

# **KMG STRATEGY**

# Contribution to the UN Sustainable Development Goals

**♦ Vision** 

neet high safety standards and principles of sustainable development, focused on maximizing financial results

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efficiently and rationally develop natural resources to ensure energy security, taking care of future generations

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

E

❖ Environmental

protection

development

S



- Occupational health and safety
- Human ResourceManagement andHuman Rights
- Local communities

governance



















- KMG's approach to issues of sustainable development is based on the consistency of the Company's interests and plans with the basic principles of the UN, universal human values, global trends and development priorities of Kazakhstan
- The company adheres 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.





# GOOD HEALTH AND WELLBEING



### **PRIORITY**

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



### **SDG TARGETS**

- 3.6 Reduce road injuries and deaths
- 3.8. Achieve universal health coverage, including financial risk protection, 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**



### **Journey Management**

As part of the project's replication:

- diagnostics of transport management processes was carried out in 7 KMG's SDEs;
- 5 KMG's SDEs (KBM, OMG, MMG) have developed roadmaps for implementation.
- 1,451 employees of SDEs and 454 contractors' employees were trained in the Defensive driving course.

In order to raise awareness among employees about the need to use seat belts and reduce injuries in RTAs, 7,783 employees of KMG's SDEs took part in a practical demonstration of Convincer.



### 100% of KMG's employees are covered by the health insurance program

### OUR INITIATIVES



### Journey Management Project

In order to improve the transport safety and develop a culture of safe driving, work is underway to gradually replicate the Journey Management project in KMG's group:

- diagnostics of the maturity of processes in SDEs, given the level of automation and equipment with GPS trackers;
- preparation of individual programs for the development of transport management processes for each SDE:
- phased implementation of a transport management system with a focus on traffic safety.



### **Employee Wellness Program**

For 2024-2028, an employee wellness program is being developed, the main areas are:

- an information system that will provide control and monitoring of the condition of production personnel and employees with chronic diseases;
- implementation of comprehensive prevention programs for chronic diseases;
- innovative methods of pre-shift inspections;
- reducing staff morbidity, improving accessibility and quality of medical care;



### Medical health insurance

Medical examinations and vaccinations of employees are carried out on a regular basis.



### Leadership initiatives

A Code of Leadership and Employee Commitment to Comply with Health, Safety and Environment Requirements is being introduced and implemented.



### «Korgau» Map

A program is implemented to identify and report unsafe conditions/unsafe behaviors/unsafe behaviors/hazards





# GENDER EQUALITY



### **PRIORITY**

Achieve gender equality and empower all women and girls





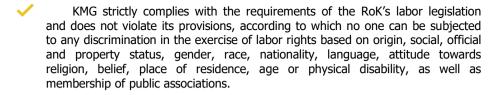
### **SDG TARGETS**

End all forms of discrimination against all females everywhere

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



### **OUR RESULTS**



Competitive recruitment procedures have no restrictions based on gender, age or other characteristics. The same salaries and the same conditions of social support are established for everyone.



Proportion of women on the Board of Directors and Supervisory Boards:

- 2023 up to 20%
- 2030 up to 30 %

### **OUR INITIATIVES**



Increasing the proportion of women on the Board of Directors and Supervisory Boards in KMG's group by December 2023 to 20%, by 2030 to 30%.



Promoting the WEP's initiative created by UN Women and the UN Global Compact. The WEPs (Women's Empowerment Principles) are informed by international labour and human rights standards and grounded in the recognition that businesses have a stake in, and a responsibility for, gender equality and women's empowerment.

As part of this initiative, it is planned to:

- sign the Statement of the Head of the Company on supporting the principles of women's empowerment.
- Conduct a self-assessment using the WEPs Gender Gap Analysis Tool. It evaluates your strategic approach to gender equality, identifies gaps and opportunities for continuous improvement, and helps you set goals and targets.
- disclose gender-disaggregated data in sustainability reports to communicate our progress to our stakeholders.





