical development, strengthening KMG's role in major oil and gas projects, launching production at new fields, energy transition, and carbon footprint reduction).

KMG aims to attract highly qualified professionals who meet business requirements. The main approaches to talent acquisition include:

- Promoting the company's HR brand through partnerships with universities, participation in industry events, and career guidance programs.
- Using automated recruitment tools, including corporate platforms (work.kmg.kz, gsamruk.kz) and recruiting services.

 $^{^{15}}$ In 2024, the KMG Group changed the methodology for calculating staff turnover. In previous years, turnover = A/B*100, where A is the number of employees who quit on their own initiative, by agreement of the parties or through the fault of the employee, at the end of the reporting period; B is the average number of employees for the reporting period. In 2024, turnover = A/B*100, where A is the number of employees who quit on their own initiative, by agreement of the parties or through the fault of the employee, at the end of the reporting period; B is the list number for the reporting period.

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- Competitive selection of candidates, with a focus on the internal talent pool within the KMG Group.
- Creating an attractive employee value proposition (EVP) that includes competitive compensation, professional development, and social benefits.

To ensure the successful integration of new and transferred employees, KMG applies a comprehensive onboarding system that includes:

- Corporate onboarding familiarization with the Company's history, values, strategy, and structure.
- Social onboarding establishing effective communication within the team.
- Organizational onboarding learning the company's rules and procedures.
- Technical onboarding training in the use of corporate IT systems and equipment.
- Professional onboarding mastering jobrelated processes and role expectations.
- Psychophysiological onboarding supporting adaptation to work and rest schedules.

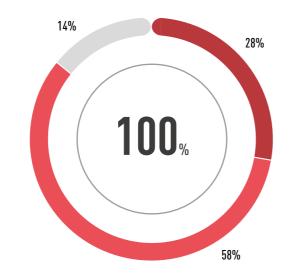
In 2024, KMG hired 3,928 employees. By gender, 82% of new hires were men and 18% were women.

Age group distribution among new hires shows that the largest share falls within the 30–50 years range (58%), followed by those under 30 (28%) and over 50 (14%).

The highest number of new employees was hired in the Mangystau Region (1,037), Atyrau Region (778), Pavlodar Region (224), and Astana (483). A significant number were also hired outside the Republic of Kazakhstan (1,035 employees).

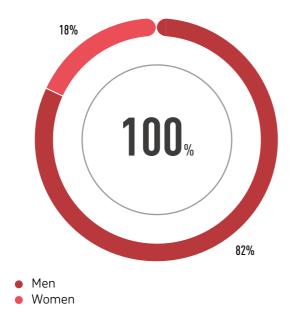
STRUCTURE OF NEW HIRES IN 2024

BY AGE GROUPS

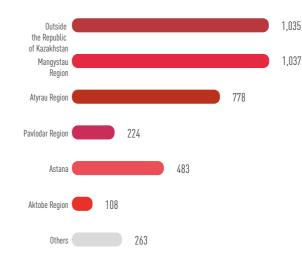


- Under 30 years old
- 30-50 years old
- Over 50 years old

BY GENDER GROUPS



NUMBER OF EMPLOYEES BY REGION AS OF THE END OF 2024, PERSONS



TRAINING AND DEVELOPMENT

GRI 404-2, GRI 403-5

Continuous professional development is one of the priorities of the Group's HR policy. KMG invests in employee training in alignment with the strategic needs of the business and modern technologies. The key areas of development include:

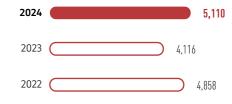
- Qualification enhancement, including international certification and the acquisition of additional competencies;
- Management skills training for middle-level managers;
- Training of engineering, technical, and bluecollar personnel;
- Development of digital skills and competencies related to automation and data analytics;
- Collaboration with universities and dual education programs;
- Support for employees in obtaining higherlevel qualifications (master's, doctoral, MBA, DBA programs);

- Development of outplacement programs to provide new employment opportunities for staff in the case of organizational restructuring or retirement by acquiring additional qualifications;
- Implementation of internal educational platforms, including digital training catalogs and mentorship programs.

The company systematically invests in personnel development. In 2024, KMG allocated KZT 5,109.7 million for employee training, which exceeds the 2023 figure (KZT 4,115.7 million) by 19%.

The average number of training hours per employee amounted to 35 hours in 2024, which is 2.9% higher than in 2023 (34 hours). On average, male employees received 38 hours of training, while female employees received 25 hours—this difference is attributed to the structure of the production workforce¹⁶.

INVESTMENTS IN TRAINING. MILLION TENGE



AVERAGE NUMBER OF TRAINING HOURS PER EMPLOYEE



¹⁶ The indicators for 2023–2022 have been recalculated due to changes in methodology. The average number of training hours per employee = the total number of training hours completed by employees / the headcount at the end of the period.

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KEY TRAINING AND PROFESSIONAL DEVELOPMENT PROGRAM TOPICS



Risk Management



Mandatory Safety Trainings



Economics and Industrial Safety, Finance and Emergency



Integrated Management Systems, ISO and **OHSAS Standards**



Safe Driving (OPITO, ROSPA



Legislation



International Standards for Safe Work Practices



Kazakhstan's content and purchase of goods, works and services



Mandatory

Occupational Health and

Civil Defense

Situations, and Energy Management

Certification Training



Corporate Governance and Project Management



Vocational Training



Information Technologies



Diversity, Equity, and Inclusion Training



Production and production, transportation, gas business, refining and marketing, service projects, etc.)



Sustainable Development

SAFETY AND RISK MANAGEMENT TRAINING

- To prevent road traffic accidents, KMG conducted defensive driving training in accordance with the international ROSPA standard. A total of 3,404 drivers responsible for transporting personnel and hazardous materials completed the training (compared to 691 people in 2023 and 350 people in 2022). The program will continue in the coming years.
- Training on "Internal Auditor of Integrated Management System" (ISO/OHSAS) was held with 255 employees participating.
- 422 employees completed training in risk assessment skills.



INTERNATIONAL QUALIFICATIONS AND **CERTIFICATIONS**

- 63 employees were trained to obtain international qualifications and certifications under programs such as DipIFR, ACCA, IPMA, CIMA, PMP, CFA, CIA, and others.
- As part of the annual certification of key personnel at KMG and its subsidiaries in line with the IPMA international project management standard, 83 specialists passed certification and exams.
- Over 500 employees of KMG and its subsidiaries participated in internal project management training.

MODULAR TRAINING PROGRAMS

 With the support of Samruk-Kazyna JSC, modular programs were implemented in the following areas: IR School, HR School,

CnB School, and Chief Geologist. A total of 48 employees took part in the training.

 In cooperation with Eni SpA Affiliate Agip Caspian Sea B.V., an offline "Total Project Management" training was held, delivered by ENI Corporate Training Center professor Manuel Martinatti. The program was attended by 43 employees.

INDUSTRY-SPECIFIC EDUCATIONAL PROGRAMS

Two specialized educational programs were successfully completed:

- FROSIO Certified Coating Inspectors 7 employees were trained in accordance with FROSIO requirements and ISO/IEC 17024.
- Well Control under the IWCF international standard – 7 employees trained.

These international certificates confirm a high level of professional knowledge and the ability to ensure safety in drilling and corrosion protection.

YOUTH EDUCATIONAL INITIATIVES

As part of the "ALYP" program, a new phase of training was conducted for young transformation leaders, including:

- Module 1: DMAIC project implementation methodology:
- Module 2: Basics of effective interaction and personal efficiency;
- Module 3: Financial and technological literacy.

In 2024, 63 specialists completed the training. Upon completion, participants implement individual projects and can become mentors for new program groups.

Under the youth program "Zheti Qadam", nine employees completed training focused on developing managerial competencies, communication skills, and understanding the principles of budget planning.

TRAINING IN SUSTAINABLE DEVELOPMENT

As part of KMG's strategic goal "Sustainable development and reduction of carbon intensity," the following trainings were held:

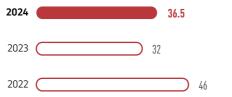
- Carbon Capture, Utilization and Storage (CCUS) (INPEX Corporation).
- Training of greenhouse gas verification experts.
- Greenhouse gas management at enterprises.
- ESG strategic seminar.
- Waste management.
- Biodiversity impact management.
- GHG emission regulation and ESG integration.
- Low-carbon development and carbon footprint
- Green Ports and EcoPorts certification.
- Petro Decarbonization Program.
- Carbon capture, utilization, and storage.
- Diversity and inclusion.

EMPLOYEE PERFORMANCE EVALUATION

KMG aims to enhance labor efficiency through a performance evaluation system that also facilitates employee potential development and career advancement. The core principles of the performance evaluation system include:

- Cascading corporate business goals into individual KPIs.
- A transparent and objective system for evaluating employee results.
- Feedback and adjustments to individual development plans.
- Regular assessments and consistent methodology.

PERCENTAGE OF EMPLOYEES WHO RECEIVED REGULAR PERFORMANCE AND CAREER DEVELOPMENT REVIEWS,



SUCCESSION SYSTEM AND TALENT MANAGEMENT

KMG is developing the internal talent pool and succession system for key positions. This approach includes:

- Selection of high-potential employees and preparation for leadership positions.
- Development of career paths and individual development programs.
- Transfer of knowledge from foreign specialists to local employees.
- Development of cross-functional expertise and internal mentoring.

To support and accompany the professional development of young specialists, newly hired employees, talent pool members, and KMG Group staff. KMG has introduced an institute of Internal Trainers and Mentors.

Talent pool formation and development across the KMG Group is conducted through the "MANSAP" project. In 2023-2024, a mentorship program was launched under which successors from Pools A and B act as mentors for Pool C participants.

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At the end of 2024, selection was carried out for the industrial talent pool in the following areas: Oil Refining and Petrochemicals, Exploration and Production, Transportation and Marketing, and Oilfield Services. More than 1,000 employees participated in the selection.

In 2024, 35% of key position appointments were made from the talent pool.

YOUNG PROFESSIONALS ENGAGEMENT

KMG actively collaborates with educational institutions in the regions where its production facilities are located by implementing programs for training young professionals:

- Education funding for students in 2024, 1,966 students had their university education financed by various KMG enterprises.
- Internship programs in 2024, 1,713 students completed industrial or pre-graduation internships.

Key youth development programs include:

- "Zhas Maman" a program for young professionals at Atyrau Refinery. In 2024, 9 people participated; 4 completed training, 2 were employed, and 5 continued their studies.
- Dual Training a combination of education, internship, and employment:
 - EMG 106 participants, 10 employed;
 - KBM 57 participants;
 - Atyrau Refinery 30 participants, 7 employed;
 - Pavlodar Refinery 86 participants, 22 employed;
 - KPI 10 participants;
 - PKOP 27 participants;
 - KMG International 42 participants.

- "KMGE School" a program for training niche specialists for KMG Engineering LLP. In 2022–2024, 18 people were trained, of which 18 were employed, and 3 people continue their education.
- "Intern" a vocational training program at Atyrau Refinery. Between 2023-2024, 60 participants were trained, 31 of whom were hired. An additional 20 interns were selected in 2024.

In 2024, KMG, together with Mangistaumunaigas JSC, implemented a unique project to train 60 unemployed residents of the Mangystau region. The goal was to reduce unemployment and ensure socio-economic stability in the region.

The "Educational Intensive" program was specially designed to prepare participants for employment. During the program, future specialists acquired key professional skills, gained knowledge of the oil and gas industry, and adapted to work processes.

Upon completion, all graduates were offered employment at Mangistaumunaigas JSC. For many, this became their first job, providing practical experience and launching their careers in the oil and gas sector.

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REMUNERATION AND MOTIVATION MANAGEMENT

GRI 401-2, GRI 202-1, GRI 405-2, GRI 201-3

KMG adheres to the principles of fairness, transparency, and objectivity in remuneration management.

KEY COMPONENTS OF KMG'S REMUNERATION SYSTEM:

Remuneration

- A grading system ensures internal fairness and market competitiveness.
- Differentiated pay based on job complexity, qualifications, level of responsibility, and employee performance.
- A performance-based bonus system linked to key performance indicators (KPIs), including incentive programs to motivate employees.
- Labor market monitoring and salary benchmarking to maintain competitiveness.
- Transparency of the remuneration system, enabling employees to understand how their salaries are determined and what factors affect changes.

Social Benefits and Support Programs

- Voluntary medical insurance for employees and their family members.
- Non-state pension provision to ensure additional financial stability for employees.
- Partial reimbursement for wellness and fitness activities - to promote employee health.
- Well-being programs to ensure comfortable working conditions and improve workplace infrastructure.
- Financial support for employees in difficult life situations – such as childbirth, serious illness, or the loss of loved ones.

Non-Material Incentive Programs

- Professional excellence competitions to reward top performers.
- Public recognition and awards for outstanding contributions.
- Encouragement of creative initiatives and participation in Kaizen programs (process improvement).
- Promotion of a feedback and engagement culture – to strengthen internal communication.

KMG applies a grading-based remuneration system, ensuring equal pay for equal work regardless of social category. In 2024, the average ratio of women's to men's average remuneration across the Company was 97%. By personnel category, the ratio stood at 72% among administrative and managerial personnel (AMP) and 92% among production personnel (PP). The difference in average pay within AMP is due to the variation in positions held within this group.

The ratio of entry-level salaries to the national minimum wage in 2024 was 6.18 for men and 7.24 for women.

KMG strives not only for a fair and effective compensation system but also to foster an environment where every employee feels valued and motivated to build a long-term career within the Company.

Employee Pension Plans

In accordance with national legislation, pension savings of citizens of the Republic of Kazakhstan are held in the Unified Accumulative Pension Fund as well as in voluntary pension funds.

