

# Oil and Gas

# Transforming commodity revenues



KMG plays a key role in representing Kazakhstan's interests in the oil and gas market, operating four major refineries domestically and two refineries in Romania. KMG participates in projects at major fields: Tengiz (20%), Kashagan (16.87%) and Karachaganak (10%), co-operating

with strategic investors. The company maintains its competitive advantage through a stable cycle of hydrocarbon production, transportation and processing. KMG is actively exercising its priority right to acquire subsoil assets, which contributes to replenishing its resource base.

### **KEY PERFORMANCE RESULTS 2024**

| Indicator  | 2023    | 2024    |
|--|---------|---------|
| Production figures, million tonnes:              |         |         |
| Oil and gas condensate production                | 23.5    | 23.8    |
| Crude oil refining                               | 19.6    | 19.2    |
| Refining in Kazakhstan                           | 14.2    | 14.2    |
| Oil transportation                               | 80.4    | 83.5    |
| Gas production, billion m³                       | 9.5     | 9.6     |
| Financial indicators, billion KZT:               |         |         |
| Revenue  | 8,320   | 8,330   |
| Dividends  | 300     | 300     |
| Net profit                                       | 927     | 1,094   |
| Costs  | 8,045.6 | 7,780,6 |
| Operating profit                                 | 1,486.2 | 1,467.6 |
| Net debt   | 1,645   | 1,163   |
| Sustainable development indicators:              |         |         |
| Greenhouse gas emissions, million tonnes CO2-eq. | 7.4     | 7.4     |
| Accidents  | 29      | 21      |
| Fatal accidents                                  | 2       | 1       |

2024 was an important milestone for KMG, marked by significant achievements in sustainable development, international co-operation and infrastructure modernisation

In 2024, KMG started drilling wells at the Turgai Paleozoic, Karaton Podsolevoy, Karazhar and Taisoigan fields, whose combined resources are estimated at more than 800 million tonnes of oil equivalent.

In addition, as part of the Kalamkas Sea, Khazar, Auezov subsoil area development project in the Kazakhstan sector of the Caspian Sea, basic engineering and design (FEED) work has begun. By the end of 2025, it is planned to make a final decision on the project implementation

In March 2024, as part of the development of the Trans-Caspian route, KMG and SOCAR signed an agreement on a phased increase in oil transportation, providing for an increase in the transit of Kazakh oil through the Baku-Tbilisi-Ceyhan pipeline to 2.2 million tonnes per year.

In 2024, as part of co-operation with Abu Dhabi Ports Group, the tankers Taraz and Liwa, acquired in 2023, transported 874,000 tonnes of oil on the Aktau-Makhachkala route.

In April 2024, work began on commissioning the facilities of the Wellhead Pressure Management Project. As part of the Future Expansion Project, crude oil production began at the new Third Generation Plant in January 2025. Production is being ramped up in stages to reach the full design capacity of the Future Expansion Project.

In addition, in the reporting year, a final investment decision was made on the project for the construction of a gas separation complex.

KMG actively develops international co-operation. Thus, in 2024 KMG signed a geological exploration agreement with CNOOC on the new Zhylyoi subsoil use project, as well as a joint research agreement with Shell and Chevron to study geological and geophysical data on the Mugodzhar project.



One of KMG's priorities is the modernisation of production capacities. As part of increasing refining capacity, a project is being implemented

to increase the capacity of the Shymkent Refinery to 12 million tonnes per year by 2030.

### **HYDROCARBON RESERVES**

PROVED AND PROBABLE HYDROCARBON RESERVES (2P)

5,551 million barrels

In 2024, KMG's proven and probable hydrocarbon reserves (2P) amounted to 716 million tonnes of oil equivalent, equal to 5,551 million barrels. Compared to 2023, the level of 2P reserves decreased by 2.4% due to the impact of economic macro-factors on subsoil users, as well as a decrease in the timing of the profitability of gas production at Karachaganak.

