

KEY INVESTMENT PROJECTS

Investment portfolio overview

Today, KMG’s investment portfolio includes projects across all areas of operations aimed at increasing the resource base, boosting efficiency across the value chain, diversifying business activities, and expanding the product offering. In line with the KMG Development Strategy for 2022–2031, the Company’s investment portfolio encompasses projects in both conventional areas (exploration, transportation and refining of oil) and new realms (petrochemicals, alternative energy, and carbon footprint reduction at KMG’s existing operating assets).

As of 1 January 2025, the investment portfolio totalled KZT 51,270 bln¹, including KZT 19,390 bln¹ attributable to KMG.

In 2024, final investment decisions were made on projects totalling KZT 4,972.3 bln (including KZT 3,558.8 bln attributable to KMG), including:

- Building the first integrated gas chemical complex in the Atyrau Region, Phase 2 (polyethylene production);
- Building the first integrated gas chemical complex in the Atyrau Region, Phase 2 (gas separation unit construction);
- Expanding Caspi Bitum’s oil refining capacity to 1.5 mln tonnes per year by upgrading the existing EDD-AVDU unit;

Additionally, in 2024, exploration was approved for:

- Taisoigan 1 and 2;
- Karazhar subsoil use project.

Portfolio of investment projects

Project type	Total investment portfolio, KZT bln ¹		Share of investment portfolio attributable to KMG, KZT bln ¹	
	31.12.2023	31.12.2024	31.12.2023	31.12.2024
Oil and gas exploration and production	41,857	42,747	12,713	13,216
ESG projects	965	991	420	363
Service projects	178	–	178	–
Oil transportation	419	368	155	136
Refining and marketing of oil products	797	587	732	501
Petrochemicals	6,131	6,460	4,329	5,063
Other	114	117	109	111
Total	50,461	51,270	18,636	19,390

Oil and gas exploration and production

In 2023 and 2024, fieldwork (seismic surveys) was completed ahead of schedule for the five blocks under the subsoil exploration project: Mugodzhary, Bereзовsky, Zharkyn, Bolashak, and Northern Ozen. Seismic surveys, processing, and interpretation of data were completed for Northern Ozen, Zharkyn, and Bereзовsky. With the contracts expected to be signed shortly, the search is open for strategic partners.

In 2025, subsoil exploration licences are planned for the Southern Shu-Sarysu, Shygys, and Bereke blocks, with pro-active seismic surveys, processing, and interpretation of results to reduce geological risks and obtain input data for geological evaluation and feasibility study.

The Abay project is underway in line with Contract No. 4752-UVS-ME dated 26 July 2019 for the exploration and production of hydrocarbons in the Abay block located in Kazakhstan’s part of the Caspian Sea. Construction of the first prospecting well, Abay-1, was completed in September 2024. Exploration was performed by the strategic partner (Eni) on the basis of carry-financing. With no signs of hydrocarbons found following the well construction at the Abay block, KMG and Eni jointly decided to withdraw from the project in February 2025.

2024 saw the construction of the first prospecting well kick off at the Turgai Palaeozoic block with the aim of drilling and testing a 5,500 m deep PZ-1 prospecting well.

In 2023, a contract was awarded for the Karaton Subsalt block, with an operator company established and a strategic partner engaged. In 2024, drilling of the first prospecting well, SG-8, to a depth of 5,500 m commenced, using funds from the strategic partner under a carry-financing agreement. Testing is scheduled for completion in 2025.

Five wells were brought online at the Rozhkovskoye field in the West Kazakhstan Region, with a raw gas production rate of 1.4 mln m³ per day². Project partners are currently working with Ural Oil and Gas LLP to increase the number of production wells, boost output, and improve field development efficiency.

VU-6 well was commissioned at the Urikhtau field in 2024, resulting in a production increase of 90.3 tonnes of oil per day. Drilling of VU-7 and VU-8 production wells continues, with commissioning planned for 2025. Design work is ongoing to determine the concept for further field development.