KMG also fulfills additional social support obligations for retired employees through collective bargaining agreements. Employees retiring upon reaching the statutory retirement age, as well as those already retired, are provided with:

• Financial assistance for national and state holidays of the Republic of Kazakhstan;

- One-time payments upon reaching milestone
- Sanatorium treatment vouchers with partial cost compensation;
- Other forms of social support.

Additionally, KMG enterprises implement a preretirement employee support program, offering the option of early retirement with compensation upon mutual agreement. Employees reaching retirement age also receive compensation when concluding employment.

Indicator	2022	2023	2024
Social contributions and mandatory pension deductions, in billion KZT	66	79	101

For 2024, the amount includes the Mandatory Pension Contributions by the Employer (MPC), introduced in 2024.

SOCIAL POLICY

KMG strives to ensure favorable working conditions and a high level of social protection for its employees. The main areas of the Company's social policy include:

- Support for projects focused on continuous production improvement.
- Implementation of collective agreements and social programs.
- Support for inclusivity and equal opportunities.
- Improvement of working and living conditions for employees at production sites.
- Development of corporate social responsibility through support for vulnerable population groups.
- Organization of corporate volunteering programs.
- Development of internal communications.
- Conducting social stability research and developing improvement plans based on the results.

reached 79%, which is 4 percentage points higher than in 2023 (75%).

To assess social stability, the annual Samruk Research Services study is conducted. Its results are used to develop individual action plans at the enterprise level. These plans aim to address identified problem areas and improve employee satisfaction. Measures include improving working conditions, enhancing feedback systems, organizing comfortable living and dining arrangements, among others.

In 2024, the Corporate Center introduced a unified action plan template across all subsidiaries to improve SRS performance and initiated on-site consultations to assist with plan development, thereby strengthening the Company's social policy.

SOCIAL STABILITY LEVEL

In 2024, the level of social stability in KMG's labor collectives was assessed as satisfactory - the index

EMPLOYEE LIVING AND WORKING CONDITIONS

KMG systematically works to improve the working and rest conditions of its employees. These issues are included in the social stability improvement plans of subsidiaries and reflected in roadmaps for 2023-2027 developed by all Group companies.

In 2024, improvement projects were planned at 183 facilities of social infrastructure. Of these:

Work was completed at 106 sites,

- 20 new facilities were built.
- Major repairs were carried out at 23 facilities.
- Current repairs were completed at 51 facilities,
- Train cars, utility cabins, and other infrastructure were upgraded – 12 units in total.

Total investment in 2024 amounted to KZT 3.7 billion. Completion of the remaining 77 facilities, worth KZT 3.1 billion, is scheduled for 2025.

TRADE UNIONS AND COLLECTIVE AGREEMENTS

GRI 2-30, GRI 401-2

There are 35 trade union organizations operating within the KMG Group, representing 36,606 employees.

COOPERATION WITH TRADE UNIONS

KMG builds relationships with trade unions within the framework of social partnership, guided by labor legislation at the industry and regional levels.

At the industry level, key cooperation parameters – including social guarantees, labor organization and remuneration, employment, gender and youth policies, labor protection, and mechanisms for preventing and resolving labor disputes – are defined in the Sectoral Agreement for the oil, gas, refining, and petrochemical industries of Kazakhstan. KMG and its companies actively participated in the development of this document.

KMG and its subsidiaries are members of the Industry Commission on Social Partnership, where issues of social stability, sectoral qualification standards, and human capital

development are addressed. KMG complies with the provisions of the Sectoral Agreement for 2023-2025, aimed at strengthening employee social protection, enhancing the role of trade unions, and ensuring safe working conditions.

The wage system in KMG's subsidiaries complies with industry standards, including minimum intergrade ratios and the minimum wage rate for grade

At the regional level, cooperation is carried out through local social partnership commissions, where employment and occupational safety issues, including labor disputes, are considered. Conciliation commissions operate in all KMG companies.

To maintain social stability, KMG and subsidiary leadership engage in regular dialogue with trade unions. Meetings with trade union committees help promptly resolve issues related to collective agreement implementation, labor discipline, working conditions, and social benefits and compensations.

COLLECTIVE AGREEMENTS AND SOCIAL SUPPORT

KMG ensures equal opportunities for all employees to exercise their labor rights and actively engages with labor collectives in the negotiation and amendment of collective agreements. Within the framework of social partnership, the Company strictly adheres to established negotiation deadlines, guarantees transparency of the process, and fulfills all obligations stipulated in the collective agreements.

Collective agreements are in effect in 21 subsidiaries of the KMG Group, covering 97% of the Group's total workforce.

According to labor legislation, every employee has the right to participate in collective bargaining through their representatives and to review the signed collective agreement. There are no restrictions on the right to freedom of association or collective bargaining based on type of activity or geographic location in the Company's operations. We foster an enabling environment for employees to fully exercise their right to freedom of association.

Due to the expiration of terms in 2024, new editions of collective agreements were signed at Ozenmunaigas JSC, EP KMG Catering LLP. KazGPZ LLP, and Ozenmunaiservice LLP. At the initiative of labor collectives, new collective agreements were also signed at the branch of KMG Kashagan B.V. CJSC in the Republic of Kazakhstan and at the Corporate Center of NC KazMunayGas JSC.

Additional agreements were signed at Ozenmunaiservice LLP, Oil Transport Corporation LLP, and Water Production and Transportation Management LLP, which enhanced the existing social benefit packages.

Amendments and additions were made to internal regulatory documents and the types and conditions of social benefits were revised upward at the following companies:

KMG GREEN Energy LLP, KMG Engineering LLP, Pavlodar Petrochemical Plant LLP. MangistauEnergoMunay LLP, MunaiTelecom LLP, Oil Services Company LLP, KMG PetroChem LLP, Kazmortransflot LLP, and KMG Security LLP.

KMG is consistently developing its system of social support for employees and their families. Collective agreements across the Group provide for more than fifty types of social benefits.

In the subsidiaries located in the Mangystau, Atyrau, Aktobe, Kyzylorda, and Pavlodar regions, employees are entitled to the following benefits:

- financial assistance for health improvement,
- voluntary medical insurance for employees and their families.
- compensation of costs for sanatorium and health resort treatment,
- payments in case of disability or occupational
- financial assistance in difficult life situations.
- maternity and childcare benefits,
- payments upon early retirement, among other types of assistance.

In 2024, KMG continued its efforts to standardize collective agreements to ensure a unified system of voluntary social benefits and transparent principles for their distribution.

All established social payments and guarantees were maintained and paid in full in 2024. The total amount of social support provided during the year amounted to K7T 25 billion.



INTERNAL COMMUNICATIONS

KMG Group has established an internal communications system that ensures effective feedback between management and employees. All enterprises within KMG hold regular meetings between management and employee teams to discuss social, workplace, and operational matters. The goal of this system is twofold: to inform employees about the Company's strategic goals and current developments, and to take into account the opinions of employees and their representatives.

In 2024, a total of 67 reporting meetings were held with the participation of over 9,000 employees

OMBUDSPERSON

The Ombudsperson of NC KazMunayGas JSC is an independent official accountable to the Board of Directors of KMG. The main role of the Ombudsperson is to ensure compliance with the principles of corporate ethics, assist in resolving labor disputes, and prevent violations of employees' rights.

The Ombudsperson operates based on the principles of independence, neutrality, impartiality, confidentiality, and informality.

In 2024, the Ombudsperson's Office actively worked to raise employee awareness on issues of corporate ethics and employee rights. As part of this effort, information sessions were held at 14 major KMG enterprises, including PetroKazakhstan Oil Products LLP, Karazhanbasmunay JSC, Mangistaumunaigas JSC, Pavlodar Petrochemical Plant LLP, Ozenmunaigas JSC, and others. The Ombudsperson visited both industrial sites and social infrastructure, such as dormitories and canteens, to speak with employees about working conditions and compliance with the Code of Business Ethics.

from KMG subsidiaries. During these meetings, employees raised more than 300 questions on topics such as production processes, employment, occupational safety, and social support. Each issue received a formal response and appropriate actions were taken.

To support open communication, additional tools have been introduced at subsidiaries, including employee receptions with senior executives, corporate blogs, internal information portals, and video displays for announcements. Information is also promptly disseminated through noticeboards and electronic messages.

Employees of the KMG Group can contact the Ombudsperson via the Nysana hotline, email, or in person.

Additionally, in 2024, the KMG Ombudsperson:

- Participated in updating the Code of Business Ethics in line with the Company's new corporate values.
- Provided methodological support to the Ombudspersons of Embamunaigas JSC and KazTransOil JSC.
- Took part in forums, conferences, and councils of Ombudspersons organized by Samruk-Kazyna JSC and established cooperation with the National Human Rights Center.

The Ombudsperson's Office will continue to evolve with a focus on prompt response to appeals and strengthening corporate ethics across KMG.

ETHICAL PRINCIPLES

NC KazMunayGas JSC operates in accordance with its Code of Business Ethics (hereinafter the Code), which was updated at the beginning of 2025. The provisions of the Code are mandatory for all employees, including top management. The Code also extends to subsidiaries and dependent entities, as well as business partners and contractors.

The Code sets out the fundamental principles of ethical conduct that form the foundation of the Company's corporate culture:

- Ethical conduct adherence to high moral standards, respect for traditions, cultural differences, and applicable laws.
- Professionalism continuous development of competencies, responsible job performance, and striving for excellence.
- Fairness and meritocracy equal opportunities for all employees, transparent recruitment and promotion procedures.
- Respect appropriate interaction with colleagues, partners, shareholders, government agencies, and other stakeholders.
- Openness honesty and transparency in business processes, open information sharing, and constructive dialogue.

- Environmental responsibility compliance with environmental standards and rational use of resources.
- Occupational health and safety ensuring safe working conditions and minimizing the risk of accidents.
- Sustainable development principles taking into account the long-term interests of the Company, society, and future generations.
- Prohibition of discrimination and harassment zero tolerance for coercion, intimidation, or unethical behavior.

Compliance with the Code is monitored by the Company's Compliance Service and Ombudsperson's Office. All employees are required to read the Code and confirm their agreement with its provisions. Violations of the Code may result in disciplinary action in accordance with internal policies and the laws of the Republic of Kazakhstan.

The Company ensures the availability of confidential and accessible mechanisms for reporting potential violations of the Code and guarantees protection from retaliation for good faith reporting, fostering an open and ethical corporate environment.



MECHANISMS FOR SUBMITTING APPEALS AND **COMPLAINTS**

GRI 2-25, GRI 2-26

KazMunayGas places great importance on ensuring accessible, transparent, and effective mechanisms for submitting appeals and complaints. Several dedicated channels are provided, allowing

stakeholders to report violations, request consultations, and track the progress of their submissions.

MAIN CHANNELS FOR APPEALS

ANTI-CORRUPTION AND FRAUD HOTLINE

The KMG Compliance Hotline is administered independently by KPMG, ensuring objectivity and protection for whistleblowers.

How to report:

- Hotline number: 8 (800) 080-47-47
- WhatsApp: 8 (771) 191-88-16
- Email: mail@sk-hotline.kz
- Web portal: www.sk-hotline.kz

The channel can be used to report:

- Suspected corruption, fraud, or abuse
- Conflicts of interest involving KMG employees or partners
- Violations of the Code of Ethics or anticorruption policy
- Suspected violations of laws

The Company guarantees complete confidentiality and protection from harassment for applicants. Appeals are reviewed in strict accordance with international standards of business ethics.

The process of registering incoming requests and providing responses to the applicant is fully automated. All requests from the hotline operator are submitted to the compliance officers of the KMG Group of Companies in real time.

On a quarterly basis, the Compliance Service provides information on the results of consideration of received appeals to the Audit Committee and the Board of Directors of KMG.

NYSANA UNIFIED SOCIAL AND LABOR HOTLINE

NYSANA is a centralized channel for addressing social and labor-related issues, available to both employees and external stakeholders.

How to report:

- Hotline number: 8 (800) 080-30-30
- WhatsApp: 8 (778) 120-99-11
- Email: nysana@cscc.kz
- Web portal: nysana.cscc.kz
- Internal corporate portal access

What can be reported:

- Facts of violations in the field workplace safety and occupational health
- Labor disputes
- Any other issues related to employment and labor relations

Reports can be submitted anonymously. All submissions are handled confidentially and reviewed in a timely manner.

E-OTINISH UNIFIED INFORMATION SYSTEM

The E-Otinish platform is a unified digital system in Kazakhstan designed to process appeals from individuals and legal entities. This channel ensures transparent and effective consideration of applications in accordance with the legislation of the Republic of Kazakhstan.

How to report:

Appeals and complaints could be submitted through:

- Website: https://eotinish.gov.kz
- Mobile App: "E-Otinish" (available on App Store and Google Play)
- Public Service Centers across Kazakhstan

Benefits of the system:

- Automatic registration of appeals with assignment of a unique number
- The ability to track the status of consideration of the appeal
- Guarantee of providing an official response within the established time frame

APPEALS STATISTICS

COMPLIANCE AND ETHICS HOTLINE

In 2024, the Compliance and Ethics Hotline received 115 reports, representing a 35% increase compared to the same period in 2023. This growth indicates increasing engagement from employees and contractors, greater trust in the function, and successful promotion of the hotline and the compliance culture within KMG. The most frequent topics of appeals included corruption, labor disputes, and procurement.

NYSANA UNIFIED SOCIAL AND LABOR HOTLINE

During the reporting period, 112 appeals related to labor rights violations and social-labor conflicts were received through the NYSANA communication channel, email, and in-person

meetings with the Ombudsperson. Upon review, the Ombudsperson provided feedback to applicants. This work required careful consideration, thorough analysis, and timely responses to the involved employees.

Among the reviewed cases:

- Complaints regarding managerial pressure were resolved, including disciplinary measures
- Labor disputes were settled through explanatory meetings and consultations.

E-OTINISH UNIFIED INFORMATION SYSTEM

In 2024, 1,289 appeals from individuals and legal entities were submitted to KMG via the E-Otinish platform.