### Net reserves under PRMS (as of 31 December 2024)

| Category of reserves, million tonnes of oil equivalent | 2023<br>(KMG share) | 2024<br>(KMG share) |
|--|---------------------|---------------------|
| Proven (1P)  | 507                 | 452                 |
| Proven plus probable (2P)                              | 733                 | 716                 |
| Proven plus probable plus possible (3P)                | 842                 | 794                 |



### GEOLOGICAL EXPLORATION AND OIL AND GAS PRODUCTION

As part of an investment project for geological exploration of subsoil in five areas (Mugodzhary, Berezovsky, Zharkyn, Bolashak and North Ozen), fieldworks (seismic survey) were carried out ahead of schedule. Field seismic acquisition and processing and interpretation were completed in the North O9zen, Zharkyn and Berezovsky areas. It is planned to obtain contracts and attract strategic partners.

Drilling of the 5,500-metre deep Turgai Paleozoic exploration well in the Kyzylorda region commenced in 2024.

Also in 2024, drilling of the first 5,500-metre deep prospecting well was started at the Karaton Podsolevaya prospect, with testing to be completed in 2025.

At the Rozhkovskoye field in the West Kazakhstan region, 5 wells were connected to commercial operation, which allowed achieving a daily production of 1.4 million m³/day of raw gas.

Currently, the project partners together with Ural Oil and Gas LLP are working to ensure an increase in the number of operated wells, production and efficiency of field development.

At the Urikhtau field, the VU-6 well was commissioned in 2024, which enabled an increase in oil flow rate of 90.3 tonnes per day. Drilling of production wells VU-7,8 continues with planned commissioning in 2025. Design work is ongoing to define the concept for further development of the field.

### HYDROCARBON PRODUCTION

OIL AND GAS CONDENSATE PRODUCTION

23.8

million tonnes

KMG's oil and gas condensate production in 2024 was 23,837,000 tonnes (490,000 barrels per day), an increase of 1.3%. Production of associated and natural gas (before reinjection) increased by 1.0% to 9,554 million m<sup>3</sup>.

### Oil and condensate production volume in 2024

| Oil and condensate production, '000 tonnes | 2023 (KMG share) | 2024 (KMG share) |
|--|------------------|------------------|
| OzenMunaigas                               | 4,877            | 5,098            |
| Mangistaumunaigas                          | 3,075            | 3,085            |
| Embamunaigas                               | 2,722            | 2,790            |
| Tengiz                                     | 5,779            | 5,562            |
| Kashagan                                   | 3,108            | 2,885            |
| Karachaganak                               | 1,086            | 1,097            |
| Others                                     | 2,883            | 3,321            |
| Total                                      | 23,520           | 23,837           |



Oil production at Tengiz decreased by 3.7% to 5,562,000 tonnes (121,000 barrels per day). Associated gas production decreased by 5.9% to 3,012 million m<sup>3</sup>. The decrease was mainly due to overhauls at production facilities.

Oil production at Kashagan was 2,885,000 tonnes (62,000 barrels per day), a decrease of 7.2%. Gas production decreased by 5.1% to 1,863 million m<sup>3</sup>. The decrease was due to the scheduled overhaul of the slag-catcher unit in October 2024.

Oil and condensate production at Karachaganak increased by 1.0% to 1,097,000 tonnes (24,000 barrels per day). The growth in liquids production was fuelled by an increase in the reinjection of crude gas into the reservoir

at Karachaganak's production units. Gas production before reinjection increased by 6.9% to 2,394 million m<sup>3</sup>.

In 2024, oil and condensate production at KMG's operating assets increased by 5.4% to 14,294,000 tonnes. Production growth at the operating assets of JSC OzenMunaiGas, JSC Embamunaigas, JSC MangistauMunaiGas and other operating assets was due to a decrease in emergency power outages by the Mangistau Nuclear Power Plant in the reporting year compared to 2023, as well as due to additional geological and technical measures applied by the operating assets to increase production.

## TENGIZ, KASHAGAN, KARACHAGANAK MEGAPROJECTS

KMG is actively involved in key oil and gas projects, including Tengiz (20%), Kashagan (16.87%) and Karachaganak (10%), working together with strategic investors.

