

**CONTRIBUTION
OF JSC NC KAZMUNAYGAS TO
THE ACHIEVEMENT OF THE
UN SUSTAINABLE
DEVELOPMENT GOALS**



ҚазМұнайГаз

NATIONAL COMPANY ҚҰЛТЫҚ КОМПАНИЯСЫ

KMG STRATEGY

VISION

ensure compliance with rigorous safety standards and sustainable development principles aimed at maximizing financial outcomes

MISSION

efficiently and responsibly develop natural resources to guarantee energy security while prioritizing the well-being of future generations

-  Sufficient resource base
-  Improving value chain efficiency
-  Business diversification and portfolio expansion
-  Sustainable development and reduction of carbon intensity of production

- Environmental Protection
- Low-Carbon Development



- Occupational Health and Safety
- Human Resources Management and Human Rights
- Local Communities



- Corporate Governance



- KMG approach to sustainable development is grounded in aligning the Company's objectives and plans with the core principles of the United Nations, universal human values, global trends, and Kazakhstan's development priorities.
- The Company is committed to all 17 UN Sustainable Development Goals.
- Taking into account the strategic goals and priority objectives for the Company, KMG discloses information about its contribution to the achievement of **10 UN SDGs and 24 targets.**
- Goals and objectives are combined with strategic and business initiatives that are being implemented at KMG.

Contribution to the UN Sustainable Development Goals





GOOD HEALTH AND WELL-BEING



PRIORITY

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



SDG TARGETS

- 3.6** Reduce road traffic deaths and injuries
- 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 for all
- 3.9** Substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination



OUR RESULTS:

- As part of the replication of the Travel Management project:
 - a diagnostic review of transport management processes was conducted across 7 KMG subsidiaries, and the roadmaps for project replication were approved;
 - a total of 4,227 employees from subsidiaries, along with 2,082 contractor employees, completed the Defensive Driving course in 2024
- To raise awareness about the importance of seat belt use and reduce injuries in road accidents, 17,712 employees from KMG subsidiaries participated in a convincer demonstration
- All KMG employees are fully covered by the health insurance program

OUR INITIATIVES:



Travel Management Project

To enhance transport safety and foster a culture of safe driving, the Travel Management project is being implemented in stages across the KMG group:

- a diagnostic assessment of process maturity in subsidiaries was conducted, considering the level of automation and GPS tracking equipment;
- tailored programs for developing transport management processes are being developed for each subsidiary;
- the phased implementation of the transport management system focuses on improving traffic safety.



Personnel Wellness Program

The Personnel Wellness Program is being developed for 2024-2028, with the following key focuses:

- an information system for monitoring and managing the health of employees with chronic conditions and production staff;
- implementation of comprehensive prevention programs for chronic diseases;
- introduction of innovative pre-shift health screenings;
- reduction of employee morbidity and improvement in the accessibility and quality of healthcare services.



Medical Health Insurance

Employee medical examinations and vaccinations are conducted regularly.



Leadership Initiatives

The Code of Leadership and Employee Commitment to Health, Safety, and Environmental Compliance has been introduced and implemented.



The Korgau Map

The program has been implemented to identify and report unsafe conditions, behaviors, acts, and factors.





GENDER EQUALITY



PRIORITY

Achieve gender equality and empower all women and girls



SDG TARGETS

- 5.1** End all forms of discrimination against all women and girls everywhere
- 5.5** Ensure women's full and effective participation and equal opportunities for leadership at all levels of decisionmaking in political, economic and public life



OUR RESULTS:

- ✓ KMG fully adheres to the labor laws of RK and upholds their provisions, ensuring that no individual faces discrimination in the exercise of labor rights based on origin, social or official status, gender, race, nationality, language, religion, beliefs, place of residence, age, physical abilities, or membership in public associations
- ✓ Competitive recruitment processes are not limited by gender, age, or any other characteristics. All employees are provided with equal labor compensation and the same social support conditions
- ✓ Proportion of women on the Board of Directors and Supervisory Boards:
 - 2024 - 13%, including Board – 11% (1 out of 9); KMG Subsidiaries BD and SB – 16% (33 out of 196)
 - target for 2030 - 30%

OUR INITIATIVES:



Increasing the proportion of women on the Board of Directors and Supervisory Boards of KMG group to 30% by 2030.