# AFFORDABLE AND CLEAN ENERGY



### **PRIORITY**

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



### **SDG TARGETS**

7.1 Ensure universal access to affordable, reliable and modern energy services

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



### **OUR RESULTS**

An Action Plan for the implementation of the 2022-2031 Low-carbon Development Program was developed and validated.

2023: through the implementation of 60 actions, the estimated savings in fuel and energy resources amounted to 22,2 thousand toe, which is equivalent to a reduction of 45 thousand tonnes of CO2 emissions

- A process audit of furnaces and boiler equipment was conducted at the production assets of KMG's group (OMG, EMG, MMG and KBM). Additional measures are being developed to reduce the consumption of boiler and furnace fuels for inclusion in SDEs' Action Plans for low-carbon development.
- In December 2023, the purchase of "green" I-REC certificates in the amount of 10,000 units was carried out to confirm the consumption of electricity from renewable energy sources.

#### 2031.

- 15% share of RES in KMG's electricity consumption balance (implementation of RES projects of at least 300 MW)
- ✓ Development of hydrogen energy in Kazakhstan
- 100% coverage of SDEs with energy management services

### **OUR INITIATIVES**

The main strategic directions for the development of energy saving and energy efficiency of the group are the modernization of process equipment, the introduction of energy-saving technologies, the optimization of the production and consumption of thermal energy, as well as the development of its own generation sources, including using renewable energy sources.

The Low-carbon Development Program until 2031 was validated, priority areas of activity were identified



### For improving energy efficiency:

- implementation of best available techniques (BAT);
- modernization of boiler and furnace equipment;
- modernization of process units that consume thermal energy;
- modernization of artificial lift well stock:
- implementation of management programs aimed at optimizing the artificial lift well stock and pumping equipment with the introduction of VSDs;
- thermal insulation of main and auxiliary equipment;
- optimization of transport equipment;
- implementation of automated systems for metering and management of FERs;
- creation of energy management services.



### For RES development:

1 GW WF in cooperation with Total Eren,

- 1120 MW hybrid power plant in cooperation with Eni
- purchase of green electricity of at least 15% by 2031





### Sustainable Aviation Fuel Production (SAF)

In September 2023, together with Air Astana, with the support of the European Bank for Reconstruction and Development, work began on a feasibility study of the environmentally friendly aviation fuel market and production prospects in the Republic of Kazakhstan.



# **DECENT WORK AND ECONOMIC GROWTH**



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





### SDG TARGETS

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



### **OUR RESULTS**

- KMG provides employment to over 49 thousand people, including 82% men and 18% women
- Programs for engaging and developing young professionals in production: Zhas Maman, Dual training, Trainee

### **OUR INITIATIVES**



### Programs for the development and engagement of young specialists in production

Zhas Maman is a program for engaging and developing young specialists at AR and PPCP. From 2022 to 2023, 31 people study and work in AR, of which 7 people are employed, in PPCP - 1 person, of which 1 is employed.

Dual training is a program that includes training, internship and further employment in KMG's group. Thus, between 2022 and 2023, 4 people out of 99 people studying under this program were employed in EMG: 17 people were employed in AR out of 62 people: 36 people were employed in PPCP out of 53 people.

Trainee - the program started in 3 professions - Process Plant Operator, Process Pump and Compressor Operator, Instrumentation Operator, Trainees are trained and undergo industrial training in AR, Between 2022 and 2023, 60 people are trained under this program, 29 of them are employed.



### Social support for employees

Social support for the employees of KMG's Group is provided in accordance with collective agreements and internal regulations of the employer. In KMG's Group, collective agreements are in force in 24 enterprises. The social package of enterprises considers more than 50 types of social benefits; as of today, all terms of collective agreements and regulations are fully observed in all KMG's enterprises.