In 2024, key stages of the Future Expansion Project were being finalised at the Tengiz field. Tengizchevroil LLP commissioned the Wellhead Pressure Management Project facilities, beginning the phased conversion of wells from high pressure to low pressure. Mechanical works and major commissioning activities were completed. Despite the planned commissioning in Q2 2025, production at the new third generation plant started as early as January 2025, becoming an important milestone in the implementation of the project designed to increase oil production by 12 million tonnes per annum.

The Karachaganak field continues to implement projects to maintain stable production levels. In 2023, a concept was developed for the construction of a 4 bcm³ per annum gas

processing plant, which will allow monetisation of crude gas produced from the field and its products. The project for installation of the 5th gas reinjection compressor (5IC) was completed and a certificate of readiness for commissioning was signed. The project for installation of the 6th gas reinjection compressor is in the active construction phase.

The Kashagan field is producing oil as part of the Stage 1 development. Phase 2 projects are currently being considered to increase oil and condensate production levels to ~710,000 bbl (~89,500 tonnes per day) over the next 10 years. The Stage 2A project will increase production to 6,300 tonnes per day (total field production will be 500,000 bpd) by supplying crude gas to a planned third-party gas processing plant with a capacity of 2.5 billion m³ per year. NCPC and QazaqGaz signed an agreement on conducting a pre-baseline design, which will result in an adjustment of the previously developed baseline project and an investment decision on project implementation.

The Phase 2B project involves increasing oil production to 710,000 bbl by supplying 6bn m³ per annum of crude gas to a third party. The operator has completed preliminary

synergy studies. Discussions are underway with the shareholders of the Tengiz field to assess possible synergy connections and assumptions.

### **OIL TRANSPORTATION**

Work is continuing to increase utilisation of the established transport capacities on KMG's oil transportation systems, as well as work to diversify export routes.

TOTAL OIL TRANSPORTATION VOLUME

83.5

million tonnes

Total volume of trunk and sea transportation of crude oil increased by 3.9% to 83.5 million tonnes.

The volume of oil transported through trunk pipelines increased by 1.0% to 70.3 million tonnes. The increase was due to transshipment of oil from the Kashagan and Karachaganak fields in the direction of the Atyrau-Samara pipeline and the Caspian Pipeline Consortium through the system of KazTransOil JSC, as well as the growth of domestic transportation in the direction of oil refineries.

The total volume of oil transportation by sea in the reporting year increased by 22.2% to 13.2 million tonnes. The growth was due to an increase in oil transportation in the Mediterranean Sea due to higher volumes shipped from the port of Ceyhan, as well as increased volumes on the Aktau-Makhachkala and Aktau-Baku routes in the Caspian Sea.

### Oil transportation volume in 2024

| Total  | 80,359              | 83,478              |
|--|---------------------|---------------------|
| Kazmortransflot                                | 10,778              | 13,169              |
| Caspian Pipeline Consortium                    | 13,171              | 13,074              |
| MunaiTas <sup>12</sup>                         | 2,819               | 2,953               |
| Kazakhstan-China Pipeline                      | 9,403               | 9,394               |
| KazTransOil                                    | 44,188              | 44,887              |
| Oil transportation <sup>11</sup> , '000 tonnes | 2023<br>(KMG share) | 2024<br>(KMG share) |

<sup>11</sup> Some crude oil may be transported by two or three pipeline companies and, accordingly, these volumes are accounted for more than once in the consolidated volume of crude oil transported.

<sup>&</sup>lt;sup>12</sup> MunaiTas is an equity-consolidated joint venture and therefore transportation volumes are shown according to a 51% ownership interest.



### REFINING CRUDE OIL AND MARKETING PETROLEUM PRODUCTS

HYDROCARBON FEEDSTOCK PROCESSED AT KAZAKHSTAN REFINERIES

14.2

million tonnes

The amount of hydrocarbon feedstock processed at Kazakhstan refineries increased by 0.3% to 14,246,000 tonnes. Refining at ANPZ and PNHZ increased by 1.3% and 1.2%, respectively, while refining at PKOP increased by 0.1% compared to the 2023 reporting period. The increase in refining at these refineries in 2024 was offset by a decrease in refining at Caspi Bitum due to the planned shutdown in November 2024 to commence work on the capacity expansion project.