Promote the WEP's Initiative

The initiative created by the UN Women and the UN Global Compact. WEP's (Women's Empowerment Principles) is based on international labor and human rights standards, emphasizing that businesses have a role in and responsibility for promoting gender equality and empowering women.

As part of this initiative, the following actions are planned:

- signing the CEO Statement of Support for the Women's Empowerment Principles;
- conducting a self-assessment using the WEPs Gender Gap Analysis Tool, which evaluates the strategic approach to gender equality, identifies gaps and opportunities for improvement, and helps set goals and targets;
- disclosing gender-disaggregated data in sustainability reports to share progress with stakeholders.



7 AFFORDABLE AND CLEAN ENERGY



AFFORDABLE AND CLEAN ENERGY



PRIORITY

- Ensure access to affordable, reliable, sustainable and modern energy for all
- Enhance energy efficiency in production
- Increase the proportion of clean energy available



SDG TARGETS

- 7.1** Ensure access to affordable, reliable and modern energy supply
- 7.b** Expand infrastructure and upgrade technology for supplying modern and sustainable energy services



OUR RESULTS:

- ✓ 76 events have been planned for 2024 (estimated savings of 45.7 thousand tons of fuel resources and a planned reduction of 98.9 thousand tons of CO2 emissions)
- ✓ A targeted energy audit of process furnaces and boiler equipment at oil-producing companies has been conducted
- ✓ In 2023 and 2024, the purchase of "green" I-REC certificates in the amount of 20,000 units was carried out to verify the consumption of electricity from renewable energy sources
- ✓ The Energy Policy and the Regulations on Management in Energy Saving and Energy Efficiency Improvement within KMG group have been approved

OUR INITIATIVES:

The primary strategic focus areas for the Group's energy saving and energy efficiency development include the modernization of process equipment, the introduction of energy-saving technologies, the optimization of heat generation and consumption, and the development of its own generation sources, including those utilizing RES.

The KMG Low-carbon Development Program until 2060 has been approved, the Action plan is being updated, and priority areas of activity have been identified:



Energy Efficiency Improvement:

- introduction of Best Available Techniques (BAT)
- modernization of boiler and furnace equipment
- modernization of process units that consume heat energy
- modernization of mechanical assets
- implementation of control programs for optimizing mechanical assets and pumping equipment with the introduction of VFD
- thermal insulation of main and auxiliary equipment
- optimization of transport equipment
- introduction of automated systems for metering and managing FER
- establishment of energy management services.



RES Development:

- 1 GW RES project in collaboration with Total Eren
- 247 MW hybrid power plant project with Eni
- purchase of at least 15% "green" electricity by 2031



Sustainable Aviation Fuel (SAF)

As a result of technical and economic studies of the potential of SAF production in Kazakhstan conducted by ICF SH&E Limited from September 2023 to June 2024, an analysis of supply and demand for SAF in Kazakhstan, the region, and the world, including potential export markets such as the EU, was carried out and the following conclusions were made:

- identified the most promising and cost-effective technology for SAF production in Kazakhstan, considering available raw materials and fuel quality requirements, as well as the potential for SAF transshipment to other markets - specifically ATJ (Alcohol to Jet) based on ethanol. Key companies developing this technology include LanzaJet, Honeywell, and Axens.
- the capacity for the first SAF production is tentatively set at 40,000 tons per year, requiring 72,000 tons of bioethanol.

8 DECENT WORK AND ECONOMIC GROWTH



DECENT WORK AND ECONOMIC GROWTH



PRIORITY

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





SDG TARGETS

- 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 labour rights and promote safe and secure working environments for all workers



OUR RESULTS:

-  KMG provides employment for over 49 thousand people, including 81% of men and 19% of women
-  Programs to attract and develop young professionals at production facilities include Zhas Maman, Dual Training, Trainee, KMGE School, and Alyp

OUR INITIATIVES:



Attracting and Developing Young Professionals at Production Facilities

Zhas Maman is a program aimed at attracting and developing young professionals at Atyrau Refinery. In 2024, 9 people are studying, 2 of them are employed.

Dual Training is a program that includes training, internships, and subsequent employment within KMG group. In the period from 2023 to 2024, 242 people are undergoing dual training, 34 of them are employed.

KMGE School is a program designed to train specialized professionals for KMG Engineering. Selection is based on students who have completed their first year (on the basis of a technical or vocational education) or second year (on the basis of a general secondary education) of undergraduate program. Upon completion, students receive a certificate and commit to at least 3 years of employment with KMGE. In the period from 2022 to 2024, 18 individuals have been trained, 17 of them are employed.

