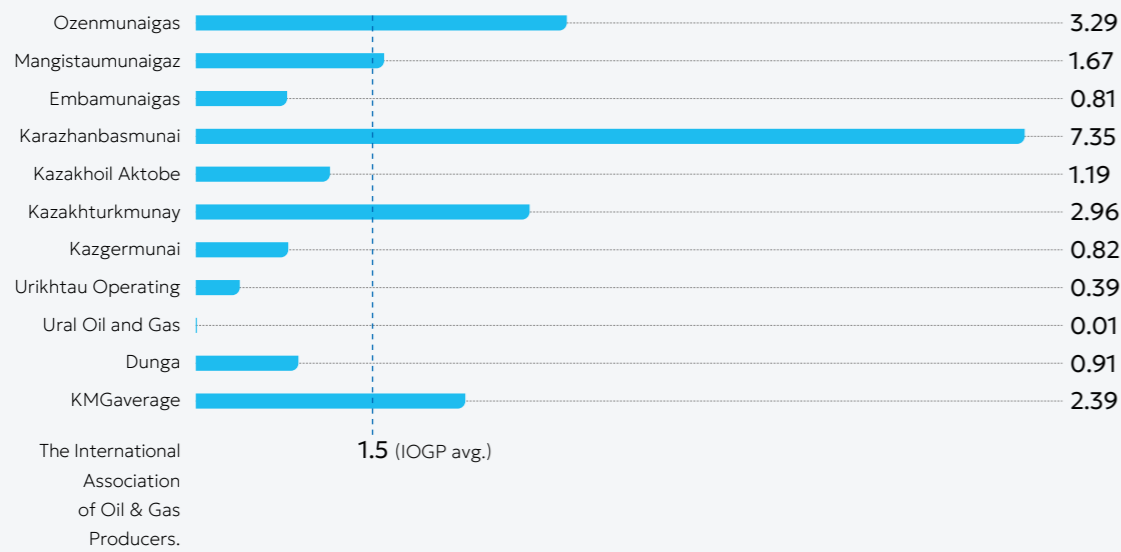


Environmental protection

Management approach: key aspects and initiatives

Energy consumption per tonne of hydrocarbons produced, GJ/tonne



Reducing energy consumption

The main strategic focus areas for energy saving and energy efficiency development in KMG Group include upgrade and replacement of process furnaces and boilers, installation of variable speed drives on pumps, thermal integration of process flows, modernisation of the lighting system, and more.

In 2025, a total of 87 initiatives were implemented (14 in design and estimation, 62 in construction and installation, and 11 at the organisational level) to upgrade process equipment, replace gas burners in furnaces, introduce energy-saving technologies, optimise heat generation and consumption, and modernise lighting systems, etc.

Estimated annual savings of fuel and energy amounted to 1,935.3 thous. GJ, equivalent to a reduction of GHG emissions by 128.3 thous. tonnes of CO₂. The effect in physical terms represents savings of 22,468 thous. kW of electricity, 21,208 Gcal of heat, 2,855 tonnes of boiler and heating fuel, 5,807 thous. m³ of dry stripped gas, a 37,935 thous. m³ of natural gas, 65 tonnes of diesel fuel, and 3,310 thous. m³ of associated petroleum gas. Overall spending on the energy saving and energy efficiency initiatives was KZT 6,172.9 mln.

Energy intensity

In 2025, KMG Group's upstream energy intensity averaged at 2.39 GJ per tonne of hydrocarbon production, 59% above the IOGP average of 1.5 GJ per tonne recorded in 2024.

KMG Group's average does not reflect the status quo because of a severe distortion owing to high energy intensities at Ozenmunaigas and Karazhanbasmunai. Karazhanbasmunai's energy consumption per tonne of produced hydrocarbons is five times higher than the IOGP global average, as production at the Karazhanbas field requires the use of steam and hot water to displace oil from subsoil reservoirs. Ozenmunaigas's energy intensity is more than twice the industry average, due to high dissolved paraffin concentrations and the rheological properties of oil, which means that it needs to be heated during production and transportation in both winter and summer.