Refining at KMG International (Petromidia, Vega) in Romania decreased by 8.8% to 4,912,000 tonnes. The decrease in refining was due to the late restart of the soft hydrocracking unit



after a fire at the Petromidia plant on 21 June 2023, as well as the plant shutdown for scheduled overhaul in March of the reporting year. KMG International's plants are operating normally at full capacity following the completion of the remedial work.

### Hydrocarbon feedstock processing voume in 2024

| Hydrocarbon feedstock processing, '000 tonnes | 2023<br>(KMG share) | 2024<br>(KMG share) |
|---|---------------------|---------------------|
| ANPZ  | 5,475               | 5,547               |
| PETROCHEMICAL PLANT                           | 5,434               | 5,500               |
| PKOP <sup>13</sup>                            | 2,870               | 2,872               |
| Caspi Bitum <sup>14</sup>                     | 427                 | 327                 |
| Petromidia and Vega                           | 5,386               | 4,912               |
| Total   | 19,593              | 19,158              |

The amount of hydrocarbon feedstock processed at Kazakhstani and Romanian refineries decreased by 2.2% to a cumulative 19.2 million tonnes.

Production of refined products at Kazakhstani and Romanian refineries decreased by 1.5% to 17,894,000 tonnes in 2024. Kazakhstan refineries produced 13,085,000 tonnes of petroleum products, 1.0% more than in 2023 due to improved efficiency of production units. KMG International (Petromidia, Vega) refineries produced 7.9% less petroleum products, which amounted to 4,809,000 tonnes mainly due to a corresponding decrease in refinery throughput.

One of the main tasks for KMG in the coming years, due to the projected growth in domestic consumption, is to address the issue of supplying the domestic market of Kazakhstan with domestic oil products, which leads to the need to increase the current capacity of oil refineries. In this regard, a project to double the refining capacity of the Shymkent Refinery is

being implemented. Currently, the adjustments to the pre-project technical and economic documentation are being finalised.

In order to address the problematic issues related to the shortage of bitumen in the domestic market, KMG began work to expand the capacity of JV Caspi Bitum LLP for oil refining to 1.5 million tonnes per year with the production of road bitumen up to 750,000 tonnes per year. The implementation of this project will allow to continuously supply bitumen to the country's road sector from 2025.

The study of the expansion of PKOP capacity is ongoing. A pre-feasibility study for the project has been completed in 2024, and a Project Feasibility Study is planned for 2025.

In 2024, PNHZ will launch a new liquefied hydrocarbon gas purification complex using Merox technology, which will make it possible to process Kazakh oil characterised by high sulphur content in light fractions.

<sup>&</sup>lt;sup>13</sup> Processing at PKOP and Caspi Bitum is indicated pro rata to a 50 per cent ownership.

<sup>14</sup> Processing at PKOP and Caspi Bitum is indicated pro rata to a 50 per cent ownership, in the other plants it is 100 per cent.





KMG continues to develop its oil and gas chemical business, which has a high potential multiplier effect for the country.

In 2024, final investment decisions were made on the related oil and gas chemical projects, Construction of Gas Separation Complex and Polyethylene. In September 2024, construction works of a polyethylene plant with a capacity of 1.25 million tonnes per year started on the territory of a special economic zone in the Atyrau region.

KPI integrated gas chemical complex produced 10 product grades with a total of 251,000 tonnes

of polypropylene in 2024. Of this amount, 230,000 tonnes were exported to China, Europe, Turkey and Russia. Deliveries to the domestic market reduced the share of imports to 17%, compared to 34% in 2023.

These large-scale oil and gas chemical projects of the company are mainly focused on the sale of finished products to the growing export markets. It is planned to fully meet the domestic market demand for polypropylene and polyethylene, which will have an additional economic impact on the development of related industries in Kazakhstan.

### SUSTAINABLE DEVELOPMENT

KMG actively integrates the principles of sustainable development into its operations and consistently implements measures to reduce its negative environmental impact, confirming its commitment to long-term sustainable development goals.