Trainee Program provides training for professionals in three positions - Process Plant Operator, Process Pump and Compressor Operator, Instrumentation Technician and EC&I Technician. Trainees receive on-the-job training at Atyrau Refinery. In the period from 2023 and 2024, 60 people are studying under this program, 31 of them are employed, and in 2024, an additional 20 new trainees were selected for a 6-month training course until 10 December 2024 under the Atyrau Refinery Trainee Program.



Social Support for Employees

Social support for KMG Group employees is provided in accordance with collective agreements and internal acts of the employer. In the KMG Group of companies, collective agreements are valid in 24 enterprises. The social package of enterprises considers more than 50 types of social benefits, and today all the conditions of collective agreements and acts are fully respected in all KMG enterprises.



INDUSTRY, INNOVATION, AND INFRASTRUCTURE



PRIORITY

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



SDG TARGETS

- 9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being
- 9.4 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



OUR RESULTS:



Six ABAI modules were implemented ("Database", "Map Builder", "Technological Mode", "Selection of Depth Pumping Equipment", "Production Planning and Monitoring", and "Selection and Analysis of Efficiency of Geological and Technical Measures"). Achieved effects:

- the speed of automated data collection and production report generation was increased by approximately two times;
- additional production was generated due to a more efficient technological mode in OMG and KGM;
- the number of underground well repairs was reduced due to fewer failures of depth pumping equipment in OMG and MMG;
- extra production was gained through more efficient selection of new wells in OMG



The course Digital Citizen has been developed, the course is scheduled to start in 2025

OUR INITIATIVES:



The KMG Low-carbon Development Program until 2060 has been approved, the action plan is being updated, and priority areas of energy efficiency improvement have been identified:

- optimization of energy management and creation of energy management services
- introduction of automated systems for metering and managing FER
- determining the applicability of projects on the assets of specific KMG Subsidiaries
- introduction of Best Available Techniques (BAT)
- modernization of mechanical assets, modernization and optimization of transport equipment



ABAI IS Development Project

This project aims to centralize all production data of KMG group into a single database on the Big Data platform, utilizing artificial intelligence and machine learning for data processing and analysis.

The ABAI information system comprises 17 independent modules, each designed to address specific production challenges.



Digital Citizen Project

The Project's objective is to enhance digital literacy of KMG employees.



11 SUSTAINABLE CITIES AND COMMUNITIES



SUSTAINABLE CITIES AND COMMUNITIES



PRIORITY

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



SDG TARGETS

11.2 Provide access to safe, affordable, accessible and sustainable transport systems, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

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.



OUR RESULTS:



KMG active involvement in the Taza Kazakhstan environmental campaign:

- 75 activities focused on cleaning and enhancing the grounds of historical and cultural monuments, schools, kindergartens, etc.;
- 225 volunteer cleanup days (subbotnik) with over 10,000 participants, resulting in the collection of 240 tons of waste;
- 60 activities dedicated to the whitewashing of green spaces, affecting around 170,000 trees;
- training sessions on managing the impact of biodiversity

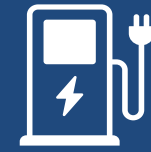


Installation of automated systems for monitoring emissions of pollutants is being conducted. A number of subsidiaries and affiliates transmit data to the authorized body in the field of environmental protection through the national data bank of NIT JSC



A FS has been prepared for the “Development of Charging Infrastructure for Electric Vehicles in the Republic of Kazakhstan” project

OUR INITIATIVES:



Electric Vehicle Charging Infrastructure Project

KMG is exploring the development of electric vehicle charging infrastructure in Kazakhstan. The project is in its initial stages, with a feasibility study completed by KazMunaiGas-Engineering. The project is expected to be submitted to KMG Investment Committee for consideration later this year.



The introduction of the best available techniques aimed at gradually reducing the negative impact on the environment

A number of companies of the KMG Group of companies, which are among the 50 major polluters in terms of pollutant emissions in Kazakhstan, in 2024 developed draft programs to improve environmental efficiency based on national industry manuals of BAT and applied for a comprehensive environmental permit from the Ministry of Ecology and Natural Resources of the Republic of Kazakhstan.