Participation in initiatives and programmes



The World Bank's Zero Routine Flaring by 2030 initiative



UN 17 Sustainable Development Goals initiative



Climate program CPD



Global Methane Initiative



Caspian Environmental Protection Initiative



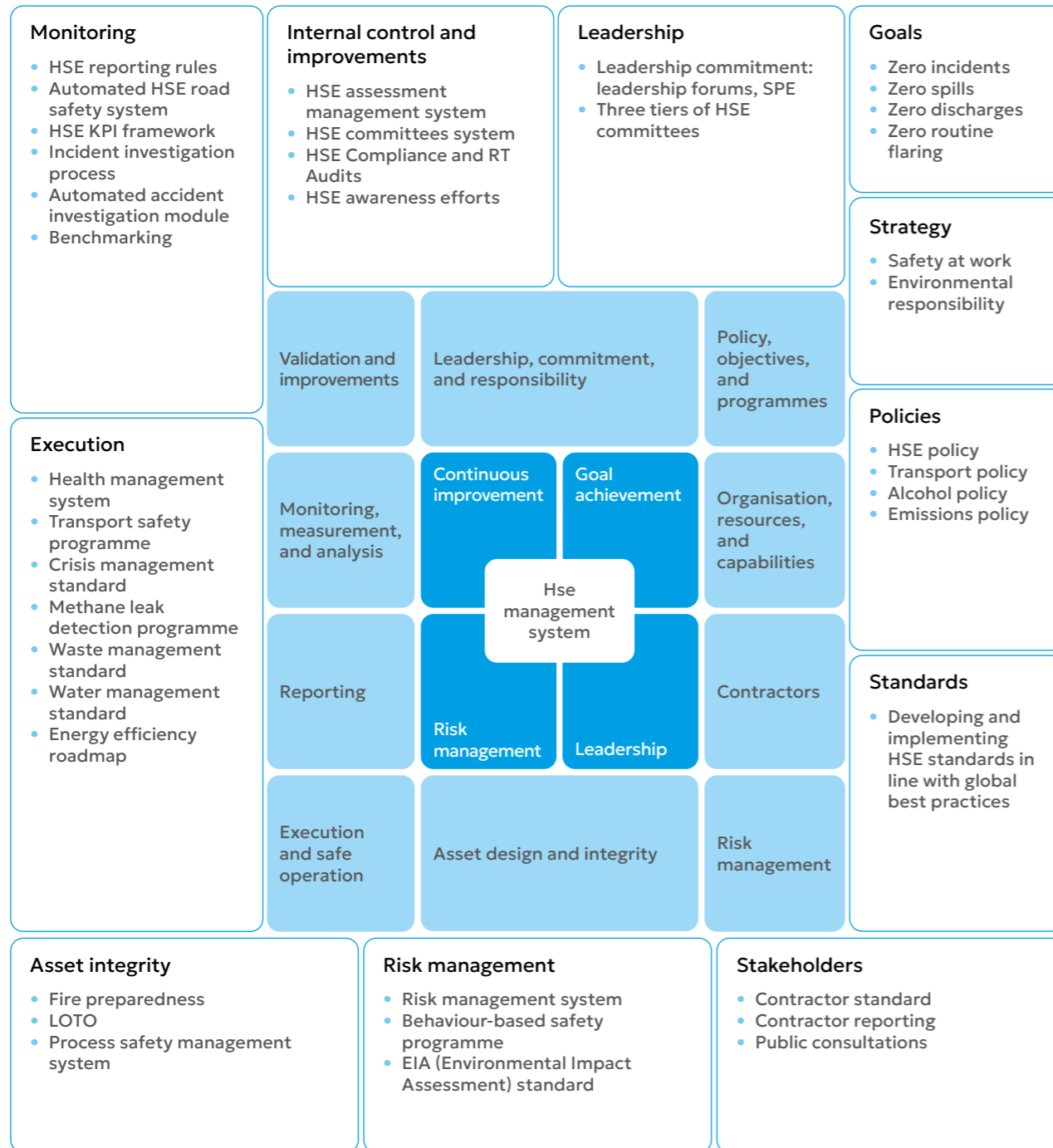
The International Association of Oil & Gas Producers

Environmental highlights

Indicator	2023	2024	2025
NOx emissions, tonnes per 1,000 tonnes of produced hydrocarbons	0.35	0.39	0.36
SOx emissions, tonnes per 1,000 tonnes of produced hydrocarbons	0.23	0.23	0.18
APG flaring rate, tonnes per 1,000 tonnes of produced hydrocarbons	1.4	1.45	1.70

The health, safety and environment management system is designed to Kazakhstan's statutory requirements, ISO 14001 and ISO 45001 international industry standards, global best practices, and recommendations of the IOGP. It covers ten areas and relies on four pillars: leadership, goal achievement, risk management, and continuous improvement.