In 2023, KMG and LUKOIL signed a number of agreements as part of the Kalamkas-Sea–Khazar–Auezov project in Kazakhstan’s part of the Caspian Sea. Recoverable reserves are estimated at 86 mln tonnes of oil and 22 bln m³ of gas (dissolved gas and potential gas from the gas cap). In 2024, the FEED commenced. The final investment decision is planned by the end of 2025.

Tengiz, Kashagan and Karachaganak megaprojects

KMG partners with strategic investors in projects at large fields: Tengiz (20%), Kashagan (16.87%), and Karachaganak (10%).

- At the Tengiz field, key stages of the Future Growth Project (FGP) were completed in 2024. Throughout the year, Tengizchevroil (TCO) commissioned WPMP³ facilities, initiating a phased transition of wells from high to low pressure. By the end of the year, 16 out of 21 group metering stations (GZU) were operating in the low pressure mode, with the transition continuing. Mechanical works were also fully completed in 2024, along with the main commissioning stages. The cost of FGP and WPMP projects totals USD 48.9 bln, with aggregate costs as of the end of 2024 amounting to USD 47.5 bln. The commissioning of FGP facilities was planned for 2Q 2025, with projections to increase Tengiz field oil output by 12 mln tonnes per year. However, oil production at the new Third-Generation Plant (TGP) commenced as early as in January 2025, marking a significant milestone in the project development.
- Projects to maintain production plateau at the Karachaganak field are ongoing. In 2023, a concept was developed for the construction of a gas processing plant with a capacity to produce 4 bln m³ of marketable gas per year. This project will provide the Karachaganak field with opportunities to monetise its raw gas and its by-products. The project to install the 5th injection compressor (5ICP) is in 2024, with the parties signing the readiness certificate. The 6th injection compressor project is now in the active construction phase (with completion progress at 72.8%).
- Oil production at the Kashagan field is currently underway as part of Phase 1 development. Currently, projects are being considered for Phase 2 development aimed at increasing crude oil and condensate output by a total of ca. 710 thous. bbl per day (ca. 89.5 thous. tonnes per day) over the next ten years. Phase 2A involves increasing oil production at Kashagan to 6.3 thous. tonnes per day (with the overall production at the field reaching 500 thous. bbl per day) by supplying raw gas to the projected third-party gas processing plant (GPP) with a capacity of 2.5 bln m³ per year. NCOC and QazaqGas signed a pre-FEED agreement; following the pre-FEED, the existing FEED will be revised, and an investment decision will be made.
- Phase 2B involves increasing oil production to 710 thous. bbl per day by supplying 6 bln m³ of raw gas to a third party. The operator completed preliminary technical conceptual studies on synergy. Negotiations are underway with Tengiz shareholders to assess the feasibility of connections and potential synergies.

¹ Including KMG’s participation in megaprojects (Tengiz, Kashagan, Karachaganak) and joint ventures; including historical costs and foreign exchange differences; including preliminary cost estimates for exploration projects, factoring into further project implementation.

² As of 31 December 2024.

³ Wellhead Pressure Management Project.

Refining and marketing of oil products

Given the projected growth in consumption, one of KMG's key objectives in the coming years is to ensure the supply of locally refined oil products to Kazakhstani domestic market, which necessitates the expansion of existing capacities. To achieve this, comprehensive measures need to be taken to improve equipment reliability, allowing the refineries to operate without interruption for three years. To this end, KMG has initiated projects to increase the time between repairs at its Atyrau, Pavlodar, and Shymkent refineries to three years.

To boost the production of light oil products, there are plans to implement an efficiency enhancement project at Atyrau Refinery. The project includes eight sub-projects to remove bottlenecks and boost light oil product output. In 2025, the Tengiz Oil Refining sub-project is planned for implementation. Upon its completion, Atyrau Refinery will have the capacity to process up to 1 mln tonnes of Tengiz oil.

To ensure energy security of Kazakhstan's northern and eastern regions, KMG implements projects at Pavlodar Refinery to remove sulphur compounds from liquefied petroleum gas and make winter diesel fuel. The project to construct an LPG treatment facility was completed in 2024 and officially commissioned on 30 December 2024. The winter diesel fuel production unit will be launched in 2025.