Pollutant Emissions Reduction Program

To address pollutant emissions, KMG group is developing a comprehensive program with clear targets aimed at reducing these emissions.



Implementation of the World Bank Initiative “Complete cessation of regular flaring of APG by 2030”

KMG is actively participating in the World Bank’s initiative to eliminate routine flaring of associated petroleum gas by 2030, a commitment made in 2015. The initiative seeks to unite governments, oil companies, and public entities in the beneficial use of associated petroleum gas. As part of this initiative, KMG follows its Emissions Management Policy, which targets the zero routine flaring by 2030. In 2023, KMG reduced raw gas flaring by 89% compared to 2017 levels.



Creation of “Green Belt” - Greening Projects

Over the past three years, KMG group has planted around 100,000 trees. By the end of 2024, over 88,000 trees are planned for planting, with more than 60,000 already planted.



Environmental campaign Taza Kazakhstan

The Republican environmental campaign "Taza Kazakhstan" is an initiative of President K.K. Tokayev aimed at improving the environmental situation in the country through mass cleanups (subbotniki), garbage collection, landscaping, public education, etc. As part of the implementation of this campaign, an Action Plan has been developed for the implementation of the environmental campaign Taza Kazakhstan in the KazMunayGas group of companies.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



RESPONSIBLE CONSUMPTION AND PRODUCTION



PRIORITY

Ensure sustainable consumption and production patterns



SDG TARGETS

- 12.4** Achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
- 12.5** By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
- 12.6** Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle



OUR RESULTS:

- ✓ From 2018 to 2024, a total of 3.97 million tons of oil waste were processed as part of waste management efforts
- ✓ As part of the implementation of the "Green Office" and in order to reduce the amount of plastic and metal waste, a Fandomat has been installed in the office of the business Center "Emerald Quarter". By 2024 (01.11.2024), 7,861 aluminum cans and 22,644 plastic bottles were delivered

OUR INITIATIVES:



Carbon Disclosure Project

The company calculates its water footprint and publishes a water security questionnaire on the Carbon Disclosure Project platform.



Water Resources Management Program

A comprehensive long-term Water Resources Management Program has been developed for KMG group to establish targets for reducing water withdrawal and enhancing water reuse.



TAZALYQ

Atyrau Refinery is actively implementing the large-scale environmental project TAZALYQ, aimed at improving environmental conditions.



Program for the disposal of historically accumulated oil waste

Implementation of a program for the utilization of historically accumulated oil waste and oil-contaminated lands.



Waste Management Standard

A waste management standard has been developed in the KMG Group of companies.



Green Office

The company is advancing its corporate "green" agenda by gradually adopting "green office" principles, including separate waste collection, and water and energy conservation in office spaces.



13

CLIMATE ACTION



CLIMATE ACTION



PRIORITY

Take urgent action to combat climate change and its impacts









SDG TARGETS

13.2 Integrate climate change measures into policies, strategies and planning

13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning



OUR RESULTS:

-  A hydrogen Atlas has been developed to assess potential production. A pilot project on green hydrogen is being implemented
-  The corporate methodology for the quantitative assessment of greenhouse gas emissions has been implemented
-  The benchmark for light petroleum products has been developed
-  The methodology for calculating Scope 3 greenhouse gas emissions has been introduced
-  KMG became a member of the OGMP 2.0 partnership and submitted its first desk-based methane emissions report to UNEP
-  The forestry offset project has been implemented in collaboration with Chevron in Pavlodar region

OUR INITIATIVES:



Internal Carbon Pricing Concept

In order to implement planning and provision of measures to reduce the carbon footprint of subsidiaries, as well as comprehensive consideration of the impact of carbon regulation on financial and economic indicators, internal carbon pricing mechanisms have been developed. Currently, work is underway to integrate them into the business processes of the NC KazMunaiGas Group of companies.



Carbon Disclosure Project

The Company calculates its carbon footprint and submits the Climate Questionnaire on the Carbon Disclosure Project platform.



Task Force on Climate-related Financial Disclosures (TCFD)

Disclosure of climate risks in accordance with the recommendations of TCFD, the working group on financial disclosure related to climate change.



Methane Emission Reduction

KMG, in collaboration with international partners like Carbon Limits, the International Finance Corporation, and Tetra Tech Inc., is actively managing methane emissions. In 2024, methane leakage management training was conducted for KMG specialists, accompanied by field measurements at two KMG facilities.