In 2024, KMG approved the Low Carbon Development Programme 2060.

Reported to UNEP on methane emissions in May 2024 as part of the OGMP 2.0 partnership.

Construction of a solar and gas power plant with Eni has begun.

The law on ratification of the agreement with Total Eren on the Mirny project (1 GW) was signed and updated draft agreements were approved.

The updated ESG risk rating from rating agency Sustainalytics for 2023 was 32.8, and a plan to improve it is underway.

KMG was assigned a "B" rating under the Carbon Disclosure Project (CDP) international reporting framework. Previously, the rating was "C".

### PLANS FOR 2025

In 2025, NC KazMunayGas JSC will continue to implement large-scale projects, where special attention will be paid to geological exploration, oil and gas processing and provision of the domestic market of fuels and lubricants.

### **EXPLORATION AND PRODUCTION**

As part of geological exploration activities, it is planned to complete drilling of exploration wells in the Turgai Paleozoic, Karaton Podsolovoye

and Karazhar areas. Additional drilling is planned at Taisoigan-1 and Taisoigan-2.
3D seismic surveys will be carried out within the Tsentralnoye field. Licences are also expected to be obtained and seismic exploration is expected to commence in the South Shu-Sarysu, Bereke and Shygys areas.

Special attention is paid to the development of mature fields: drilling of horizontal wells continues at Karsak, East Moldabek, Uzen and other fields. In addition, polymer flooding technology is being introduced at the Uzen and Kalamkas fields.

#### **GAS SEGMENT**

To increase gas production, it is planned to complete construction of infrastructure and commission new wells at the Zapadnaya Prorva field. Work is also underway to develop the Urikhtau, Kalamkas and Rozhkovskoye fields.

Construction of methanol production facilities is planned at the Karatobe South and Laktybay fields, which will expand sales markets and increase the added value of products.

KMG will continue to modernise booster pump stations and expand processing capacity at key gas infrastructure facilities, in particular, the construction of a new gas processing plant in Zhanaozen due to the deterioration of the existing gas processing plant.

#### OIL TRANSPORTATION

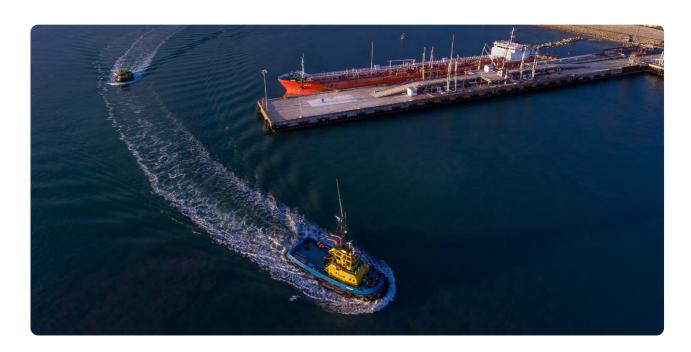
KMG is developing new areas of hydrocarbon transportation, including the development of the Trans-Caspian route. Priority measures include the implementation of a project to acquire two Aframax tankers (115,000 tonnes deadweight) and the development of a project to build three more similar vessels.

### RECYCLING PROJECTS

In 2025, we will focus on completion of design and estimate documentation and the transition to the active phase of construction of a new polyethylene plant in Atyrau. The plant is expected to be commissioned in 2029, with total investment in the project exceeding \$ 7 billion.

The construction of a gas separation complex will be continued to provide raw materials for the polyethylene production project.

Work will be carried out to attract a strategic partner for the construction of the polyethylene terephthalate production complex.





# Gas supply to the domestic market



In addition, QazagGaz participates in the design, financing of construction and operation of pipelines and gas storage facilities in the regions of presence in 14 regions and 3 cities of republican status - Astana, Almaty and Shymkent.

QazaqGaz, as a national operator in the field of gas and gas supply, manages the largest network of main gas pipelines, the length of which increases annually and currently exceeds 21,300 kilometres (including branch pipelines of 3,000 kilometres), and gas distribution networks, the length of which is more than 70,800 kilometres.