Since 2006, KMG operates an integrated quality, environmental, and occupational health and safety management system compliant with ISO 9001, ISO 14001, and ISO 45001. KMG's subsidiaries and associates with significant energy consumption are certified to ISO 50001. The effectiveness of the HSE management system is verified by independent auditors on a regular basis.



To improve its Health, Safety and Environment Management System, KMG has it certified to ISO 45001.

Recognising the nature and scale of its footprint, the Company is committed to prioritising the sustainable use of natural resources, ensuring safe working conditions, safeguarding employee health across all business lines, protecting the well-being of local communities in its regions of operation, and upholding environmental stewardship.

We have made significant progress in enhancing the environmental safety of our operations thanks to effective corporate standards and continuous improvements in management. We aim to achieve a zero footprint, which means no negative impact on the environment whatsoever.

2025 highlights

0.18 (IOGP – 0.59)
SO_x emissions intensity

338.8 thous. tonnes
(2025: 1,099 thous. tonnes)
Recovery of historical waste and remediation of oil-contaminated soils

0.36 (IOGP – 0.34)
NO_x emissions intensity

“C”
CDP water security score

Environmental performance indicators, tonnes per 1,000 toe of produced hydrocarbons

Year	SO _x emissions intensity	NO _x emissions intensity	Raw gas flaring rate	Raw gas utilisation, %
2023	0.23	0.35	1.4	98.9
2024	0.23	0.39	1.45	98.9
2025	0.18	0.36	1.70	98.8

KMG Group’s goals in HSE management are directly related to its Development Strategy. Our Development Strategy until 2031 covers strategic initiatives to promote greater environmental responsibility. KMG Group’s environmental priorities include effective management of air emissions, water resources and waste, flaring reduction, and land reclamation.

The Company remains dedicated to being an environmentally responsible business by further enhancing its environmental protection management system, maintaining open dialogue with all stakeholders, and fulfilling its commitments as outlined in its Environmental Policy.

Taza Qazaqstan environmental campaign

Clean Kazakhstan (Taza Qazaqstan) is a large-scale nationwide environmental campaign initiated by the President of the Republic of Kazakhstan in 2024. KMG Group actively participates in this initiative. In March 2025, the Action Plan for the implementation of the Taza Qazaqstan environmental campaign at KMG for 2025 was approved.

- The key areas of the plan include:
- implementing environmental initiatives;
 - developing an environmental culture among employees;
 - promoting environmental campaigns;
 - creating an eco-community;
 - stepping up greening efforts.

A central aspect of our action plan is the initiative to clean up populated areas. To that end, a schedule of clean-up days for KMG Group was approved.

In 2025, a total of 282 clean-up days were held with the participation of 9,287 people, and over 5.9 thous. bags of waste were collected.

Greening projects

KMG actively engages in large-scale tree planting initiatives, contributing to the country's reforestation efforts.

In accordance with KMG Group's 2025 greening plan, 109 thous. trees were planned for planting, with approximately 113.7 thous. actually planted.

In addition, 150 thous. Scots pine seedlings were planted in the Kostanay Region in October of the reporting year with KMG's financial support. The technical opening of a KMG park in Astana also took place, with 1,320 trees planted.

In 2025, KMG Group planted a total of approximately 264 thous. trees.

Use of reverse vending machines

KMG's Corporate Centre also launched an initiative to collect plastic bottles and aluminium cans using a reverse vending machine (RVM). A competition was announced encouraging the active use of the RVM. The goal of the competition is to raise awareness about reverse vending machines that accept bottles and cans for recycling. In addition to incentivising waste separation, this initiative seeks to foster environmental responsibility among employees. In 2023–2025, the following was collected:

- 15.1 thous. aluminium cans;
- 61.7 thous. plastic bottles.
- Total: 76.8 thous. containers.

Information about the reverse vending machine in the building was circulated regularly throughout the year. The most active users were awarded prizes.