APPEALS HANDLING PROCEDURE

All appeals received by KMG are processed in accordance with the Appeals Handling Regulation, approved by the Board of Directors in 2024. The Regulation outlines:

- Registration of appeals, including through the "E-Compliance" system.
- Classification by the nature of violation (corruption, ethics, labor relations, etc.).
- Appointment of responsible parties and creation of working groups, when necessary.
- Review timelines.
- Processing principles: objectivity, completeness, confidentiality, and whistleblower protection.
- Feedback mechanisms: applicants are informed about the status and outcomes of their complaints.

HUMAN RIGHTS PROTECTION

GRI 2-23, GRI 2-24, GRI 406-1

KMG'S HUMAN RIGHTS COMMITMENTS

NC KazMunayGas JSC recognizes the importance of respecting and protecting human rights, guided by both international standards and national legislation. The Company is committed to respecting human rights across its entire value chain and expects the same from its partners, suppliers, and contractors.

KMG bases its activities on the following international standards and declarations:

- Universal Declaration of Human Rights;
- International Covenant on Civil and Political
- International Covenant on Economic, Social and Cultural Rights:
- UN Guiding Principles on Business and Human
- ILO Declaration on Fundamental Principles and Rights at Work;
- UN Declaration on the Rights of Indigenous Peoples;

- UN Voluntary Principles on Security and Human Rights;
- UN Global Compact.

The Company recognizes freedom of association, the right to safe working conditions, and strictly prohibits discrimination and exploitative practices. It also respects the cultural identities of local communities in its regions of operation.

No child or forced labor is used, and equal rights are guaranteed regardless of race, religion, or gender.

No cases of discrimination were recorded during the reporting period.

KMG ensures the availability of accessible channels for reporting potential violations, including anonymous mechanisms.

DIVERSITY AND INCLUSION

KMG adheres to principles of equal opportunity, inclusivity, and a discrimination-free work environment. The Company believes that a diverse workforce and inclusive corporate culture enhance operational efficiency and sustainable development.

• Implements initiatives to increase the proportion of women in managerial positions, in particular by increasing the proportion of women in succession pools.

• Taking into account the specifics of work in the oil and gas industry, KMG applies measures to minimize health risks for women in production environments.

GENDER EQUALITY

• KMG promotes equal opportunities for women and men at all management levels and actively involves women in all aspects of business operations.

• Ensures equal pay for equal work.



SUPPORT FOR LOCAL TALENT AND VULNERABLE **GROUPS**

- KMG prioritizes the hiring of local personnel in operational regions and supports their professional development.
- Promotes employment of migrants and Kandasses (ethnic Kazakhs returning to their homeland).

INCLUSION OF PEOPLE WITH DISABILITIES

• KMG strives to create a comfortable and accessible work environment for people with disabilities.

• Workplaces are adapted, and assistive technologies are introduced to improve mobility and working conditions.

CREATIION OF AN INCLUSIVE CORPORATE CULTURE

- KMG fosters a workplace environment where every employee feels accepted and respected.
- KMG develops internal training programs aimed at fostering a culture of respect for diversity and preventing discrimination.

KMG acknowledges that diversity and inclusion are not only a matter of social responsibility but also a competitive advantage, driving innovation and performance.

OCCUPATIONAL SAFETY AND WORKERS' RIGHTS PROTECTION

KMG ensures safe and healthy working conditions for all employees, which is an integral part of its commitment to human rights. The Company has implemented:

- Occupational safety policies in line with international standards.
- Regular safety training programs.
- Monitoring systems to ensure compliance with safety regulations and mitigate workplace

KMG respects the right of employees to freedom of association and collective bargaining, in accordance with the laws of the Republic of Kazakhstan.

PROHIBITION OF FORCED AND CHILD LABOR

KMG strictly adheres to a zero-tolerance policy regarding forced and child labor. The Company:

- Eliminates all forms of work performed under threat of punishment or against the will of the worker, in line with ILO Convention No. 29 on Forced Labor.
- Monitors compliance with labor standards both within the Company and among its suppliers and contractors.
- Ensures that all employees work under voluntarily signed employment contracts and have the right to terminate their employment in accordance with applicable legislation.

CONSIDERATION OF APPEALS AND HUMAN RIGHTS MONITORING

KMG has implemented a multi-level appeals and complaints submission mechanism, which

• Hotlines and anonymous reporting channels.

• An Ombudsperson and Compliance Service that provide impartial review of complaints.

КазМунайГаз

IMPLEMENTATION OF THE HUMAN RIGHTS POLICY

To ensure the effective implementation of its Human Rights Policy, KMG undertakes the following actions:

TRAINING AND AWARENESS

- Regularly trains employees on human rights issues, including diversity and inclusion principles.
- Conducts awareness initiatives for employees, suppliers, and contractors.

RISK ASSESSMENT AND MANAGEMENT

KMG periodically analyzes risks related to potential human rights violations and develops response programs and applies human rights due diligence principles.

TRANSPARENCY AND ACCOUNTABILITY

• Discloses information on the implementation of the Human Rights Policy in its non-financial reports, in accordance with international standards.

• Monitors the effectiveness of human rights measures and implements corrective actions when violations are identified

ENGAGEMENT WITH STAKEHOLDERS

- Actively engages with government agencies, NGOs, and international organizations on human rights protection issues.
- Conducts public hearings and consultations with local communities when implementing projects.

KMG views the implementation of its Human Rights Policy as a dynamic process, requiring continuous improvement aligned with international best practices.



OUR COMMUNITIES

GRI 203-1, GRI 413-1

As part of subsoil use contracts and enterprise development master plans, KMG allocates substantial funds for infrastructure development and social assistance for those in need. Based on

agreements and memoranda with local authorities (akimats), KMG subsidiaries (SDEs) finance regional social initiatives.

KEY REGIONAL INVESTMENTS

- Ozenmunaigas JSC KZT 1.7 billion for the development of social infrastructure in Zhanaozen and Karakiyan district of the Mangystau Region.
- Embamunaigas JSC KZT 617.7 million for the construction of a 150-seat sports and wellness center in Tandai village (Atyrau Region) and KZT 168.8 million for multifunctional sports grounds.
- Mangistaumunaigas JSC KZT 140 million to the Mangystau akimat for regional infrastructure development.

- Kazakhoil Aktobe LLP- KZT 168 million for regional development in Aktobe Region and KZT 205.3 million to its social fund.
- KazakhTurkMunai LLP KZT 285.7 million for social infrastructure in Aktobe and Mangystau
- Urikhtau Operating LLP KZT 34.4 million for regional socio-economic development.
- Kazgermunai LLP KZT 375.58 million for the socio-economic development of the Kyzylorda region.

COMPLETED PROJECTS

CONSTRUCTION OF THE MULTIFUNCTIONAL SPORTS COMPLEX "JAIYQ ARENA" IN URALSK

As instructed by the President of Kazakhstan, KMG completed the construction of a multifunctional sports complex in Uralsk. The facility spans over 20,000 sq.m., has a capacity of 300 people per shift, and includes a swimming pool, halls for martial arts, fitness, futsal, volleyball, basketball, and a 1,200-seat athletics arena. Total cost: KZT 19.9 billion.

REHABILITATION AND SUPPORT CENTER FOR CHILDREN WITH SPECIAL NEEDS IN ATYRAU REGION

The modern facility was handed over to the Zhylyoi district akimat. It employs 40 specialists (speech therapists, defectologists, psychologists), providing free services to children aged 3–14. Up to 180 children attend the center daily.

PALACE OF SCHOOLCHILDREN IN KYZYLORDA

Funded by JV Kazgermunai LLP (KZT 2.4 billion), the modern educational complex accommodates 350 children and includes a technocenter, programming and robotics classes, environmental lab. TV studio, and creative classrooms.

PROJECTS IN PROGRESS

DEVELOPMENT OF RURAL ANCHOR SCHOOLS IN MANGYSTAU REGION

As part of the national "Otpan" initiative, KMG is modernizing rural schools in Mangystau. In 2024, over 50 classrooms were upgraded in the villages of Taushyk, Zhetybai, and Rakhat. STEM labs, art and TV studios, and robotics classrooms have been established in three schools serving more than 3,500 students and staffed by 380 teachers.

CHARITY INITIATIVES

• Karazhanbasmunai LLP contributed KZT 32 million to build a children's playground commemorating the 50th anniversary of the first oil well at the Karazhanbas field.

• PetroKazakhstan Oil Products LLP donated KZT 180 million to the Shymkent Corporate Social Development Fund "Shymkent -Kayirymdy Kala" for local social projects.

"ZHARKYN BOLASHAK" GRANT PROGRAM

To improve the level of education in Mangystau Region, KMG is implementing a grant support program. In 2024, 1,010 grantees studied at 62 institutions across 10 regions. 2.4 billion tenge has been allocated to finance the program.

• KMG allocated up to KZT 10 billion to assist flood-affected regions through the Samruk Kazyna Trust Corporate Foundation, the unified operator of charitable assistance for the Samruk-Kazyna Fund.



SUPPLIER ENGAGEMENT

GRI 204-1

EXPANDING COMPETITIVE PROCUREMENT

In 2024, the total procurement plan of the KMG Group amounted to KZT 1,219 billion (excluding VAT). KMG's procurement priorities include reducing single-source purchases and increasing the share of competitive tenders, thereby promoting fair competition and sustainable development goals.

Competitive procurement methods include open tenders, price quotation requests, e-store

purchases, and commodity exchanges. In 2024, the volume of contracts from competitive procurement reached KZT 593 billion, accounting for 51% of the total procurement plan.

Single-source purchases are applied only when competitive procedures are objectively not feasible. This approach minimizes the risks of limited competition and enhances procurement transparency.

VOLUME OF COMPETITIVE PROCUREMENT (EXCLUDING VAT), KZT BILLION¹⁷

Year		Goods	Works	and Services		Total
	Amount	Share, %	Amount	Share, %	Amount	Share, %
2022	237	23	275	26	512	49
2023	302	25	320	26	622	51
2024	258	22	335	29	593	51

IMPORT SUBSTITUTION

KMG actively promotes import substitution in procurement, guided by the requirements of the Law of the Republic of Kazakhstan "On Procurement of Certain Entities of the Quasi-Public Sector" dated June 8, 2021. A Program to Support the Establishment of New Production Facilities is being implemented, which provides for the conclusion of offtake contracts.

The main goal of the Program is to support private entrepreneurs launching new production facilities and implementing technological upgrades to

manufacture products in demand by companies within the Samruk-Kazyna Fund. Offtake contracts enable companies to receive guaranteed orders for products that will be manufactured within the territory of the Republic of Kazakhstan.

In 2024, KMG's subsidiaries and dependent entities signed 137 offtake contracts totaling KZT 58.7 billion (including VAT), contributing to the development of domestic production and reduction of import dependency.

VOLUME OF KMG OFFTAKE CONTRACTS

Year	Number of Contracts	Amount, million KZT
2022	56	791
2023	64	1,687
2024	137	58,688

IMPORTED GOODS IN PROCUREMENT

Year	Amount, billion KZT	Share of Goods Supplied Without Certificate of Kazakh Origin (CT-KZ)®, %
2022	90	23
2023	158	28
2024	112	22

TOTAL VOLUME OF SUPPLIED GOODS, WORKS AND SERVICES (GWS), INCLUDING LONG-TERM PROCUREMENT CONTRACTS. AND SHARE OF LOCAL CONTENT IN GWS PROCUREMENT

Year		Goods	Works	and Services		Total
	Total amount, billion KZT	Local Content Share, %	Total amount, billion KZT	Local Content Share, %	Total amount, billion KZT	Local Content Share, %
2022	410	58	1,290	90	1,700	82
2023	606	50	1,580	88	2,186	77
2024	503	55	1,550	89	2,053	81

⁷⁷Competitive procurement methods include tendering, request for quotations, electronic marketplace, and commodity exchanges.

¹⁸ The share of goods supplied without a certificate of Kazakhstani origin represents the share of imported goods delivered during the reporting period.

SUSTAINABLE DEVELOPMENT PRINCIPLES IN ENGAGEMENT WITH COUNTERPARTIES

KMG builds relationships with counterparties based on the principles of sustainable development, which include legality and transparency of business processes, compliance with contractual obligations, and zero tolerance for corruption. When selecting suppliers, KMG evaluates a combination of key factors: optimal price-quality ratio, delivery terms, and the business reputation of the counterparty.

In turn, KMG places reciprocal obligations on its partners, requiring them to:

- Comply with applicable legislation
- Ensure fair treatment of employees
- Prohibit the use of child labor
- Provide safe working conditions
- Adhere to environmental standardsUphold ethical business practices

These requirements form an integral part of contracts concluded by KMG with counterparties. Their inclusion helps protect labor rights, ensure decent working conditions for citizens of the Republic of Kazakhstan, and strengthen environmental safety.

KMG is confident that the implementation of these measures will help reduce cases of misconduct among partner companies and increase the level of responsibility of participants in procurement processes.





ABOUT THE REPORT

GRI 2-2, GRI 2-3, GRI 2-4

NC KazMunayGas JSC has been publishing sustainable development reports annually since 2008, and since 2012 it has been publishing reports in accordance with the GRI Sustainability Reporting Standards (GRI). This report reflects KMG's commitment to transparency and accountability to its stakeholders and covers key aspects of sustainable development, including economic, environmental, and social performance.

The 2024 Sustainable Development Report has been prepared in accordance with the GRI Standards, including the sector-specific standard GRI 11: Oil and Gas Sector 2021. The reporting period is the calendar year from January 1 to December 31, 2024.

To ensure the objectivity and reliability of the disclosed information, the report underwent external verification. The assurance provider was selected through a competitive procurement process in line with the procedures of Samruk-Kazyna JSC.