In 2024, efforts commenced on expanding Caspi Bitum's oil refining capacity from 1 mln tonnes to 1.5 mln tonnes per year, along with the production of up to 750 thous. tonnes of road bitumen annually. A contract was signed with a consortium comprising CITIC Construction Co. Ltd. and OGCC KazStroyService. Orders for equipment manufacturing and supply were placed, and construction and installation works are underway for temporary buildings and facilities. The project is slated for completion in 2025.

Petrochemicals

In 2024, final investment decisions were made on the major petrochemical projects (construction of a gas separation unit and polyethylene production unit) as part of Phase 2 of the first integrated gas chemical complex in the Atyrau Region.

As far as the polyethylene production project is concerned, the design stage is complete, and the design and estimate documentation is to be approved by Gosexpertiza in 1Q 2025. In September, an EPC¹ contract for pyrolysis was signed with a consortium of Técnicas Reunidas, S.A. (Spain) and Sinopec Engineering Incorporated (China), with construction starting at the pyrolysis unit site and equipment manufacturing orders being placed. Work is underway to conclude the EPC contract for the polymerisation project and the construction of off-site facilities; completion is scheduled for 1H 2025. The first stage of securing a bridge loan is nearing completion, with finalisation of the term sheet, development of the loan agreement, and guarantee agreements underway.

For the construction of a gas separation unit, a formal tender to select an EPC contractor was announced on 31 October 2024; the EPC contract award is planned for 2025. FEED for LGM² is also being developed, with completion expected in May 2025. Work is underway to secure financing according to the approved structure (20% soft financing from KMG; 40% bond financing from the National Fund of Kazakhstan; 40% market co-financing). KMG PetroChem and TCO signed addendum No. 3 to the 2008 Raw Material Supply Agreement and an updated dry gas sales contract.

Guarantee tests of the polypropylene production unit and a pilot run of the polypropylene plant were completed this year. The product range was expanded (nine grades), output came in at approximately 200 thous. tonnes, a new commercial policy was implemented, the Overdrive support programme was launched, and warehouses were opened in Almaty and Astana.

In advancing the terephthalic acid and polyethylene terephthalate plant construction project, Sinopec Shanghai Engineering Co., Ltd. developed a pre-feasibility study and performed a market analysis. Negotiations are underway with potential strategic partners.

In 2024, a framework agreement was signed between KMG and China National Petroleum Corporation (CNPC) to deepen strategic cooperation in the oil and gas industry as part of the project to construct a gas chemical complex for the production of ammonia and urea. The parties will collaborate on a feasibility study for urea production utilising commercial gas from CNPC International Aktobe Petroleum.

This initiative is poised to drive local economy, create jobs and increase tax revenue, while also boosting Kazakhstan's export potential and addressing domestic market demands.

Sustainable development projects

As a national company, KMG runs projects to address water supply issues in the country's western regions. For the Kenderly project to build a desalination plant, major design and construction works were completed, with the commissioning of the plant expected in 2025.

KMG is also implementing a project to construct a hybrid power plant in the Mangistau Region, involving combined electricity generation from renewable sources (wind, solar) and a gas power plant. The project will bring down overall CO₂ emissions and ensure stable electricity supply by balancing variable renewable energy with the plant's manoeuvrable capacity. In 2024, an EPC contract was awarded for the construction of a gas power plant and a solar farm, with construction now underway.

ICF SH&E Limited conducted a feasibility study for a sustainable aviation fuel (SAF) plant, the first of its kind in Central Asia and the CIS. The project involving KMG, the European Bank for Reconstruction and Development, KazMunayGas-Aero, and Air Astana aligns with Kazakhstan's Strategy to Achieve Carbon Neutrality by 2060 and IATA's³ commitment to net-zero emissions by 2050. SAF is considered a promising alternative to fossil fuels due to its significantly lower carbon emissions.



¹ Engineering, Procurement, Construction.
² Front-End Engineering Design Light Gas Mixtures.

³ The International Air Transport Association.