Green Office

The Company adheres to the Green Office principles, which focus on resource efficiency and environmental sustainability. To date, KMG's Corporate Centre has installed eco-bins for waste separation, set up a cabinet for storing fluorescent lamps in the warehouse, implemented electronic document management, and established designated bicycle parking and electric vehicle charging stations.

Regular internal mailings keep employees informed on environmental and sustainable development matters, while information materials and posters promoting

the key principles of the Green Office concept are displayed throughout the building to foster a culture of environmental awareness.

Environmental legislation

KMG actively participates in task forces under the authorised bodies responsible for environmental protection and water resources, and contributes to proposals for amendments to laws of Kazakhstan. The Company is also engaged in monitoring and participating in negotiations with the Ministry of Ecology, Geology, and Natural Resources concerning:

1. a draft international treaty on combating plastic pollution, including marine pollution;
2. a methodology for calculating financial security to determine the amount of financial assurance for fulfilling obligations to remediate the consequences of operating Category I facilities, and for developing a repurposing and/or alternative operation plan;
3. tightening of sanctions for environmental violations under the Code of Administrative Offences of Kazakhstan, and other matters;
4. amendments to the environmental legislation of Kazakhstan.

Comprehensive environmental approvals

A comprehensive environmental approval is a document designed to ensure the comprehensive prevention of environmental pollution through the application of best available technologies, while minimising and controlling the negative anthropogenic impact on the environment. Throughout 2025, KMG Group actively supported the development of design documentation for comprehensive environmental approvals at its refineries. PetroKazakhstan Oil Products obtained its approval in April 2025, with the process ongoing for the remaining refineries and Kazakhoil Aktobe.

Automated monitoring system

Between 2022 and 2025, automated monitoring systems were deployed in phases across subsidiaries and associates at Mangistaumunaigaz, Kazakhoil Aktobe, Atyrau Refinery, Pavlodar Refinery, Shymkent Refinery, and KPI – covering 15 pollutant emission sources in total. All subsidiaries and associates now transmit data online to the National Environmental Data Bank in real time, with the exception of KPI, where commissioning is currently underway.

Priority environmental projects

Eliminating legacy pollution

Elimination of historical pollution, as well as sources of negative environmental impact (idle wells, wastewater reservoirs, landfills and other production facilities).

Reducing atmospheric emissions

Reduction in emissions through improved technology solutions, e.g. replacing fuel oil with fuel/natural gas as a process furnace fuel; using next-generation additives; tree planting and land improvement at production facilities; upgrading equipment; replacing burners; streamlining equipment operating modes to reduce runtime; treating exhaust gases from harmful compounds; expanding gas processing capacity; installing gas processing units; engaging in ongoing monitoring to detect and promptly repair leaks; equipping storage tanks with floating roofs to minimise the generation of volatile fractions by eliminating the free space above the product common in conventional tanks.

Automated environmental monitoring information system

The automated environmental monitoring information system is designed to create a shared information space in environmental protection and covers the following critical tasks: automated generation of environmental reports to government agencies; maintaining the database of authorisation regulations and calculating environmental emission fees; day-to-day environmental monitoring based on environmental controls at production sites.

Air protection

Air protection is a priority for KMG, given that pollution directly impacts both human health and the environment. Under its Environmental Policy, the Company is consistently reducing pollutant emissions through equipment upgrades, modern technological solutions, automated monitoring systems, and measures to cut gas flaring.

Key work streams include the technical modernisation of facilities, optimisation of equipment operating modes, transition to cleaner fuel types, and the development of industrial environmental monitoring systems. Energy efficiency projects and reductions in process losses further contribute to lowering the Company's atmospheric impact.

Emission monitoring is carried out continuously across both stationary and mobile sources. In line with Kazakhstan's environmental laws and international best practices, automated emission monitoring systems have been deployed at a number of facilities, ensuring transparency and timely environmental control. For more details on activities and performance indicators, see KMG's Sustainability Report.