The reporting boundaries include KMG and its subsidiaries and dependent entities in which the Company holds 50% or more of the voting shares (ownership interest), as well as legal entities whose operations are under KMG's control (see section "Reporting Boundaries" for details).

To ensure comparability and data consistency, information is presented in a multi-year dynamic format.

The Sustainable Development Report is approved by the KMG Board of Directors and is communicated to stakeholders by publishing on the corporate website and distributing the printed version.

KMG's Sustainable Development reports are available in Kazakh, Russian, and English on the KMG website: https://www.kmg.kz/en/ sustainable-development/. An interactive version of the Report is also published in Kazakh, Russian, and English on the KMG website: https://www. kmg.kz/en/ sustainable-development/.

The report has been prepared in line with the GRI Standards, enabling comparison of performance across different reporting periods.

Guided by international sustainable development initiatives, KMG is a signatory to the UN Global Compact and integrates the Sustainable Development Goals (SDGs) into its core activities. This report outlines the Company's progress within these frameworks.

The purpose of this report is to inform stakeholders about the Company's strategic priorities, its efforts in the area of sustainable development, and ESG initiatives that contribute to the creation of longterm value for society and the business.

REPORTING BOUNDARIES

The reporting boundaries of NC KazMunayGas JSC encompass subsidiaries and dependent entities in which KMG directly or indirectly holds 50% or more

of the voting shares (ownership interest), as well as legal entities whose operations KMG is entitled to control.

CONSOLIDATED REPORTING

AS OF DECEMBER 31, 2024, THE CONSOLIDATED FINANCIAL STATEMENTS INCLUDE THE FOLLOWING ENTITIES:

Exploration Production KazMunayGas JSC	National Maritime Shipping Company Kazmortransflot LLP
Oil Company KazMunayTeniz LLP	Cooperative KazMunayGas PKI U.A.
KMG Karachaganak LLP	Atyrau Oil Refinery LLP
KazakhTurkMunay LLP	Pavlodar Petrochemical Plant LLP
KMG Kashagan B.V.	KMG International N.V.
Dunga Operating GmbH	KMG Drilling&Services LLP
KazTransOil JSC	

REPORTING BOUNDARIES BY SECTION AND INDICATOR

- Corporate Governance: Includes all KMG subsidiaries and dependent entities, regardless of ownership share.
- Financial and Operating Results: Presented based on consolidated financial reporting prepared in accordance with International Financial Reporting Standards (IFRS).
- Human Resource Management: Covers entities with the largest number of employees.
- Social Policy: Applies to key subsidiaries involved in the implementation of social programs.
- Industrial Safety and Occupational Health: Covers key production companies.

- Water Resource Management: Involves enterprises with significant water use.
- Greenhouse Gas Emissions: Includes the largest entities operating in oil and gas exploration, production, and processing.
- Air Emissions Control: Covers entities with the highest emission volumes.
- Associated Gas Utilization: Applies to companies with the most substantial volumes of associated petroleum gas.
- Energy Use and Efficiency: Encompasses the most energy-intensive operations.
- Waste Management: Includes the largest entities involved in oil and gas exploration, production, and processing.



PERIMETER OF DISCLOSURES

Disclosure	Economic Impact	ts	Social Policy					Environm	nental Prote	ction					
	Value Created	Anti- corruption	Local Communities	Employment Practice			Occupational Health and Safety	Energy	Water Resources	Biodiversity	Emissions		Waste Manage		_
	GRI 201-1 GRI 201-4 GRI 203-1 GRI 203-2 GRI 204-1	GRI 205-1 GRI 205-2 GRI 205-3	GRI 413-1 GRI 414-1 GRI 2-27	GRI 2-7 GRI 2-8 GRI 2-30 GRI 401-1		GRI 404-1 GRI 404-3	GRI 403-8 GRI 403-9	GRI 302-1 GRI 302-3 GRI 302-4		GRI 304-1 GRI 304-2 GRI 304-3 GRI 304-4	GRI 305-1 GRI 305-2 GRI 305-3	GRI 305-4 GRI 305-5 GRI 305-7	GRI 306-1 GRI 306-2	GRI 306-3 GRI 306-4 GRI 306-5	
KMG Group Company	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	√ √ √ √ √	 	/ /	✓ ✓	✓ ✓	✓ ✓ ✓	/ / / /	✓ ✓ ✓	/ / /	✓ ✓	✓ ✓ ✓	
NC KazMunayGas JSC	/ / / / /	✓ ✓ ✓	/ / /	V V V V	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/ /	✓				√		✓	✓ ✓ ✓	
KazMunayGas Exploration Production JSC	\[\] \[\] \[\] \[\]	✓ ✓ ✓	✓	✓											
KazMunayTeniz MNC LLP	\[\] \[\] \[\] \[\]	✓ ✓ ✓	✓	✓ ✓ ✓	V V V										
KMG Karachaganak LLP	\[\] \[\] \[\]	✓ ✓ ✓	/ / /	V V V V	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/ /	✓								
Kazakhturkmunay LLP	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/ /	✓ ✓		✓ ✓ ✓	\(\)	/ / /	/ / /	✓ ✓	✓ ✓ ✓	
KMG Kashagan B.V.	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	V V V V	 	/ /	√								_
Dunga Operating GmbH	/ / / / /	✓ ✓ ✓	✓	✓ ✓ ✓	V V V		√	✓ ✓			✓ ✓ ✓	✓	✓	✓ ✓ ✓	_
KazTransOil JSC	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	√ √ √ √ √	V V V V .	/ /	✓ ✓		✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓	/ / /	✓ ✓		_
NMSK KazMorTransFlot LLP	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	√ √ √ √	 	/ /	✓ ✓	✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓		✓ ✓	✓	✓ ✓ ✓	_
Atyrau Refinery LLP	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	V V V V	 	/ /	✓ ✓	✓ ✓ ✓		✓ ✓ ✓ ✓	✓ ✓ ✓	/ / /	✓ ✓	✓ ✓ ✓	_
Pavlodar Oil Chemistry Refinery LLP	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	V V V V	 	/ /	✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓	/ / /	✓ ✓	✓ ✓ ✓	_
KMG Drilling&Services LLP	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	√ √ √ √	V V V V V	/ /	✓								_
Ozenmunaigas JSC	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	V V V V	 	/ /	✓ ✓		✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓	/ / /	✓ ✓	✓ ✓ ✓	_
Embamunaigas JSC	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	V V V V	 	/ /	✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓	/ / /	✓ ✓	✓ ✓ ✓	- (
Oil Construction Company LLP	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	V V V V	 	/ /	✓ ✓			✓ ✓ ✓ ✓	✓ ✓	/ / /	✓ ✓	✓ ✓ ✓	
Oil Services Company LLP	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	V V V V	 	/ /	✓ ✓			✓ ✓ ✓ ✓	✓ ✓	/ / /	✓ ✓	✓ ✓ ✓	
Urikhtau Operating LLP	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	√ √ √ √	 	/ /	✓ ✓			✓ ✓ ✓ ✓	✓ ✓ ✓	/ / /	✓ ✓	✓ ✓ ✓	_
KazGPP LLP	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	√ √ √ √ √	 	/ /	✓ ✓		✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓	✓ ✓ ✓	_ (
Magistralny Vodovod LLP	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	√ √ √ √	 	/ /			✓ ✓ ✓						
UDTV LLP	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	V V V V	 	/ /	√					√	✓ ✓	✓ ✓ ✓	
Ken-Kurylys-Service LLP	\[\] \[\] \[\] \[\]	✓ ✓ ✓	/ / /	V V V V	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/ /	✓					✓	✓ ✓	✓ ✓ ✓	
Petrotrans Limited	\[\] \[\] \[\]	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/ /									
Cooperative KazMunaiGaz U.A	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/ /									
KMG Finance Sub B.V.	\[\] \[\] \[\] \[\]	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/ /									
KMG International N.V.	\[\] \[\] \[\] \[\]	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/ /									
Batumi Oil Terminal LLC	\[\] \[\] \[\] \[\]	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	/ /					✓ ✓	✓			
Batumi Sea Port LLC	/ / / / /	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	 	/ /									
Green Energy LLP	/ / / / /	✓ ✓ ✓	/ / /	√ √ √ √	 	/ /									
Bolashak Operating LLP (former Zhambyl Petroleum LLP)	/ / / /	/ / /	✓ ✓ ✓	✓ ✓	✓ 、	/ /									
KMG Barlau LLP	/ / / / /	/ / /	✓ ✓ ✓	✓ ✓ ✓ ✓	 	/ /	✓								
KMG PetroChem LLP	\(\sqrt{ \sq}\q \sqrt{ \q \sq}} \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq}} \q \sq\ti \sq\ti \sq\tikq} \sq\ti\q \sq\sq \sq\ti \sq\tikq}\q \sq\sint{ \sint{ \sinq} \sq\ti \sint{ \sint{ \sinq} \squit \q	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓	 	/ /	✓								