### **KEY PERFORMANCE RESULTS 2024**

| Indicator  | 2023     | 2024    |
|--|----------|---------|
| Production indicators, billion m³:                                       |          |         |
| Gas transportation   | 79.4     | 88.4    |
| Gas sold   | 24.1     | 25.8    |
| Gas sold (exports)   | 5.6      | 5.7     |
| Gas production   | 0.29     | 0.3     |
| Financial indicators <sup>15</sup> , billion KZT:                        |          |         |
| Revenue  | 1,080.7  | 1,259.4 |
| Dividends  | 27.1     | 22.8    |
| Net profit   | 325.9    | 289.1   |
| Costs  | 1,138.1  | 1,436.9 |
| Operating profit   | -8.0     | -31.5   |
| Net debt   | 396.5    | -25.3   |
| Taxes paid   | 50.2     | 89.1    |
| Sustainable development indicators:                                      |          |         |
| Greenhouse gas emissions, '000 tonnes CO <sub>2</sub> -eq. <sup>16</sup> | 3,694. 9 | 3,931.7 |
| Accidents  | 3        | 2       |
| Fatal accidents  | 1        | 0       |

QazaqGaz continues to implement positive changes: production indicators are improving, systematic modernisation of the gas transmission system, construction of socially significant

infrastructure projects and implementation of initiatives aimed at improving the quality of life of the population.

### IMPLEMENTATION OF THE PRODUCTION PROGRAMME

For QazaqGaz, 2024 was marked by positive dynamics of a number of production indicators, in particular:

- Gas transportation increased by 11% compared to the actual figure for the same period last year. This is mainly due to an increase in transportation in the Russia-Uzbekistan direction via SAC (in 2023, transport started only in October).
- Gas sales to the domestic market increased by 8% compared to the same period of 2023. This was due to an increase in gas consumption across all customer categories.
- The year-on-year increase in gas sales for export resulted from the fact that last year the bigger part of gas was redistributed to the domestic market due to limited reception of raw Karachaganak gas of the Orenburg GPP and increased consumption due to abnormally low ambient temperatures across Kazakhstan.
- The increase in gas production is due to the commissioning of the Anabai field (commissioned at the end of 2023).

 <sup>15</sup> Financial indicators are stated in accordance with the Company's consolidated financial statements for 2023 and 2024.
 16 Indicators for 2023 and 2024 were recalculated in connection with updating the methodology for calculating direct greenhouse gas emissions within the Group of companies of NC QazaqGaz JSC, to ensure a unified methodological approach.





Due to annually growing gas consumption, expansion of the resource base becomes a strategic necessity. Current data shows that recoverable gas reserves in Kazakhstan reach 3.8 trillion m³.

THE MAIN GAS
RESERVES ARE IN
4 MAJOR FIELDS:
KARACHAGANAK,
TENGIZ, KASHAGAN
AND ZHANAZHOL, WITH
A COMBINED VOLUME
OF

2.7

trillion m<sup>3</sup>

The 2024 assessment revealed that the total residual natural gas reserves are 15.2 billion m³. Of these, the Amangeldy field accounts for 9.52 billion m³, the Zharkum field for 0.04 billion m³, the Ayrakty field for 2.41 billion m³, the Anabai field for 2.16 billion m³, and the Barkhannaya field for 1.07 billion m³.

QazaqGaz has entered into a number of investment agreements and contracts in accordance with the Roadmap to expand its resource base. Thus, in November 2024, contracts were signed with the Ministry of Energy of the Republic of Kazakhstan for exploration and production in the Maldybay area (Zhambyl region) and Shalkar area (Aktobe region) jointly with strategic partner KOR Oil Company JSC. These subsoil use contracts are the first QazaqGaz contracts signed following direct negotiations with the state under the priority right.

The results of geological exploration at the Maldybay site confirmed the productivity of the Lower Visean horizon of the Lower Carboniferous and confirmed the presence of a gas deposit. The liquidated well No. 4G was rehabilitated for their development.

QazaqGaz continuously analyses the country's sedimentary basins to determine the feasibility of geological exploration.