Air pollutant emissions

Volume of air pollutant emissions, thous. tonnes

Indicator	2023	2024	2025
Nitrogen oxides (NO _x)	15.27	15.22	14.84
Sulphur dioxide (SO _x)	10.99	11.69	20.11
Carbon oxide (CO)	22.96	21.50	17.24
Particulate matter (PM)	1.31	1.97	1.75
Other	68.93	66.38	58.57

Per unit emissions of air pollutants at KMG Group

Indicator	2023	2024	2025
Hydrocarbon production, tonnes per 1,000 tonnes of produced hydrocarbons	2.2	2.2	2.1
Oil refining, tonnes per 1,000 tonnes of refined oil	3.0	2.9	2.5
Oil transportation, tonnes per 1,000 tonnes of transported oil	0.4	0.4	0.4

Monitoring and automated control system

To strengthen the transparency and efficiency of environmental control, KMG is rolling out automated emission monitoring systems at key production facilities. These systems track emission parameters in real time and relay data directly to state supervisory authorities.

The integration of digital solutions into environmental monitoring is central to KMG's broader approach to ambient air protection and reducing its environmental footprint.

Efficient use of raw gas

The reduction of gas flaring is a priority task for KMG Group. According to the approved Environmental Policy, the Company strives to achieve zero routine gas flaring

by paying increasing attention to the responsible use of gas. Hence, over the last nine years, routine flaring has decreased by 86% (2017: 315.8 mln m³). Utilisation of raw gas in 2025 was 98.8%. Flaring was brought down thanks to the launch of a gas processing unit at Embamunaigas, which provides highly efficient treatment of hydrogen sulphide. In addition, a modern gas processing facility with a capacity of 226 mln m³ of commercial gas per year was commissioned at Kazakhoil Aktobe's Kozhasai field.

In 2025, raw gas utilisation rate was 98.8%, with flaring at 1.7 tonnes per 1,000 tonnes of produced hydrocarbons (1.45 tonnes in 2024 and 1.4 tonnes in 2023), an increase year-on-year and 83% lower than the IOGP industry average (10.0).

Raw gas flaring

Indicator	2023	2024	2025
Total raw gas flaring, mln m ³	33.3	35.2	43.9
Raw gas utilisation, %	98.9	98.9	98.8
Raw gas flaring rate, tonnes per 1,000 tonnes of produced hydrocarbons	1.4	1.45	1.70

KMG supports the World Bank's Zero Routine Flaring by 2030 initiative. Raw gas flaring reports under the Initiative are submitted on an annual basis to the World Bank's representative office in Kazakhstan.

Initiatives to reduce atmospheric emissions

Several subsidiaries and associates are implementing measures to cut pollutant emissions. At Atyrau Refinery, these include the phased installation of internal floating roofs across the tank farm (60 roofs), reducing evaporative hydrocarbon losses and cutting VOCs by up to 80–90%; modernisation of burner equipment at EDD-ADU-2 units, with 36 burners replaced in 2024; the introduction of additional heat-exchange circuits at EDD-AVDU-3, lowering fuel consumption by up to

30%; and, under the Tazalyq project, the dismantling of a sectional oil-water separator and closure of open reservoirs at mechanical treatment plants, reducing fugitive emissions and eliminating odour sources.

The automated monitoring system (AMS) is installed at Kazakhoil Aktobe, Mangistaumunaigaz, Atyrau Refinery, Pavlodar Refinery, and PetroKazakhstan Oil Products; data on emission indicators are transmitted in real time; KPI is finalising pre-commissioning and construction and installation works. Environmental control devices monitor emissions of soot, nitrogen oxides, and carbon monoxide in flue gases from furnaces and boilers. The AMS not only helps monitor emission indicators but also, if necessary, adjust the operating mode of equipment to improve process performance.

➔ For more details on air protection, see [the Sustainability Report](#).

Waste management

KMG's production operations generate production and consumption waste. KMG Group develops and implements a set of measures to improve the waste management system, keeps records of waste generated and accumulated, including contractors' waste, and ensures the safe accumulation of waste until it is recovered or disposed of. In 2025, KMG's expenses for the recovery of historical oil waste totalled KZT 9.7 bln.

In selecting waste recovery methods, KMG prioritises advanced technologies that minimise environmental impact and prevent secondary pollution.

KMG Group disposed of a total of around 339 thous. tonnes of historical waste, with their sites remediated.

In 2024, we approved the Corporate Waste Management Standard for KMG Group. The standard specifies step-by-step actions of officers in charge at subsidiaries and associates when carrying out waste management activities to ensure compliance with the requirements of Kazakhstan's environmental laws. In 2025, the standard was implemented as a guiding document for waste management at production facilities of subsidiaries and associates.

➔ For more details on waste management, see [KMG's Sustainability Report](#).