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Disclosure	Economic Impa	cts	Social Policy						Environm	nental Prote	ction				
	Value Created	Anti- corruption	Local Communities	Employment Practice			ı	Occupational Health and Safety	Energy	Water Resources	Biodiversity	Emission	ns	Waste Manage	ement
	GRI 201-1 GRI 201-4 GRI 203-1 GRI 203-2	GRI 204-1 GRI 205-1 GRI 205-2 GRI 205-3	GRI 413-1 GRI 414-1 GRI 2-27	GRI 2-7 GRI 2-8 GRI 2-21 GRI 2-30 GRI 401-1	GRI 401-2	GRI 401-3 GRI 405-1 GRI 406-1 GRI 404-1	GRI 404-3	GRI 403-8 GRI 403-9	GRI 302-1 GRI 302-3 GRI 302-4	GRI 303-3 GRI 303-4 GRI 303-5	GRI 304-1 GRI 304-2 GRI 304-3 GRI 304-4	GRI 305-1 GRI 305-2	GRI 305-3 GRI 305-4 GRI 305-5	GRI 305-7 GRI 306-1 GRI 306-2	GRI 306-3 GRI 306-4 GRI 306-5
KMG-Security LLP	\(\sqrt{ \qquad \sqrt{ \sq}\q \sqrt{ \q \sq}} \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq}} \squit} \squit{ \squit{ \sq} \sqrt{ \squit} \squit{ \sq \sq \sq \sq \sq \sint{ \sq}\q \sq}\ \sqit{ \squit} \squit{ \sq} \squit{ \squit} \squit \	/ / / /	✓ ✓ ✓	V V V V	√	/	✓	√							
Ozenmunaiservice LLP	\(\sqrt{ \qquad\ta\ta\ta\ta\etitt{ \sqrt{ \sqrt{ \sqrt{ \sq\tin\ta\ta\etitt{ \sqrt{ \qq\ti \sqrt{ \sq}} \sqrt{ \sq}} \squad{ \sqrt{ \sq}\q \sq\sq \sq\sq \sq\ti \sq\tik\q \sq \sint{ \sinq \sint{ \sinitit{ \q \sintit{ \sint{ \sinq \si	/ / / /	✓ ✓ ✓	✓ ✓ ✓ ✓	✓	/	< ·	✓ ✓			/ / / /	✓ ✓	√	√	✓ ✓ ✓
Polymer Production LLP	\(\ \ \ \sq	/ / / /	✓ ✓ ✓	✓ ✓ ✓ ✓	✓	/	✓								
KazMunayGasService LLP	\(\ \ \ \ \	/ / / /	✓ ✓	✓ ✓ ✓ ✓	✓	/	✓								
KMG-Kumkol LLP	\(\sqrt{ \qquad \sqrt{ \sq}\q \sqrt{ \q \sq}} \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq}} \squit{ \squit} \squit \sqrt{ \sq}} \sqrt{ \sq\sq \squit{ \squit} \squit\q \sq \sint{ \sq}\q \sq}\ \sq \sq \sintii \q \sint{ \sq \q	/ / / /	✓ ✓ ✓	✓ ✓ ✓ ✓	─	/	✓	√							
KMG Engineering LLP	\(\sqrt{ \qquad \sqrt{ \sq}\q \sqrt{ \q \sq}} \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq}} \q \sq\ti \sq\ti \sq\tikq} \sq\ti\q \sq\sq \sq\ti \sq\ti\q \sq\ti\q \sinq} \sq \sint{ \sinq \sint{ \sinitita\q \sinq} \sq \	/ / / /	✓ ✓ ✓	✓ ✓ ✓		/ / / /	✓	√							
KMG-Aero LLP	\(\sqrt{ \qquad \sqrt{ \sq}\q \sqrt{ \q \sq}} \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq}} \q \sq\ti \sq\ti \sq\tikq} \sq\ti\q \sq\sq \sq\ti \sq\tikq \sq\ti\q \sinq} \sq \sinq \sintii \q \sinq \sinq \sinq \sinq \si	/ / / /		✓ ✓ ✓		/ / / /	✓	√							
Oil Transport Corporation LLP	\(\sqrt{ \qquad \sqrt{ \sq}\q \sqrt{ \q \sq}} \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq}} \squit} \squit{ \squit{ \sq} \sqrt{ \squit} \squit{ \sq} \squit{ \squit{ \sq}\q\sq\sq \sign{ \sq}\q \sq\ti \squit{ \sq} \squit{ \squit}	/ / / /	✓ ✓ ✓	✓ ✓ ✓ ✓	✓	/ / / /	✓	√					√	√	✓ ✓ ✓
Mangistaumunaigas JSC	\(\ \ \ \ \	/	√	✓				✓ ✓	✓ ✓ ✓	✓ ✓ ✓	/ / / /	✓ ✓	✓	· ✓ ✓	✓ ✓ ✓
Kazakhoil Aktobe LLP	V V V V V	/	✓	✓				✓ ✓	✓ ✓ ✓	✓ ✓ ✓	/ / / /	✓ ✓	✓	′ ✓ ✓	✓ ✓ ✓
Karazhanbasmunay JSC	\(\sqrt{ \sq}\q \sqrt{ \q \sq}} \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq}} \q \sq\ti \sq\ti \sq\tikq} \sq\ti\q \sq\sq \sq\ti \sq\tikq \sq\ti\q \sinq} \sq \sint{ \sint{ \sinq \sint{ \sinitit{ \q \sintii} \q	/	√	✓				✓ ✓	✓ ✓ ✓	✓ ✓ ✓	/ / / /	✓ ✓	✓	′ ✓ ✓	✓ ✓ ✓
PetroKazakhstan Oil Products LLP	V V V V V	/		✓				✓ ✓	✓ ✓ ✓	✓ ✓ ✓	/ / / /	✓ ✓	✓	′ ✓ ✓	✓ ✓ ✓
CASPI BITUM JV LLP	V V V V V	/	√	✓ ✓				✓ ✓	✓ ✓ ✓	✓ ✓ ✓	/ / / /	✓ ✓	✓	′ ✓ ✓	✓ ✓ ✓
Kazgermunai JV LLP	\(\sqrt{ \qquad \sqrt{ \sq}\q \sqrt{ \q \sq}} \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq}} \squit} \squit{ \squit{ \sq} \q \sq \sq\ti \sq\sq \sq\sq \sq\sq \sq\sint{ \sq\s\qq\q \sq\sq \sint{ \sq}\q \sq \sq \sintii \q \sint{ \sq \q	/ / / /	✓	✓				✓ ✓	✓ ✓ ✓	J J J	/ / / /	V V		· 🗸 🗸	✓ ✓ ✓
KMG Systems & Services LLP	\(\sqrt{ \qquad\ta\ta\ta\ta\etitt{ \sqrt{ \sqrt{ \sqrt{ \sq\tin\ta\ta\etitt{ \sqrt{ \qq\q \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq}\q \sqrt{ \qq} \sqrt{ \sqrt{ \sqrt{ \sq}} \qq \sq\ti\q\q\ \sq\ti\q\q\q\q\q\q\q\q\q\q\q\q\q\q\q\q\q\q	/	✓ ✓ ✓	✓ ✓ ✓		/ / / /	< \	✓ ✓			/ / / /		√	✓ ✓	✓ ✓ ✓
Kazakhstan Petrochemical Industries Inc LLP	\(\sqrt{ \sq}\q \sqrt{ \q \sq}} \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq}} \q \sq\ti \sq\ti \sq\tikq} \sq\ti\q \sq\sq \sq\ti \sq\ti\q \sint{ \sq\ti\q \sq \sint{ \sq}\q \sq\ti \sint{ \sint{ \qq} \q \sq\ti \	/ / / /		✓					✓ ✓	✓ ✓ ✓		✓ ✓	✓ ✓ ✓	′ ✓ ✓	✓ ✓ ✓
Munaitelecom LLP	\(\sqrt{ \qquad \sqrt{ \sq}\q \sqrt{ \q \sq}} \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq}} \squit{ \squit} \squit \squit{ \sq\tikq} \squit{ \sq \sq \squit{ \squit} \squit\q \sq \sint{ \sq}\q \sq \sint{ \sq \sint{ \sq} \squit{ \squit} \	/ / / /	✓ ✓	✓ ✓ ✓ ✓		/	✓	√					√	✓ ✓	✓ ✓ ✓
Ural Oil & Gas LLP	\(\ \ \ \ \	/ / / /	✓	✓				√	✓ ✓			✓ ✓	/ / /	✓ ✓	✓ ✓ ✓
KMG EP-Catering LLP	\(\ \ \ \ \	/ / / /	✓	✓ ✓ ✓ ✓	✓	/	✓	√					✓		✓ ✓ ✓
Al-Farabi Operating LLP	\(\ \ \ \ \	/	✓	✓				√					✓	✓	
Mangistauenergomunai LLP	\(\ \ \ \ \	/ / / /	✓ ✓	✓ ✓ ✓ ✓	✓	/	✓						✓	✓ ✓	✓ ✓ ✓
Karaton Operating Ltd.	\(\sqrt{ \qquad \sqrt{ \sq}\q \sqrt{ \q \sq}} \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq}} \squit} \squit{ \squit{ \sq} \q \sq \sq\ti \sq\sq \sq\sq \sq\sq \sq\sint{ \sq\s\qq\q \sq\sint{ \q \sq}\q \sq\sint{ \sq} \q \sq \sintit \sq\ti \q	/	✓	✓ ✓		√ ✓	✓	√							
Rompetrol Rafinare SA (Petromidia)	\(\sqrt{ \qquad \sqrt{ \sq}\q \sqrt{ \sq}} \squit{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq \sq}} \squit \squit{ \sqrt{ \sq} \squit{ \sq\sq \sq}\ \sqsq} \squit{ \sq}\q \sq\ti \sint{ \sq}\q \sq}\ \sq \sq \sintiin \sq \sin	/		✓								✓ ✓ ·	✓		
Vega Refinery	\(\ \ \ \ \	/ / / /		✓								✓ ✓ ·	✓ ✓		
Isatay Operating Company LLP	\(\sqrt{ \qquad \sqrt{ \sq}\q \sqrt{ \sq}} \squit{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq \sq}} \squit \squit{ \sqrt{ \sq} \squit{ \sq\sq \sq}\ \sqsq} \squit{ \sq}\q \sq\ti \sint{ \sq}\q \sq}\ \sq\ti \sintit \sint{ \q	/ / / /	✓	✓				✓						✓	✓ ✓ ✓
AK SU KMG LLP	\(\sqrt{ \qquad\ta\ta\ta\ta\etitt{ \sqrt{ \sqrt{ \sqrt{ \sq\tin\ta\ta\etitt{ \sqrt{ \qq\q \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq}} \sqrt{ \qq} \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq \sq}} \squid{ \sq\tikq} \squid{ \sq\sq\sq \sq \sintiq \sq \sint{ \sq \sint{ \sinq \sint{ \sinq \sint{ \sq} \q \sintit \sinq \si	/	✓	✓ ✓ ✓	<u> </u>	/ /		√							
TH KazMunaiGaz B.V.	\(\ \ \ \ \	/	✓	✓ ✓ ✓	✓	/ /		√							
KMG EP Netherlands Energy Coöperatief	V V V V V		✓	✓ ✓ ✓		/ /		√							
Kalamkas-Khazar Operating LLP	\(\sqrt{ \qquad\ta\	/	√	✓				√							
Petrosun	\(\sqrt{ \qquad\ta\ta\ta\ta\etitt{ \sqrt{ \sqrt{ \sqrt{ \sq\tin\ta\ta\etitt{ \sqrt{ \qq\ti \sqrt{ \sq}} \sqrt{ \sq}} \squad{ \sqrt{ \sq}\q \sq\sq \sint{ \squid{ \sq\sq \sint{ \sq\q \sint{ \sq}\q \sq\ti \sint{ \sint{ \sint{ \sinq} \q	/		✓											
Becturly Energy Operating LLP	\(\sqrt{ \qquad \sqrt{ \sq}\q \sqrt{ \sq}} \squit{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sqrt{ \sq \sq}} \squit \squit{ \sqrt{ \sq} \squit{ \sq\sq \sq}\ \sqsq} \squit{ \sq}\q \sq\ti \sint{ \sq}\q \sq\ti \sint{ \sq}\q \sq\ti \q	/	√	✓				√							
Kurmangazy Petroleum LLP		/	✓	✓				√							
Professional Geo Solutions Kazakhstan LLP	\(\sqrt{ \qquad\ta\	/ / / /	✓	✓				√							

DISCLOSURE BREAKDOWN

GRI 201-1	Directly Created and Distributed Economic Value	GRI 404-3	Percentage of Employees Receiving Regular Performance and Career Development Reviews
GRI 201-4	Financial assistance received from government	GRI 403-8	Occupational Health and Safety Management System
GRI 203-1	Investments in Infrastructure and Supported Services	GRI 403-9	Work-related injuries
GRI 203-2	Significant Indirect Economic Impacts	GRI 302-1	Energy consumption within the organization
GRI 204-1	Proportion of Spending on Local Suppliers	GRI 302-3	Energy intensity
GRI 205-1	Operations Assessed for Corruption Risks	GRI 302-4	Reduction in energy consumption
GRI 205-2	Communication and Training on Anti- corruption Policies and Procedures	GRI 303-3	Water withdrawal
GRI 205-3	Confirmed Corruption Incidents and Actions Taken	GRI 303-4	Water discharge
GRI 413-1	Operations with local community engagement, impact assessments, and development programs	GRI 303-5	Water consumption
GRI 414-1	New Suppliers Screened Using Social Criteria	GRI 304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas
GRI 2-7	Employees	GRI 304-3	Protected or restored habitats
GRI 2-8	Non-employee workers	GRI 304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations
GRI 2-21	Pay Ratio: the ratio of the total annual compensation of the highest-paid employee to the median annual compensation of all other employees	GRI 305-1	Direct GHG emissions (Scope 1)
GRI 2-27	Compliance with laws and regulations	GRI 305-2	Indirect GHG emissions from energy consumption (Scope 2)
GRI 2-30	Collective bargaining agreements	GRI 305-3	Other indirect GHG emissions (Scope 3)
GRI 401-1	New Employees and Employee Turnover	GRI 305-4	GHG emissions intensity
GRI 401-2	Benefits Provided to Full-time Employees but Not to Temporary or Parttime Employees	GRI 305-5	Reduction of greenhouse gas emissions
GRI 401-3	Parental Leave	GRI 305-7	Emissions of NOx, SOx, and other significant air pollutants
GRI 405-1	Diversity of Governance Bodies and Employees	GRI 306-1	Waste generation and significant waste impacts
GRI 406-1	Discrimination Incidents and Corrective Actions Taken	GRI 306-2	Management of significant waste impacts
GRI 404-1	Average Hours of Training per Employee per Year	GRI 306-4	Waste directed for recycling
GRI 306-3	Waste generated	GRI 306-5	Waste directed to landfill

KEY ESG DISCLOSURES

PRODUCTION DISCLOSURES

Key Production Disclosures	Units	2022	2023	2024
Oil & Gas Sector				
Crude oil and gas condensate production	thousand tonnes/ year	22,012	23,532	23,837
Crude oil and gas condensate production (daily)	thousand tonnes/ day	60,307	64,471	65,128
Natural and associated gas production	million m³/year	8,241	9,459	9,554
Natural and associated gas production (daily)	thousand m³/day	22,578	25,915	26,125
Number of drilling sites (>50% share)	units	65	66	67
Oil and gas processing	thousand tonnes	19,900	19,593	19,158
Production of petroleum products, incl.	thousand tonnes	18,669	18,183	17,949
Gasoline	thousand tonnes	5,330	5,628	5,566
Fuel oil	thousand tonnes	2,416	2,011	1,697
Vacuum gas oil (VGO)	thousand tonnes	482	179	258
Paraxylene	thousand tonnes	76	26	108
Diesel fuel	thousand tonnes	6,588	6,460	6,446
Benzene	thousand tonnes	9	23	28
Coke	thousand tonnes	377	630	630
Liquefied gas	thousand tonnes	846	878	883
Sulfur	thousand tonnes	60	108	102
Jet fuel	thousand tonnes	838	792	985
Furnace fuel	thousand tonnes	16	38	18
Bitumen	thousand tonnes	657	574	557
Commercial crude oil	thousand tonnes	231	242	201
Feedstock for carbon black	thousand tonnes	10	9,542	0
Light naphtha	thousand tonnes	2	1	1
Propylene	thousand tonnes		117	83
Other	thousand tonnes	730	468	388
Installed processing capacity	thousand tonnes/ day	75.8	75.8	75.8
Total oil transportation, incl.	million t/km	74,659	80,359	
via trunk pipelines	thousand tonnes	65,316	69,581	70,309
via maritime transport (tankers)	thousand tonnes	9,343	10,778	13,169

ECONOMIC DISCLOSURES

COMPLIANCE WITH LAWS AND REGULATIONS

GRI 2-27

Disclosure	2022	2023	2024
Total number of instances of non-compliance with laws and regulations, units	67	40	51
– of which resulted in fines	67	40	51
 of which resulted in non-monetary sanctions 	0	0	0
Total number of non-compliance cases with paid fines, units	67	40	51
- imposed during the reporting period	58	39	50
- imposed in previous reporting periods	9	1	1
Total amount of fines paid for non-compliance with laws and regulations, KZT thousand	280,311	91,563	196,306
- imposed during the reporting period	204,796	85,937	195,118
– imposed in previous reporting periods	75,515	5,626.1	1,118.36

DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED, KZT BILLION

GRI 201-1

Disclosure		2022	2023	2024
Direct economic value generated				
Total revenue		9,827	9,242	9,238
Economic value distributed				
Total expenses		8,521	8,315	8,144
Economic value retained				
Profit		1,307	927	1,094
	Payments to providers of capital	701	558	552
	Payments to state	1,176	1,162	1,079
	Capital investments	535	804	716

KMG did not receive any financial assistance in monetary form from the state during the reporting period and does not make donations for state or political purposes. KMG does not engage in lobbying or political financing. All forms of lobbying and political expenditures, including in-kind contributions, are considered.