# INDUSTRY, INNOVATION AND INFRASTRUCTURE



### **PRIORITY**

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



### SDG TARGETS

- Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border 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**

- 6 ABAI modules have been implemented (Database, Process Mode, Selection of Downhole Pumping Equipment, Mapper, Production Planning and Monitoring, WI Effectiveness Selection and Analysis). Effects achieved:
- automated data collection and the function of uploading production reports are implemented;
- additional production was obtained due to a more efficient technological regime in OMG and KGM;
- the number of underground well repairs has been reduced by reducing failures of deep-pumping equipment in OMG and MMG;
- the efficiency of geological and technical measures in OMG and MMG has been improved;
- additional production was obtained due to a more efficient reservoir pressure maintenance system in the KGM.

#### 2031

- ✓ 100% coverage of SDEs with energy management services
- reduction in energy intensity by 10% from the 2019 level

### **OUR INITIATIVES**

The low-carbon Development Program until 2031 was validated, priority areas of activity o improve energy efficiency were identified:

- optimization of energy management and creation of energy management services,
- implementation of automated systems for metering and management of FERs
- determining the applicability of breakthrough projects on the assets of specific SDEs
- implementation of best available techniques (BAT),
- modernization of artificial lift well stock, optimization and modernization of transport equipment.



KMG's digital transformation program contributes to the expansion of scientific research and improvement of the process capacities of industrial sectors. KMG invests heavily in research and building local capacity in this area. The development of domestic process capacities to ensure industrial diversification will also have a positive impact on the climate situation in the country.



### ABAI IS Development Project

provides for the centralization of all production information of KMG's group in a single database on the Big Data platform, as well as its processing and analysis using artificial intelligence and machine learning.





### SUSTAINABLE CITIES

# AND COMMUNITIES



### **PRIORITY**

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





### SDG TARGETS

- By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, 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.
- By 2030, reduce the adverse per capita environmental impact of cities, including by 11.6. paying special attention to air quality and municipal and other waste management.



### **OUR RESULTS**

- In order to create a favorable living environment for the population and improve the environmental situation, including improving the quality of atmospheric air, refineries implement actions that correspond to the indicators of the Green Kazakhstan National Project. Within this direction, emissions are expected to be reduced by 20% over five years.
- Work is underway to install automated systems for monitoring pollutant emissions. Currently, construction and assembly works are underway to install this system in accordance with the Roadmaps.
- On 5 June 2023, the environmental conference "Atyrau Ecological Dialogue: Ecology and Industry. Partnership for the Benefit of Society" was held.
- In 2023, AR transferred 200 mature ash trees with a closed root system to the Akimat of Atyrau region. Trees were planted on the premises of the retro park. In 2022-2023, EMG planted about 22 thousand seedlings as part of the Memoranduma.
- Development of technical information for the project "Development of Charging Infrastructure for Electric Vehicles in the Republic of Kazakhstan"

### **OUR INITIATIVES**



### Project for the development of charging infrastructure for electric vehicles

KMG is considering the possibility of implementing a project to develop charging infrastructure for electric vehicles in Kazakhstan. The project is at the initial stage of development. A feasibility study has been developed by KazMunaiGas-Engineering LLP. This year, it is planned to submit the project to the KMG Investment Committee for consideration.



## Introduction of the best available techniques aimed at gradually reducing the negative impact on the environment

A number of companies of KMG's group, which are included in the 50 major polluters in terms of pollutant emissions in Kazakhstan, intend to develop an environmental progress program in 2024 based on national industry BAT reference books with subsequent receipt of a comprehensive environmental permit from the RoK's Ministry of Ecology and Natural Resources.



### Development of a pollutant emissions reduction program

In order to reduce pollutant emissions across KMG's group, it is planned to develop a program to reduce pollutant emissions to the environment and set targets.



### Implementation of the World Bank Initiatives "Complete Cessation of Regular Flaring of APG by 2030"

KMG is a member in the World Bank initiative to completely stop the regular flaring of associated petroleum gas by 2030, announced in 2015 to unite the efforts of states, oil companies and public organizations in order to increase the beneficial use of associated petroleum gas. As part of the implementation of the above initiative, the company is guided by KMG's Emission Management Policy, aimed at zero routine flaring by 2030.