Asset retirement obligations

Oil and gas assets

Under the terms of certain contracts, in accordance with legislation and regulatory legal acts, KMG has legal obligations to dismantle and liquidate fixed assets and restore land plots at each of the fields. In particular, KMG's obligations include the gradual closure of all non-productive wells and actions to permanently terminate operations, such as dismantling pipelines, buildings and reclamation of the contract area, as well as decommissioning and obligations to prevent environmental pollution at the production site.

The Company calculates asset retirement obligations separately for each contract. The amount of the liability is the present value of the estimated costs that are expected to be required to settle the liability, adjusted for the expected inflation rate and discounted using average long-term risk-free interest rates on government debt of transition economies, adjusted for risks inherent in the Kazakhstan market.

As of 31 December 2025, the carrying amount of the Company's provision for liabilities to liquidate oil and gas assets was KZT 142.3 bln (31 December 2024: KZT 142.0 bln) (for details, see Note 4 in the consolidated financial statements).

Oil and gas trunklines

In accordance with the Law of the Republic of Kazakhstan On Trunk Pipeline, which entered into force on 4 July 2012, KazTransOil has a legal obligation to liquidate the trunkline after the end of operation and implement subsequent measures to restore the environment, including land reclamation. The provision for the obligation to abandon pipelines and land reclamation is estimated based on the cost of dismantling and reclamation works calculated by KMG. As of 31 December 2025, the carrying amount of KMG's provision for the obligation to abandon pipelines and reclaim land of the Company amounted to KZT 24.1 bln (as of 31 December 2024: KZT 37.4 bln) (for details, see Note 4 in the consolidated financial statements).

Environmental remediation

KMG also creates provisions for obligations related to environmental clean-up and rehabilitation, based on its estimates and judgements. Environmental costs are either capitalised or expensed based on their future economic benefits.

The Company's environmental remediation reserve represents management's best estimates based on an independent assessment of the expected costs required for KMG to comply with the existing Kazakh and European regulatory frameworks. As of 31 December 2025, the carrying amount of the provision for obligations related to asset disposal and land reclamation was KZT 33.6 bln (as of 31 December 2024: KZT 41.8 bln) (for details, see Note 4 in the consolidated financial statements).

Water protection

Water is an integral part of all KMG production processes. KMG adheres to the principles of the UN Global Compact and integrates the Sustainable Development Goals (SDGs) into its operations. The Company adheres to all 17 SDGs, including Goal 6, Clean Water and Sanitation. In its activities, the Company strives to reduce water consumption, increase water use efficiency, drive up water reuse and recycling, improve the quality of effluents, and minimise the impact on natural water bodies.

As KMG is a vertically integrated company engaged in the production, transportation, and processing of hydrocarbons, all our processes consume a lot of water. The Company takes water from surface and underground sources, municipal water supply systems, and the Caspian Sea. Wastewater from KMG's operations mainly goes to specialised receivers: storage ponds, and evaporation and filtration fields. Those facilities are technical structures designed for natural treatment of wastewater and preventing environmental pollution. Operations that do not have their own storage facilities transfer wastewater to dedicated companies for treatment and disposal. The quality standards for discharged water established by environmental laws are met through the use of mechanical and biological methods of effluent treatment. However, no wastewater is discharged into surface natural water bodies.

One of the Company's most important objectives is to increase the reuse of treated effluents by returning them to the process, using them for irrigation of green areas, and dust suppression on construction sites and roads.

KMG uses the WRI¹ Aqueduct water stress metrics to evaluate and monitor production assets in water stressed areas within the Caspian Sea, and the Syr Darya and Ural river basins.

Kenderly seawater desalination plant

In 2025, KMG completed construction of the Kenderly seawater desalination plant, situated approximately 100 km from the city of Zhanaozen. Implemented on the instructions of the President of Kazakhstan, it is one of the Company's largest social infrastructure projects in the Mangistau Region. With a design capacity of up to 50 thous. m³ of drinking water per day, the plant will provide a reliable water supply for Zhanaozen and the surrounding settlements.

The project was delivered by Ak Su KMG, a subsidiary of Ozenmunaigas. Construction was completed in May 2025, and commissioning began in July with the launch of the full production cycle. The facility uses a modern multistage treatment and desalination system that brings water quality up to drinking water standards.