SOCIAL INFRASTRUCTURE INVESTMENTS, KZT BILLION

GRI 203-1

Disclosure	2022	2023	2024
Amount of significant infrastructure investments	12.0	5.6	3.7

NUMBER OF OIL AND GAS FIELDS

Disclosure	2022	2023	2024
Total number of fields	66	67	68
Onshore fields	65	66	67
Offshore fields	1	1	1

ENVIRONMENTAL DISCLOSURES

WATER MANAGEMENT DISCLOSURES

GRI 303-3, GRI 303-4, GRI 303-5

Disclosure	2022	2023	2024
Total volume of water taken away excluding reservoir waters, thousand m³	83,707	80,437	83,072
Total water discharge, thousand m ³	10,309	10,457	10,512
Total water consumption, thousand m ³	83,707	80,437	83,072

Structure of Withdrawal, Discharge and Water Use as of the End of 2024, thousand m ³	All regions	Water-scarce regions
Total water withdrawal, thousand m³	223,576	26,784
By source:		
Surface water	34,774	3,421
Groundwater	24,796	17,463
Seawater	13,923	1,057
Municipal water supply	9,488	4,829
Formation water	140,504	_
Third-party water supply	92	14
By water type:		
Freshwater	37,396	10,372
Other water	45,675	16,413
Total water discharge, thousand m ³	148,375	2,987
By discharge destination:		
Groundwater reinjection	_	
groundwater (injection)	137,062	

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GREENHOUSE GAS EMISSIONS INTENSITY DISCLOSURES

	Production		Trai	nsportati	ion		Refining		
	2022	2023	2024	2022	2023	2024	2022	2023	2024
Emissions Intensity - Scope 1									
GHG Emissions Intensity Scope 1 (tonnes CO₂ per KZT million of revenue)	0.28	0.28	0.32	0.01	0.01	0.02	0.59	0.60	0.59
Emissions Intensity - Scope 2									
GHG Emissions Intensity Scope 2, local-based (tonnes CO ₂ -eq per KZT million of revenue)	-	-	0.15	-	-	0.03	-	-	0.24
GHG Emissions Intensity Scope 2, market-based (tonnes CO₂-eq per KZT million of revenue)	-	-	0.15	-	-	0.03	-	-	0.23

AIR EMISSIONS DISCLOSURES

GRI 305-7

Volume of air pollutant emissions, thousand tonnes	2022	2023	2024
Nitrogen oxides (NOx)	16.00	15.27	15.22
Sulfur dioxide (SOx)	10.50	10.99	11.69
Carbon monoxide (CO)	13.71	22.96	21.50
Particulate matter (PM)	0.52	1.31	1.97
Other	79.86	68.93	66.38
Flaring of Raw Gas	2022	2023	2024
Total flaring volume of raw gas, million m ³	35.70	33.35	35.20
Raw gas utilization rate, %	98.80	98.90	98.90
Flaring intensity, tonnes per 1,000 tonnes of hydrocarbons produced	1.50	1.40	1.45

ENERGY CONSUMPTION DISCLOSURES

GRI 302-1, GRI 302-4

	2022	2023	2024
	1,557	1,578	1,805
Gasoline	70	58	93
Diesel	1,487	1,520	1,712
	5,954	17,846	5,22
Furnace oil	3,216	14,157	2,500
Crude oil	958	1,169	1,184
Mazut (fluel oil)	1,779	2,520	1,537
	Diesel Furnace oil Crude oil	1,557 Gasoline 70 Diesel 1,487 5,954 Furnace oil 3,216 Crude oil 958	1,557 1,578 Gasoline 70 58 Diesel 1,487 1,520 5,954 17,846 Furnace oil 3,216 14,157 Crude oil 958 1,169

Structure of Withdrawal, Discharge and Water Use as of
the End of 2024, thousand m³All regionsWater-scarce regionsArtificial water bodies (evaporation ponds, holding ponds, filtration
fields)10,512Transferred to third parties for treatment801By water type:--Freshwater--Other water147,5742,987Water consumption83,07126,784

5,522

451,271

136,519

99%

7,195

437,530

136,960

97%

8,460

535,510

140,504

98%

GREENHOUSE GAS EMISSIONS

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

Volume of recycled water, thousand m³

Share of associated formation water reinjected

Volume of reused water (after treatment), thousand m³

Volume of produced associated formation water, thousand m³

Scope 1. Direct Emissions		2022	2023	2024
Breakdown by Business Segment				
Production	million t CO ₂ / million t CO ₂ -eq	2.4 / 2.8	2.33 / 3.44	2.64 / 3.98
Refining	million t CO ₂ / million t CO ₂ -eq	5.1 / 5.2	5.01 / 5.03	4.92 / 4.94
Transportation	million t CO_2 / million t CO_2 -eq	0.1 / 0.1	0.1 / 0.1	0.14 / 0.14
Breakdown by Country				
Kazakhstan	million t CO_2 / million t CO_2 -eq	6.6 / 7.1	6.55 / 7.68	6.99 / 8.35
Romania	million t CO ₂ / million t CO ₂ -eq	0.9 / 0.9	0.88 / 0.88	0.69 / 0.69
Georgia	million t CO_2 / million t CO_2 -eq	0.02 / 0.02	0.02 / 0.02	0.02 / 0.02
Breakdown by Greenhouse Gas Type				
CO ₂	million t CO ₂	7.6	7.44	7.7
CH ₄	million t CO₂-eq	0.4	1.11	1.34
N_2^0	million t CO₂-eq	0.1	0.1	0.02
Scope 2 Indirect Emissions (Market-Based Method)	million t CO_2 / million t CO_2 -eq	3.2 / 3.2	3.4/3.4	3.3 / 3.3
Scope 2 Indirect Emissions (Location-Based Method)	million t CO ₂ / million t CO ₂ -eq	3.3 / 3.3	3.5/3.5	3.4 / 3.4
Scope 3 From Use of Sold Products	million t CO ₂ / million t CO ₂ -eq	61.6 / 61.8	54.6/54.8	59.1 / 59.2

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Energy consumption, thousand GJ		2022	2023	2024
	Marine fuel (IFO fuel oil)	1		
Refinery gas		43,156	28,223	35,995
Associated petroleum gas		15,702	12,933	13,809
Gas consumption, incl.:		48,975	46,794	53,509
	Natural gas	31,825	30,264	34,725
	Stripped gas	17,053	16,461	18,718
	LPG	97	69	65
Total		115,344	107,373	110,339
Electricity and Heat Consumption				
Energy from renewable sources		43	14	40
Electricity, incl.:		15,761	15,583	17,736
	Purchased	13,231	12,919	15,081
	Self-generated	2,530	2,663	2,655
Heat energy, incl.:		23,802	20,348	26,722
	Purchased	3,534	3,818	3,943
	Self-generated	20,268	16,529	22,779
Total		39,563	35,931	44,458
Total Energy Consumption		132,152	124,125	129,403
Energy Consumption by Segment, thousand GJ		2022	2023	2024
Oil & gas exploration and production		58,200	55,083	57,285
Oil & gas processing		68,654	64,423	59,492
Oil transportation		5,298	4,619	4,229
Petrochemicals (KPI)				8,397

2,057

717

2,361



WASTE MANAGEMENT

GRI 306-3, GRI 306-4, GRI 306-5

Waste generated by type	e, thousand tonnes	2022	2023	2024
Hazardous waste		382.4	383.1	358.0
	incl. drilling waste (drilling fluids and sludge) ¹⁹	220.4	228.4	179.6
Non-hazardous waste ²⁰		37.2	52.8	79.7
Total		419.5	435.9	437.7

Disclosure Waste directed to processing/utilization, thousand tonnes	On Company sites	2023 At contractor sites	On Company sites	2024 At contractor sites
Hazardous waste ²¹	825.2	736.4	1,131.2	321.7
incl. drilling waste	-	228.4	-	179.6
Non-hazardous waste	2.2	29.5	1.6	53.1
Total:	827.4	765.9	1,132.7	374.9
Waste sent for disposal and placement, thousand tonnes				
Hazardous waste	0.1	-	-	-
Non-hazardous waste	0.9	19.3	0.0	16.5
Total	1.0	19.3	0.0	16.5

ENVIRONMENTAL PROTECTION EXPENDITURES

Environmental Protection Expenditures by Type of Activity	Unit	2022	2023	2024
Implementation of technologies, including:	KZT million	777.0	7,448.6	3,586.7
BAT	KZT million			
AMS	KZT million	777.0	906.6	1,533.8
Forest-climate projects	KZT million			
Energy efficiency	KZT million			
Research and development	KZT million	470.5	363.3	1,555.7
Emission payments, including:	KZT million	3,489.4	3,420.5	3,430.8
Standard emission fees (tax)	KZT million	3,482.3	3,411.0	3,429.6
Excess emission fees	KZT million	7.1	9.5	1.2
Other	KZT million	27,650.0	46,495	36,867.6
Total:	KZT million	32,386.9	57,727.5	45,440.8

HTTPS://WWW.KMG.KZ/EN/

Disclosure

Energy Savings from Energy Efficiency Programs, thousand GJ

¹⁹ The decrease in 2024 is due to a decrease in the number of wells drilled in MMG and KBM.
20 The growth in 2024 is associated with an increase in the volume of construction waste generated at the PNHS (reconstruction of the cooling tower, plant communications, etc.).
21 Taking into account the recycling/utilization of historical and accumulated waste from previous periods.

BIODIVERSITY DISCLOSURES

Location and scale of operational sites in relation to key biodiversity areas

Site	Location	Key Biodiversity Areas (KBA)	Location in relation to KBA	Contract Area (km²)	Impact Mitigation Plan
Urikhtau	Mughalzhar District, Aktobe Region	State Nature Reserve of Local Importance "Kokzhide– Kumzhargan"	Partially overlaps	239.9	Hydrogeological monitoring
Alibekmola & Kozhasai	Mughalzhar District, Aktobe Region	Kokzhide Sands, Kokzhide Groundwater	Adjacent	156.5	Hydrogeological monitoring
Isatay	Central KCSK, Northern Mangystau Region	Special Environmentally Sensitive Zone of KCSK	Located within protected zone	1,060	Seasonal baseline studies, regular environmental monitoring
Abay	Northwest KCSK, Atyrau Region	Special Environmentally Sensitive Zone of KCSK	Located within protected zone	1,233.8	Seasonal baseline studies, regular environmental monitoring
Al-Farabi	Southern KCSK, Mangystau Region	Environmentally Sensitive Zone of KCSK	Does not intersect with KBA	6,046.6	Seasonal baseline studies, regular environmental monitoring
Kalamkas- Khazar	Northwestern Caspian Sea	Special Environmentally Sensitive Zone of KCSK	Located within protected zone	1,707.17	Seasonal baseline studies, regular environmental monitoring

SOCIAL DISCLOSURES

WORKFORCE STRUCTURE AND HEADCOUNT²²

GRI 2-7, GRI 2-8, GRI 405-1

Disclosure	2022	2023	2024
Total headcount	45,764	48,196	49,243
By gender:			
Men	37,055	39,218	40,120
Women	8,709	8,978	9,123
By age group:			
Under 30	6,484	5,006	5,686
30-50	26,227	28,468	28,584
Over 50	13,052	14,722	14,973
Outsourced personnel	2,980	3,209	3,357

Category	Men	Women	Total
GRI 405-1. Number of employees with disabilities	459	102	56´
Republic of Kazakhstan	428	95	523
Abai Region	1	-	1
Akmola Region	-	_	_
Aktobe Region	6	4	10
Almaty Region	-	_	-
Atyrau Region	107	20	127
West Kazakhstan Region	2	-	2
Zhambyl Region	-	1	1
Zhetysu Region	4	-	4
Karaganda Region	4	1	5
Kostanay Region	-	_	_
Kyzylorda Region	3	1	4
Mangystau Region	263	51	314
Pavlodar Region	15	6	21
North Kazakhstan Region	-	-	-
Turkistan Region	3	-	3
Ulytau Region	5	2	7
East Kazakhstan Region	-	-	-
Astana city	15	8	23
Almaty city	-	-	-
Shymkent city	-	1	1
Outside the Republic of Kazakhstan	31	7	38

²² Starting from 2024, the KMG Group accounts for the headcount based on the payroll. In previous reporting periods, the actual headcount was considered. As a result, historical personnel data may differ.

Disclosure		Administrative and managerial personnel	Production Personnel
Total	people	3,802	45,441
By gender:			
Men	people	1,816	38,304
	%	48	84
Women	people	1,986	7,137
	%	52	16
By age group:			
Under 30	people	311	5,375
	%	8	12
30-50	people	2,724	25,860
	%	72	57
Over 50	people	767	14,206
	%	20	31

Disclosure		Ma	anagement Board	Board of Directors
Total	peop	le 10	9	
By gender:				
Men	реор	le 9	8	
	%	90	89)
Women	реор	le 1	1	
	%	10	11	
By age group:				
Under 30	реор	le –	-	
	%	-	-	
30-50	peop	le 6	5	
	%	60	56)
Over 50	реор	le 4	4	
	%	40	44	+

Category	Total	Ву С	ontract Type	Ву	y Working Time	
		Permanent	Temporary	Full-time	Part-time	
Total	49,243	48,195	1,048	49,157	86	
By Gender						
Men	40,120	39,333	787	40,065	55	
Women	9,123	8,862	261	9,092	31	
By region						
Abai Region	58	58	-	58	-	
Akmola Region	23	23	-	22	1	
Aktobe Region	1,132	1,106	26	1,130	2	
Almaty Region	20	20	-	17		
Atyrau Region	10,605	10,443	162	10,597	11	
West Kazakhstan Region	699	661	38	699		
Zhambyl Region	-	-	-	-		
Zhetysu Region	179	175	4	179		
Karaganda Region	770	769	1	769	1	
Kostanay Region	-	-	-	-		
Kyzylorda Region	265	246	19	265		
Mangystau Region	22,026	21,609	417	22,002	24	
Pavlodar Region	3,119	3,099	20	3,114	5	
North Kazakhstan Region	85	85	-	85	-	
Turkistan Region	228	226	2	226	2	
Ulytau Region	647	642	5	644	3	
East Kazakhstan Region	-	-	-	-		
Astana city	2,120	2,089	31	2,114	6	
Almaty city	16	16	-	16	-	
Shymkent city	341	337	4	340	1	
Outside the Republic of Kazakhstan	6,910	6,591	319	6,880	30	