### Creation of a green belt - landscaping projects

ANPZ LLP will plant 10 thousand trees within three years as part of the signed Memorandum of Cooperation on landscaping Atyrau between the Akimat of Atyrau region and KMG during an environmental conference on 5 June 2023.

In order to create a green belt, a Memorandum was signed between the Akimat of Atyrau region and Embamunaygas on landscaping works on a site allocated by the Akimat of Atyrau region in the village of Talkairan with an area of 243 hectares.



# 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
- By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
- Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle



### **OUR RESULTS**

- Waste management (disposal of historical oil waste)
- Disposal of historical oil waste: for 2018 2023, 3.2 million tons of oil waste were recovered.
- As part of the implementation of the Green Office and in order to reduce the volume of plastic and metal waste, a Reverse Vending Machine was installed on the ground floor of our office. Over the entire period, 17,516 plastic bottles and 3,403 aluminum bottles were handed over to the Emerald Towers BC using a reverse vending machine.
- The 2022 CDP water security questionnaire was published.

### **OUR INITIATIVES**



### Carbon Disclosure Project

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



### Water Management Program

In order to determine target indicators for reducing water intake and increasing water reuse, a long-term Water Management Program is being developed for KMG's group.



### TAZALYO

AR is actively implementing the large-scale environmental project TAZALYQ, designed to improve the state of the environment.



### Program for the Disposal of Historically Accumulated Oil Waste.

Implementation of a program for the disposal of historically accumulated oil waste and oil-contaminated areas.



### Green Office

The corporate green direction is actively developing and the principles of a green office are being gradually introduced, such as the introduction of separate waste collection, water and energy saving in office premises.



### **CLIMATE ACTION**



### PRIORITY

Take urgent action to combat climate change and its impacts





### **SDG TARGETS**

- 13.2. Integrate climate change measures into national 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**

- An Action Plan for the implementation of the 2022-2031 Low-carbon Development Program was developed and validated
- 2023: through the implementation of 60 actions, the estimated savings in fuel and energy resources amounted to 22.2 thousand toe, which is equivalent to a reduction of 45 thousand tonnes of CO2 emissions
- A corporate methodology for quantifying greenhouse gas emissions has been introduced
- A KMG's pilot project is being developed to capture, store and use CO2 (CCUS) and determine the injection potential to increase oil recovery from depleted oil reservoirs
- ✓ A benchmark for light petroleum products has been developed
- A methodology for calculating greenhouse gas emissions using Scope 3 is being developed

### **OUR INITIATIVES**

### **Internal Carbon Pricing Concept**



In order to implement planning and ensure measures to reduce the carbon footprint of SDEs, as well as comprehensively take into account the impact of carbon regulation on financial and economic performance, internal carbon pricing mechanisms have been developed. Currently, work is underway to integrate them into the business processes of KazMunayGas's group

### Carbon Disclosure Project



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

According to the Oil and Gas Benchmark rating from the World Benchmarking Alliance, based on the assessment of low-carbon transition (ACT) and efficiency by social indicators in 2023, KazMunayGas ranked 37th among 100 key oil and gas companies in the world, rising from 77th place in 2022

### Task Force on Climate-related Financial Disclosures (TCFD)



Disclosure of climate risks in accordance with the recommendations of the TCFD, Working Group on Climate Change Financial Disclosures.

### Reducing methane emissions



A Memorandum was concluded with Carbon Limits (the world leader in methane leak management). As part of the Roadmap to the Memorandum, KMG's specialists were trained to manage methane leaks, and a demonstration of the LDAR methane leak detection and elimination program is planned for 2024.

### Joining OGMP 2.0



The company has joined the UNEP OGMP 2.0 initiative, which involves setting its own goal to reduce methane emissions and reporting methane emissions to UNEP.