The plant's strategic significance for the region is considerable: it reduces the load on the Astrakhan–Mangyshlak main water line, enhances the reliability of water supply, and supports the social and economic development of the Mangistau Region.

In its initial stage, the facility will operate in a water deficit compensatory mode, supplementing existing supply sources for the city of Zhanaozen.

The project represents the Company's largest social initiative in the region, having created 91 permanent jobs, with up to 650 people employed during the construction phase.

Social responsibility

KMG complies with the legal and regulatory requirements applicable in the Republic of Kazakhstan, as well as with international laws and treaties regulating oil companies, and is aware of its responsibility to shareholders, communities, and investors for the impact on the economy, environment, and society, for the creation of long-term business value, and for sustainable growth in the long run.

Development of the Company's regions of operation

Social and economic projects

KMG contributes to social and economic development in its regions of operation. We actively cooperate with local authorities, maintain an ongoing dialogue with key stakeholders, and focus on training and development of young skilled talent. We also run social initiatives for KMG Group's employees and are committed to supporting domestic producers through off-take agreements. Among other things, KMG Group companies invest in the development of socially important facilities, construction of sports complexes, and regional social and economic development under subsoil use contracts and the Comprehensive Development Plan.

In 2020–2025, the Company implemented social projects totalling KZT 356 bln.

The largest projects include:

- construction of a community centre for 300 visitors in Tasshagyl (KZT 200 mln, 2021);
- construction of schools (for 300 pupils) in Kulsary, Zhylyoi District, and Balausa, Atyrau (for 600 pupils) (KZT 831 mln, 2022);
- construction of a kindergarten for 280 children in Besikti, Atyrau Region (KZT 783 mln, 2023);
- construction of 21 sports grounds in Zhanaozen, Zhetybai and other locations (KZT 1 bln, 2023);
- completed construction of a multifunctional sports complex in Uralsk (KZT 19.9 bln, 2024);
- launch of a Schoolchildren Palace in Kyzylorda financed by Kazgermunai (KZT 2.4 bln, 2024);
- implementation of the project titled "Otpan: Network of Anchor Schools in the Mangystau Region". KMG renovated more than 50 classrooms and educational spaces in schools in Taushyk (Tupkaragan District), Zhetybai (Karakiya District), and Rakhat (Zhanaozen) (total of KZT 504 mln, 2024–2025);

- launch of a Rehabilitation and Support Centre for special children in the Zhylyoi District, Atyrau Region (KZT 983.2 mln, 2024);
- planting of 4.4 mln saxaul seedlings on the dried seabed of the Aral Sea (KZT 420 mln, 2024) and over 600 trees in Astana (KZT 68 mln, 2024);
- KMG implements the Zharkyn Bolashak project to enhance education level for children of the Mangistau Region. Currently, over 1 thous. students who received grants study in 56 educational institutions across Kazakhstan's ten regions (KZT 4.2 bln);
- projects were implemented for the construction of a seawater desalination plant in Kenderly (KZT 121.2 bln), as well as the construction of the Schoolchildren Palace (Bolashaq sarayi) in Zhanaozen (KZT 4.2 bln).

The subsoil use contracts signed by KMG subsidiaries provide for significant investment in developing the regions of operation and social support to vulnerable population groups. The Company's subsidiaries and associates also provide funds to local executive bodies, which are further distributed in line with the needs of local communities under agreements and memoranda concluded with the akimats of the respective regions. These include:

- Kazgermunai transferred KZT 377 mln for the social and economic development of the Kyzylorda Region;
- Ozenmunaigas allocated KZT 1.7 bln to the state-owned utility company Ozeninvest, under the akimat of Zhanaozen, for the maintenance of municipal services;
- Embamunaigas allocated KZT 884 mln for the construction of new residential buildings in Dossor, Makat District;
- Mangistaumunaigaz donated KZT 140 mln to support social and economic development of the Mangistau Region and its infrastructure;
- Kazakhoil Aktobe allocated KZT 443 mln for the social and economic development of the Aktobe Region and its infrastructure under a memorandum with the akimat of the Aktobe Region;
- Urikhtau Operating allocated KZT 59 mln to finance the region's social and economic development and infrastructure;
- Kazakhturkmunay transferred KZT 326 mln for the social and economic development of the Aktobe Region;

¹ World Resources Institute.