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EMPLOYEE HIRING AND TURNOVER DISCLOSURES

GRI 401-1

Category	Hired (persons)	Terminated (per	sons)	Turnover (%)
Total	3,928		3,272	6.6%
By Age Groups				
Under 30 years	1,087		583	1.2%
30-50	2,303		1,478	3.0%
Over 50 years	538		1,211	2.5%
By Gender				
Men	3,236		2,582	6.4%
Women	692		690	7.6%
By Regions				
Abai Region	4		4	-
Akmola Region	1		1	-
Aktobe Region	108		87	0.2%
Almaty Region	-		-	-
Atyrau Region	778		580	1.2%
West Kazakhstan Region	63		53	0.1%
Zhambyl Region	-		-	-
Zhetysu Region	8		6	-
Karaganda Region	56		73	0.1%
Kostanay Region	-		-	-
Kyzylorda Region	40		71	0.1%
Mangystau Region	1,037		889	1.8%
Pavlodar Region	224		198	0.4%
North Kazakhstan Region	2		6	-
Turkistan Region	8		9	-
Ulytau Region	21		22	-
East Kazakhstan Region	-		-	-
Astana city	483		347	0.7%
Almaty city	5		1	-
Shymkent city	55		42	0.1%
Outside the Republic of Kazakhstan	1,035		883	1.8%
Disclosure		2022	2023	2024
Hired (persons)		5,860	5,746	3,928
Terminated (persons)		3,697	2,124	3,272
Turnover (%)		6.0%	4.5%	6.6%

EMPLOYEE TRAINING AND EVALUATION DISCLOSURES

GRI 404-1, GRI 404-3

Disclosure	2022	2023	2024
Investment in training (million KZT)	4,858	4,116	5,110
Average hours of training per employee	39	34	35
By Gender			
Men	34	32	38
Women	60	43	25
By Employee Category			
Administrative and Managerial Staff	88	40	43
Production Personnel	59	34	34

Disclosure	2022	2023	2024
Percentage of employees receiving regular performance and career development evaluations (%)	45	31	37
By Gender			
Men	45	30	38
Women	46	36	28
By Employee Category			
Administrative and Managerial Staff	46	33	41
Production Personnel	45	31	36

MATERNITY LEAVE DISCLOSURES

GRI 401-3

Disclosure	Men	Women	Total
Number of employees eligible for maternity leave or parental leave (according to the Labor Code of Kazakhstan)	40,120	9,123	49,243
Number of employees who took maternity leave or parental leave	43	484	527
Number of employees who returned to work after maternity/paternity leave	22	185	207
Number of employees who returned to work in the previous year after maternity/paternity leave and continued to work for 12 months	8	141	149
Number of employees expected to return to work after maternity/ paternity leave in the reporting year	16	166	182
Return rate	1.38	1.11	1.14
Retention rate	0.35	0.53	0.51

OCCUPATIONAL HEALTH AND SAFETY SYSTEM DISCLOSURES²³

GRI 403-8

Industrial safety

Training

Other

Disclosure	Unit	2	022	2	023	2	024
		Staff	Outsourced workers	Staff	Outsourced workers	Staff	Outsourced workers
Employees covered by	Persons	45,764	3,277	48,196	3,362	49,243	3,621
the occupational health and industrial safety management system	%	100	100	100	100	100	100
Number of people and	Persons	22,379	-	30,990	-	49,243	-
the percentage covered by the occupational health and safety management system that passed the internal audit procedure (production control systems)	%	49	-	64	-	64	-
Number of subsidiaries (including parent company) with ISO 45001:2018 certification	Unit	22	-	27	-	29	_
Occupational Health and Industrial Safety Expenditures				Unit	2022	2023	2024
Total amount spent to ensure compliance with industrial safety requirements, including:		KZ	Γbillion	23.7	29.9	23.45	
Occupational health			KZ	T billion	8.1	14	7.2
Fire safety			KZ	KZT billion		9.5	4.1

KZT billion

KZT billion

KZT billion

3.7

0.9

1.8

2.8

1.4

10.1

1.79

0.26

INDEPENDENT ASSURANCE REPORT

GRI 2-5



«Эрист энд Явт комстенетік қызметтера ЖШС Фо-параби д-пы, 7777 «Сомчтав Трухо» («мераты Алматы к., 050060 Қазақтая Республикасы Реп. — 7.727.258.59.60 Факс: +7.727.258.59.61

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Independent practitioner's assurance report

To the Shareholders and Management of National Company "KazMunayGas" JSC

Scope

We have been engaged by National Company "KazMunayGas" JSC (hereinafter "the Company") to perform a 'limited assurance engagement', as defined by International Standards on Assurance Engagements, (hereinafter "Engagement"), to report on the Company's information in the field of sustainability (hereinafter "Sustainability Information" or the "Subject Matter") contained in the Company's Sustainability report (hereinafter "the Reporting Period").

Under this Engagement, we did not perform any procedures with regard to the following:

- Forward-looking statements on performance, events or planned activities of the Company disclosed in the Report;
- Quantitative and qualitative data for contractors for the following indicators: Lost Time Injury Rate (LTIR), Fatal Accident Rate (FAR), and Road Accident Per Million Kilometer Rate (MVCR); and
- Information about Report compliance with the Sustainable Development Goals and with the principles of the UN Global Compact.

Criteria applied by the Company

In preparing Subject Matter the Company applied the

 Global Reporting Initiative Sustainability Reporting Standards 2021 (hereinafter "the GRI Standards"),

as set forth in section "About the Report" (hereinafter "the Criteria").

Company's responsibilities

The Company's management is responsible for selecting the Criteria, and for presenting the Subject Matter in accordance with that Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the subject matter, such that it is free from material misstatement, whether due to fraud or error.

EY's responsibilities

Our responsibility is to express a conclusion on the presentation of the Subject Matter based on the evidence we have obtained.

We conducted our limited assurance Engagement in accordance with the International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information ("ISAE 3000 (Revised)") and the terms of reference for this Engagement as agreed with the Company on May 14, 2021. ISAE 3000 requires that we plan and perform our Engagement to obtain limited assurance about whether we are aware of any material modifications that need to be made to the Subject Matter in order for it to be in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

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²³ Names of subsidiaries and affiliates (including the parent company) that have an ISO 2018-45001 certificate of conformity: NC KazMunayGas JSC, Ken-Kurylyservice LLP, Atyrau Refinery LLP, Atyrau Refinery LLP, Pavlodar Oil Chemistry Refinery LLP, KMG-Security LLP, Kazakhoil Aktobe LLP, KMG Systems & Services LLP, KMG Engineering LLP, Oil Transport Corporation LLP, Mangistauenergomunay LLP, KazGPZ LLP, Kazgermunai JV LLP, KazTransOil JSC, Professional Geo Solutions Kazakhstan LLP, Mangistaumunaigas JSC, Ozenmunaiservice LLP, Oil Services Company LLP, Munaitelecom LLP, Ozenmunaigas JSC, Karazhanbasmunay JSC, KMG EP-Catering LLP, KMG-Kumkol LLP, Embamunaigas JSC, JV CASPI BITUM LLP, KMG-Kumkol LLP, Water Production and Transportation Department LLP, PetroKazakhstan Oil Products LLP, KMG Drilling & Services LLP.





We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

Our independence and quality management

We have maintained our independence and confirm that we have met the requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, and have the required competencies and experience to conduct this assurance Engagement.

EY also applies International Standard on Quality Management 1, Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services engagements, which requires that we design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Description of procedures performed

Procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Our procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance Engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems. A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the Subject Matter and related information, and applying analytical and other appropriate procedures.

Our procedures included the following:

- We checked the list of material topics required to be disclosed in the Subject Matter;
- We interviewed representatives of the Company's divisions involved in the preparation of the Subject Matter;
- We conducted analytical procedures of the quantitative information related to the Subject Matter;
- We examined sustainability-related internal corporate documents of the Company;
 On a sample basis we compared the items included in the Subject Matter with source
- On a sample basis we compared the items included in the Subject Matter with sour information;
- · We evaluated the presentation of the Subject Matter in the layout of the Report.

We also performed such other procedures as we considered necessary in the circumstances.

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Conclusion

Based on our procedures and the evidence obtained, we are not aware of any material modifications that should be made to the Subject Matter for the period from January 1 to December 31, 2024, in order for it to be in accordance with the Criteria.

Ernst 8 Young Advisory LLP

April 30, 2025 Almaty, Kazakhstan

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For the Content Index – Advanced Service, GRI Services reviewed that the GRI content index has been presented in a way consistent with the requirements for reporting in accordance with the GRI Standards, and that the information in the index is clearly presented and accessible to the stakeholders.





Statement of Application

GRI Standard Used

NC KazMunayGas JSC has reported in accordance with the GRI Standards for the period 1 January to 31 December 2024.

GRI 1: Foundation 2021

Applicable Industry Standard GRI 11: Oil and Gas Sector 2021

GRI Standard	Disclosure	Page	Exclusions/ Comments	GRI Standard ref. No
GRI 2: General Disclosures 2021	1. Organization and its reporting practices			
	2-1 Organization details	16		
	2-2 Entities included in sustainability reporting	174		
	2-3 Reporting period, frequency of reporting, and contact point	174		
	2-4 Restatements of information	174		
	2-5 External assurance	195		
	2. Activities and employees			
	2-6 Activities, value chain, and other business relationships	22		
	2-7 Employees	145, 189		
	2-8 Non-employee workers	145, 189		
	3. Corporate governance			
	2-9 Governance structure and composition	44		
	2-10 Nomination and selection of the highest governance body	46		
	2-11 Chair of the highest governance body	46		
	2-12 Role of the highest governance body in overseeing the management of impacts	56		
	2-13 Delegation of responsibility for managing impacts	56		
	2-14 Role of the highest governance body in sustainability reporting	56		
	2-15 Conflicts of interest	49, 51		
	2-16 Reporting on critical issues	49		
	2-17 Collective knowledge of the highest governance body	45		
	2-18 Evaluation of the performance of the highest governance body	47		
	2-19 Remuneration policy	47		
	2-20 Process for determining remuneration	47		



GRI Standard	Disclosure	Page	Exclusions/ Comments	GRI Standard ref. No
	2-21 Annual total compensation ratio		Information about the remuneration of the Board of Directors is reflected in KMG's Annual Report for 2024 on the KMG website: https://www.kmg.kz/ en/investors/reporting/	
	4. Strategy, policy, and practice			
	2-22 Statement on sustainable development strategy	32, 54		
	2-23 Political commitments	162		
	2-24 Implementation of political commitments	162		
	2-25 Processes for remedying negative impacts	50, 160		
	2-26 Mechanisms for seeking advice and raising concerns	50, 160		
	2-27 Compliance with laws and regulations	50, 182	Information on administrative fines is not available due to the absence of a mechanism for monitoring total paid fines for KMG Group	
	2-28 Membership in associations	80		
	5. Stakeholder engagement			
	2-29 Approach to stakeholder engagement	60		
	2-30 Collective bargaining agreements	156		
GRI 3: Material Topics 2021	3-1 Process for determining material topics	58		
	3-2 List of material topics	59		
Greenhouse Gas Emissions				
GRI 3: Material Topics 2021	3-3 Management of material topics	87, 96		11.1.1
GRI 302: Energy 2016	302-1 Energy consumption within the organization	99, 185		11.1.2
	302-2 Energy consumption outside the organization		Information unavailable. Energy consumption outside the organization is not tracked.	11.1.3
	302-3 Energy intensity	101		11.1.4
	302-4 Reduction in energy consumption	100, 185		

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• APPE

N THE FUTURE SUSTAINABLE DEVELOPMENT REPC

GRI Standard	Disclosure	Page	Exclusions/ Comments	GRI Standard ref. No
GRI 305: Emissions 2016	305-1 Direct GHG emissions (Scope 1)	97, 184		11.1.5
	305-2 Indirect GHG emissions from energy consumption (Scope 2)	97, 184		11.1.6
	305-3 Other indirect GHG emissions (Scope 3)	97, 184		11.1.7
	305-4 GHG emissions intensity	97, 184		11.1.8
Climate Adaptation, Resilience, a	nd the Transition Period			
GRI 3: Material Topics 2021	3-3 Management of material topics	69		11.2.1
GRI 201: Economic Performance 2016	201-2 Financial impacts and other risks and opportunities related to climate change	92	Climate risks are being identified, but at present, there is no assessment of financial impacts. The Company does not emit ozone- depleting substances	11.2.2
GRI 305: Emissions 2016	305-5 Reduction of greenhouse gas emissions	97		11.2.3
Atmospheric Emissions				
GRI 3: Material Topics 2021	3-3 Management of material topics	112		11.3.1
GRI 305: Emissions 2016	305-7 Emissions of NOx, SOx, and other significant air pollutants	112, 185		11.3.2
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories		Not applicable; research on this effect is not carried out in the Company	11.3.3
Waste				
GRI 3: Material Topics 2021	3-3 Management of material topics	98		11.5.1
GRI 306: Waste 2020	306-1 Waste generation and significant waste impacts	114		11.5.2
	306-2 Management of significant waste impacts	114, 118		11.5.3
	306-3 Waste generated	114, 187		11.5.4
	306-4 Waste directed for recycling	114, 187		11.5.5
	306-5 Waste directed to landfill	114, 187		11.5.6
Water and Wastewater				
GRI 3: Material Topics 2021	3-3 Management of material topics	104		11.6.1
GRI 303: Water and Effluents 2018	303-1 Interaction with water as a shared resource	104		11.6.2
	303-2 Management of impacts related to wastewater discharge	104		11.6.3
	303-3 Water withdrawal	108, 183		11.6.4