Joining OGMP 2.0

The company has joined the UNEP OGMP 2.0 methane initiative, which involves setting its own goal to reduce methane emissions and reporting methane emissions to UNEP. In 2024, KMG presented the first report on methane emissions under the OGMP 2.0 initiative.



Accession to the Charter on Decarbonization of the Oil and Gas Sector

On the sidelines of the COP-28 Conference of the Parties on climate change, the company joined the initiative to decarbonize the oil and gas sector.



Forest Climate Projects

A 2,000-hectare area in Pavlodar region was selected for forest climate projects, the potential for greenhouse gas absorption is being assessed.



LIFE ON LAND



PRIORITY

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



SDG TARGETS

15.3 Combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world

15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and protect and prevent the extinction of threatened species



OUR RESULTS:

✓ A total of 4.5 million saxaul seedlings have been planted over 15,000 ha of the dried-up Aral Sea bed

TAZALYQ:

✓ The second phase of the "Reconstruction of Mechanical Treatment Facilities (Closed-Type MOS)" project has been completed

✓ The "Reconstruction of Regulatory Treated Effluent Canal and Reclamation of Atyrau Refinery Evaporation Fields" project is being implemented:

- Sectors 1 and 2 have been fully drained and rehabilitated;
- A pipeline has been installed to replace the existing open canal, through which wastewater from Atyrau Refinery was previously discharged to the evaporation fields

OUR INITIATIVES:

KMG is carrying out projects and initiatives focused on reducing pollutant emissions and minimizing water extraction from natural sources:



Carbon Disclosure Project
The company calculates the water footprint and places a Corporate Questionnaire on the Carbon Disclosure Project site.



TAZALYQ
Atyrau Refinery is actively implementing the large-scale environmental project TAZALYQ, aimed at improving environmental conditions.



Construction of a desalination plant in Kenderli with a capacity of 50 thousand m3 of water per day
The project will solve the problem of shortage of drinking water for residents of Zhanaozen, and will also have a multiplier effect on the development of tourism, entrepreneurship and agriculture.



Land restoration
The company is focused on restoring "historically" accumulated oil waste and cleaning oil-contaminated lands.



Hierarchy of measures to mitigate impacts on biodiversity
The company follows a biodiversity mitigation hierarchy in planning and executing operations, which includes four key actions: prevention, minimization, restoration, and compensation for any potential significant direct impacts.



Biodiversity Conservation Program
It is planned to develop a Program for the conservation of biodiversity, including targets and timelines related to the biodiversity conservation. The program includes collaboration with local and international conservation organizations to address biodiversity issues.

17 PARTNERSHIPS FOR THE GOALS



PARTNERSHIP FOR THE GOALS



PRIORITY

Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development





SDG TARGETS

- 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, in particular developing countries
- 17.17** Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships



OUR RESULTS:

-  KazMunayGas adheres to leading international practices to enhance transparency in payments to the government, reinforce the accountability of extractive companies regarding sector revenues, and raise public awareness of the company's activities in the regions
-  Details on tax contributions to the RK budget, as well as the Report on payments to the government, can be accessed on KMG website at the following link: <https://www.kmg.kz/ru/investors/reporting/>

OUR INITIATIVES:

KMG discloses tax-related information in compliance with the GRI standards and the OECD Action 13 Country-by-Country Reporting requirements.

Payments to Governments.

The Company provides annual information in its Report on Payments to Governments, covering the following payment categories:



Taxes

All taxes, excluding the mineral extraction tax.

- **MET**

The mineral extraction tax is a mandatory payment that subsoil users must make separately for each type of extracted resource, such as oil, underground water, and therapeutic muds. The basis for the mineral extraction tax is the physical volume of minerals extracted by the subsoil user during the tax period, including crude oil, gas oil, condensate, and natural gas.



Subscription Bonus

The subscription bonus is a one-time, fixed payment made by a subsoil user to acquire subsoil use rights within a designated contractual area (subsoil plot) or in the event of an expansion of the contractual area, as required by the laws of the Republic of Kazakhstan.

- **Other Payments**

Other payments encompass all additional payments made to governments, including export customs duties.



To support the achievement of the UN SDGs, KMG actively collaborates with industry companies, international entities, and is a member of intergovernmental bodies focused on energy efficiency, labor and environmental protection, climate change mitigation, emission reduction, as well as the promotion of green energy and related initiatives.