### Joining the Charter for Decarbonization of the Oil and Gas Sector



The Company joined this initiative on the sidelines of the COP-28 climate change conference

### Forest climate projects



A plot was determined on an area of 2000 hectares in Pavlodar region, the greenhouse gas absorption potential is being assessed





### LIFE ONLAND



### PRIORITY

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





### 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**



### **TAZALYQ:**

As part of the project in AR, the implementation of the project "Reconstruction of Mechanical Treatment Facilities (Closed-type MTFs)" is nearing completion. To date, the implementation of the  $1^{\rm st}$  stage has been completed and the construction of the  $2^{\rm nd}$  stage of the project is being completed.

The project "Reconstruction of the Standard-treated Wastewater Channel and Reclamation of Evaporation Fields in AR" is being implemented. The evaporation fields are divided into 4 sectors, on which phased work is being carried outa. Sectors 1 and 2 are completely drained and reclaimed. A pipeline was installed in place of the existing open channel through which wastewater from AR was discharged to the evaporation fields of AR.

Disposal of historical oil waste: in 2018 - 2023, 3.2 million tonnes of oil waste were recovered

### **OUR INITIATIVES**

KMG is implementing projects and actions aimed at reducing pollutant discharges and reducing water intake from natural sources:



### Carbon Disclosure Project

The Company calculates its water footprint and posts a water security questionnaire on the Carbon Disclosure Project platform. A Water Management Program is being developed for KMG's group.



### **TAZALYO**

AR is actively implementing the large-scale environmental project TAZALYQ, designed to improve the state of the environment.



### Construction of desalination plants

The formation water desalination plant is a unique project in solving the issue of water supply in Mangistau region. The plant will release a volume of Volga water for the development of the region in the amount of at least 6.2 MMcmpa.



Desalination plant in the area of the Kenderli recreation area, Mangystau region. The estimated capacity will be 50 thousand m3 of water per day.



### Land restoration

The Company is carrying out work to restore "historical" oil waste and clean up oil-contaminated lands.



### Hierarchy of biodiversity mitigation measures

When planning and implementing production activities, the Company applies a hierarchy of measures to mitigate the impact on biodiversity, taking into account four key actions: prevention, mitigation, restoration and compensation of potential significant direct impacts.



### **Biodiversity Conservation Program**

Development of a Biodiversity Conservation Program, including goals and deadlines related to the conservation of biodiversity, cooperation with local or international environmental organizations on matters of biodiversity conservation.



## **PARTNERSHIPS**



### PRIORITY

Strengthen the means of implementation and revitalize the global partnership for sustainable development





### SDG TARGETS

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



### **OUR RESULTS**

- KazMunayGas follows the best international practices to increase transparency in payments to the state, strengthen the responsibility of producing companies in matters of income from the sector, increase public awareness of the company's activities in the regions.
- ✓ Information on tax payments to the budget of the Republic of Kazakhstan, as well as the Report on Payments to States are available on the KMG website at the following link: https://www.kmg.kz/ru/investors/reporting/

### **OUR INITIATIVES**



KMG Discloses information on taxes in accordance with the GRI standard and the Country by country OECD Action 13 **GRI standard and the Country by country OECD Action 13 initiative.** 

### Contributions to states.

The Company annually provides information in the **Report on Payments to States** according to the following types of payments:

### Taxes

All taxes, except for mineral extraction tax.

#### MFT

Mineral extraction tax is a obligatory payment by the subsoil user separately for each type of extracted mineral stock, oil, groundwater and therapeutic mud.

The item of taxation on mineral extraction is the physical volume of crude oil, gas condensate and natural gas produced by the subsoil user during the tax period.

### Subscription bonus

The subscription bonus is a one-time fixed payment by the subsoil user for the acquisition of the right to use subsoil in the contract area (subsoil plot), as well as when expanding the contract area (subsoil plot) in the manner prescribed by the law of the Republic of Kazakhstan.

### Other payments

Other payments include all other payments to states, including export customs duties.





In order to implement the UN SDGs, KMG actively cooperates with industry companies, international agencies and is a member of interstate organizations in the field of energy conservation, occupational safety and environmental protection, combating climate change, reducing emissions, as well as promoting green energy, etc.