303-5 Water consumption

183

11.6.6



GRI Standard	Disclosure	Page Exclusions/ Comments		GRI Standard ref. No
Closure and Rehabilitation				
GRI 3: Material Topics 2021	3-3 Management of material topics	144		11.7.1
GRI 402: Labor/ Management Relations 2016	402-1 Minimum notification periods for operational changes	144		11.10.5
GRI 404: Training and Education 2016	404-2 Employee skill development programs and programs for transitioning to new jobs	149		11.10.7
GRI 11: Oil and Gas Sector 2021	The total financial reserve value created by the organization for closure and rehabilitation	128		11.7.6
Asset Integrity and Critical Incide	nt Management			
GRI 3: Material Topics 2021	3-3 Management of material topics	117		11.8.1
GRI 306: Effluents and Waste 2016	306-3 Significant spills	117		11.8.2
Occupational Health and Safety				
GRI 3: Material Topics 2021	3-3 Management of material topics	131		11.9.1
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	131		11.9.2
	403-2 Hazard identification, risk assessment, and incident investigation	131		11.9.3
	403-3 Occupational health services	131		11.9.4
	403-4 Employee participation, consultation, and communication on occupational health and safety matters	131		11.9.5
	403-5 Training on occupational health and safety	149		11.9.6
	403-6 Employee wellness programs	139		11.9.7
	403-7 Prevention and minimization of impacts on occupational health related to business relationships	137		11.9.8
	403-8 Workers covered by the Occupational health and safety management system	139, 194		11.9.9
	403-9 Work-related injuries	134		11.9.10
	403-10 Occupational diseases	139		11.9.11
Employment Practice				
GRI 3: Material Topics 2021	3-3 Management of material topics	144		11.10.1
GRI 401: Employment 2016	401-1 New employees and employee turnover	147, 192		11.10.2
	401-2 Benefits provided to full-time employees but not to temporary or part-time employees	154, 156		11.10.3
	401-3 Parental leave	193		11.11.3

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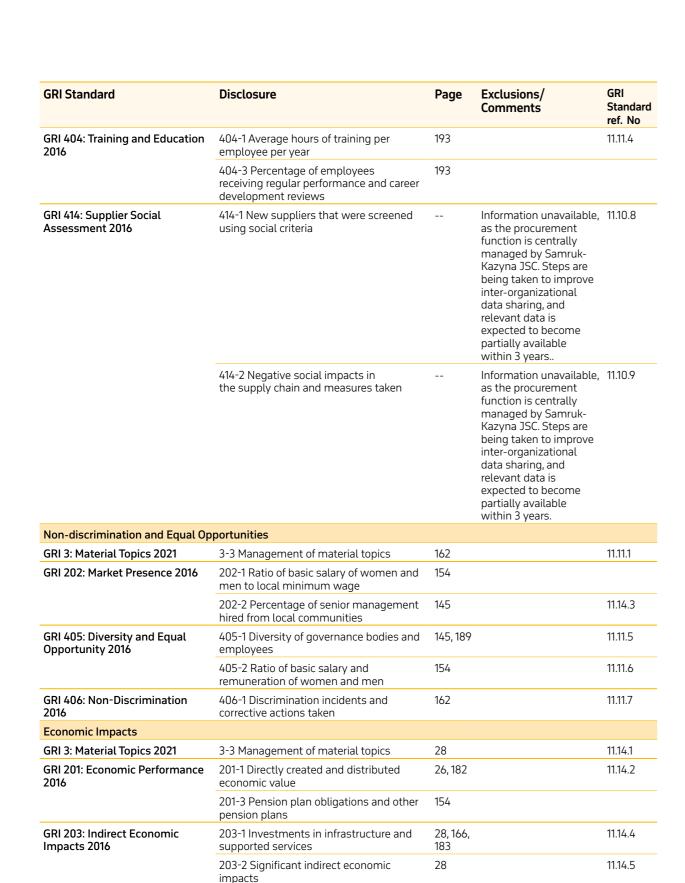
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• APPENDIC

SUSTAINABLE DEVELOPMENT REPORT FOR 2024

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GRI Standard	Disclosure	Page	Exclusions/ Comments	GRI Standard ref. No
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	168		11.14.6
Anti-corruption				
GRI 3: Material Topics 2021	3-3 Management of material topics	51		11.20.1
GRI 205: Anti-corruption 2016	205-1 Operations assessed for corruption risks	51	Information incomplete. Not all data on anti-corruption risk assessments and training is available due to the imperfection of the data reporting system. The Company plans to improve its system to close this gap within 3 years.	11.20.2
	205-2 Communication and training on anti-corruption policies and procedures	51	Information incomplete. Not all data on anti-corruption risk assessments and training is available due to the imperfection of the data reporting system. The Company plans to improve its system to close this gap within 3 years.	11.20.3
	205-3 Confirmed corruption incidents and actions taken	51		11.20.4
Additional Disclosures				
Biodiversity				
GRI 3: Material Topics 2021	3-3 Management of material topics	118		
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	121, 188		
	304-2 Significant impacts of activities, products and services on biodiversity	118, 119		
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	121, 122		
Local Communities				
GRI 3: Material Topics 2021	3-3 Management of material topics	166		
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	166		

Topic	Explanation
GRI 11: Oil and Gas Sector 2021	
Topic 11.4: Biodiversity	The topic of "Biodiversity" (GRI 11.4) was considered non-material, but potentially relevant due to the geographical presence of the Company and the nature of its production operations. As part of its ongoing environmental monitoring and control of impact on flora and fauna within the areas of influence of its production facilities, conducted in compliance with the environmental legislation of the Republic of Kazakhstan, no signs of significant impact on specially protected natural areas, Red Book-listed species, or other vulnerable ecosystems were identified during the reporting period. Also, within the analysis of stakeholder perspectives (including government agencies, public organizations and local communities), biodiversity was not identified as an area of heightened concern or priority. Nevertheless, in an effort to be transparent, the Company provides information on the disclosure GRI 304-1 ("Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas") in the ESG Indicators Appendix. See the section "Biodiversity Protection".
Topic 11.12: Forced Labor and Modern Slavery	The risk of forced labor was considered relatively low in the supply chain and production processes.
Topic 11.13: Freedom of Association and Collective Bargaining	Although this topic was not considered material, KMG provides detailed information on collective bargaining agreements and working with trade unions. See the section "Unions and Collective Agreements".
Topic 11.15: Local Communities	The topic "Local communities" (GRI 11.15) was considered non-material, however, the issue of impact on local communities was disclosed through other, more specific topics with a higher level of priority. As part of the assessment of material sustainability topics, an analysis of citizens' appeals, the results of public hearings and interaction with the local communities and local authorities was conducted, which showed that the topics of "Economic Performance" and "Employment practices" were of the greatest importance to local communities. These aspects were considered significant in terms of the Company's impact and stakeholder expectations, and were disclosed in the report. In order to ensure transparency and strengthen public trust, the report provides information on the mechanisms for submitting and processing appeals and complaints. This element meets GRI's industry requirements on the topic of interaction with local communities and provides an integrated approach to managing social impact. See the section "Our Communities".
Topic 11.16: Land and Resource Rights	The risks of violating the rights of local populations in relation to land resources are assessed as relatively low.
Topic 11.17: Rights of Indigenous Peoples	The regions of KMG's operations are characterized by low risks of violating the rights of indigenous peoples
Topic 11.18: Conflicts and Security	The company does not operate in conflict regions.
Topic 11.19: Anti-competitive Behavior	Impacts related to competition violations were assessed as relatively low.
Topic 11.21: Payments to Governments	The Company strictly adheres to the requirements of the tax legislation of the Republic of Kazakhstan and international transparency standards. In this regard, the Company annually publishes detailed information on tax payments in the sustainability report and on its corporate website, including disclosures in line with GRI 207 "Tax Reporting", and with reference to the OECD BEPS Action 13 (Country by-Country Reporting) principles. Since this disclosure is systematic and mandatory, the topic of "Payments to Governments" was not additionally highlighted as a priority in the materiality assessment process. See the section "Tax Policy and Payment to Governments".
Topic 11.22: Public Policy	The company does not make contributions or other payments for political purposes.



SASB INDEX

Торіс	Code	Indicator	Disclosure	Comment
Greenhouse Gas Emissions	EM-EP-110a.1	Total global Scope 1 emissions, methane share, share covered by regulations	98, 184	
	EM-EP-110a.2	Total global Scope 1 emissions from: (1) flaring of hydrocarbons, (2) other combustion processes, (3) process emissions, (4) other venting emissions, (5) leaks	98, 184	
	EM-EP-110a.3	Discussion of long-term and short- term management strategy or plan for Scope 1 emissions, reduction targets, and performance analysis	87	
Air Quality	EM-EP-120a.1	Emissions of the following pollutants: (1) NOx (excluding N ₂ O), (2) SOx, (3) Volatile Organic Compounds (VOCs), (4) Particulate Matter (PM10)	112, 185	
Water Management	EM-EP-140a.1	(1) Volume of water withdrawn, (2) volume of water consumed; share of each in regions with high or extremely high water stress	108, 183	
	EM-EP-140a.2	Volume of produced water and returned water; share (1) discharged, (2) injected, (3) treated; hydrocarbon content in discharged water	109, 184	
	EM-EP-140a.3	Share of hydraulic fracturing wells for which all chemicals used are disclosed		
	EM-EP-140a.4	Share of hydraulic fracturing sites where the quality of underground or surface water has deteriorated compared to baseline		
Biodiversity Impact	EM-EP-160a.1	Description of environmental management policies and practices for active sites	102, 118	
	EM-EP-160a.2	(1) Number and (2) total volume of hydrocarbon spills, (3) volume in the Arctic, (4) volume affecting shorelines with ESI indices 8-10, (5) volume recovered after spill	117	
	EM-EP-160a.3	Share of (1) proved and (2) probable reserves located near protected natural areas or habitats of endangered species	86	

Taris	Codo	Indiana.	Disalasses	Comment
Topic Safety, Human Rights, and	Code EM-EP-210a.1	Indicator Share of (1) proved and (2) probable reserves near conflict zones	Disclosure 	Comment Company does
Indigenous Rights		reserves near conflict zones		not operate near conflict zones.
	EM-EP-210a.2	Share of (1) proved and (2) probable reserves near indigenous land		Company does not operate near indigenous land.
	EM-EP-210a.3	Discussion of engagement processes and comprehensive assessment of impacts on human rights, indigenous rights, and activities in conflict zones	162	
Community Relations	EM-EP-210b.1	Discussion of the process for managing risks and opportunities related to the rights and interests of local communities	162	
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Reserves Evaluation and Capital Expenditures	EM-EP-420a.1	Sensitivity of hydrocarbon reserve levels to projected price scenarios accounting for carbon emissions costs		No studies conducted as of now.
	EM-EP-420a.2	Estimated CO2 emissions contained in proved hydrocarbon reserves		No studies conducted as of now.
	EM-EP-420a.3	Volume of investments in renewable energy, revenue from renewable energy sales	63	
	EM-EP-420a.4	Discussion of the impact of oil prices, demand, and climate regulations on capital investment strategy in exploration, acquisition, and asset development		No studies conducted as of now.
Business Ethics and Transparency	EM-EP-510a.1	Share of (1) proved and (2) probable reserves in countries with the 20 lowest positions in Transparency International's Corruption Perceptions Index		Company does not operate in these regions.
	EM-EP-510a.2	Description of the management system to prevent corruption and bribery throughout the value chain	51, 186	

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Topic	Code	Indicator	Disclosure	Comment
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	EM-EP-540a.2	Description of management systems used to identify and mitigate catastrophic and emergency risks	135	
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	EM-EP-000.B	Number of offshore fields	183	
	EM-EP-000.C	Number of onshore fields	183	



APPEND

DEVELOPMENT REPORT FOR 2024

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ABBREVIATIONS AND TERMS

ACCA	Association of Chartered Certified Accountants
AEMS	Automated Emissions Monitoring System
AIX	Astana International Exchange
AMS	Automated Monitoring Systems
ВР	British Petroleum
BRCC	Biodiversity Research and Conservation Center
CCUS	Carbon Capture, Utilization and Storage
CDP	Carbon Disclosure Project
CFA	Chartered Financial Analyst
CIA	Certified internal auditor
CIMA	Chartered Institute of Management Accountants
СОР	Conference of the Parties
COVID-19	Coronavirus Disease 2019
DBA	Doctor of Business Administration
DipIFR	Diploma in the International Financial Reporting
EBITDA	Earnings before interest, taxes, depreciation and amortization
EP	environmental protection
ESG	Environmental, Social, and Governance
FAR	Fatality accident rate
GHG	greenhouse gas
GRI	GRI Sustainability Reporting Standards
HSE	Health, Safety and Environment
IOGP	International Association of Oil & Gas Producers
IPCC	Intergovernmental Panel on Climate Change
IPIECA	International Petroleum Industry Environmental Conservation Association
IPMA	International Project Management Association
I-REC	International Renewable Energy Certificate

ISO	International Organization for Standardization
JSC	Joint stock company
KASE	Kazakhstan Stock Exchange
KOA	Kazakhoil Aktobe LLP
KPI	Kazakhstan Petrochemical Industries Inc
LP	labor protection
LTIR	Lost Time Incident Rate
MBA	Master of Business Administration
NEBOSH	National Examination Board in Occupational Safety and Health
OGMP	Oil and Gas Methane Partnership
OHSAS	Occupational Health and Safety Assessment Series
OPITO	Offshore Petroleum Industry Training Organization
OSC	Oil Services Company LLP
OSRL	Oil Spill Response Limited
PMP	Project Management Professional certificate
PR	public relations
PwC	PricewaterhouseCoopers
RoSPA	The Royal Society for the Prevention of Accidents SAF sustainable aviation fuel
SBTi	Science Based Targets initiative
SRS	Social Responsibility Scale
TCFD	Task Force jn Climate-related Financial Disclosures
UNEP	United Nations Environment Programme
WEP	United Nations Women's Empowerment Principles
WRI	World Resource Institute

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Report release date: May 2025

The previous Sustainable Development Report was published in May 2024.