Based on the results obtained, in 2024, substantial work was carried out to attract investment in geological exploration (on a 100% carry-financing basis) and to develop the gas resource base:

- A co-operation agreement was signed with the transnational company Chevron on the KT-III project in the Aktobe region.
   The investor started work on reprocessing and interpretation of 3D seismic data.
- A co-operation agreement was signed with strategic partner KazAzot JSC on the Severny-2 site located in the gas-bearing area of the Ustyurt-Bozashi sedimentary basin.
- A co-operation agreement was signed with the strategic partner KOR Oil Company JSC on the Akkuduk area located in the gas-bearing area of the Mangyshlak sedimentary basin.

In addition, as part of the GES licence in the Mangistau region, work was carried out to obtain environmental permits for the commencement of field seismic surveys.

### HYDROCARBON PRODUCTION

In 2024, the targeted gas and gas condensate production by QazaqGaz Exploration and Production LLP was 290.4 million m³ and 12,300 tonnes, respectively.

The actual performance of the planned indicators was 298.9 million m<sup>3</sup> and 13,100 tonnes, respectively: overperformance – 2.9% and 6.7%, respectively.

|                | Achieving targe                     | ts for 2024                         | Deviation                         |              |
|----------------|-------------------------------------|-------------------------------------|-----------------------------------|--------------|
| Name           | Plan,<br>million m³/<br>'000 tonnes | Fact,<br>million m³/<br>'000 tonnes | million m³/<br>'000 tonnes<br>+/- | Achievement, |
| Natural gas    | 290.4                               | 298.9                               | 8.5                               | 102.9        |
| Gas condensate | 12.3                                | 13.1                                | 0.8                               | 106.7        |

In 2024, drilling of the productive development well No. 17 at the Anabai field was completed, and the well was put into operation with an initial flow rate of 120,000 m<sup>3</sup>/day.

In 2025, "Exploration and Production QazaqGaz" LLP plans to drill 10 wells: 3 wells at the Amangeldy deposit, 3 wells at the Ayrakty deposit, 3 wells at the Anabai deposit, 1 well at the Barkhannaya deposit.

### **GAS PROCESSING**

As part of the implementation of the Head of State's instruction to build gas processing plants at the Kashagan field (with design capacities of 1 billion m³ of raw gas per year and 2.5 billion m³), a number of agreements were signed between QazaqGaz and Qatari partner UCC Holding.

As part of the joint implementation agreements, investments will be attracted and financing for the projects will be arranged. The construction

of these plants will expand the resource base of marketable gas in Kazakhstan.

As of 31 December 2024, we completed laying the foundations for the main units of the Kashagan Gas Processing Plant, with a capacity of 1 billion m³ of raw gas per annum, on schedule. The foundations are ready for further installation of equipment and fully meet the requirements of this construction phase.









### LIQUEFIED PETROLEUM GAS

Following negotiations between the partners of the North Caspian project and QazaqGaz, with the participation of the Ministry of Energy of the Republic of Kazakhstan and PSA LLP, the parties reached an agreement on the terms of the Kashagan LPG sale and purchase transaction. This step was due to its high demand in the perimeter of the domestic market of Kazakhstan.

The signing of the agreement was an important step in the co-operation aimed at making a final investment decision on the project. Under the terms of the agreement, Kashagan LPG is

scheduled to be delivered by the end of 2025, with the maximum design capacity of more than 700,000 tonnes per year by 2027 after completion of infrastructure works.

QazaqGaz is currently working on designing and placing orders for the necessary technological equipment to provide reception, storage, transshipment and fractionation of Kashagan LPG. These supplies will have a favourable impact on the socio-economic situation of Kazakhstan's regions, help reduce the deficit of LPG and promote the development of the gas chemical industry in the country.

### DEVELOPMENT OF GAS TRANSMISSION INFRASTRUCTURE

As part of the gas transport infrastructure development, construction of the second string of the Almaty-Baiserke-Talgar gas trunkline was completed. This is the fourth gas infrastructure facility for CHPP. Its length is 62.4 km, diameter – 530 mm, throughput capacity – 1,000,000 m³/hour.

Thus, QazaqGaz has fully completed construction of external gas infrastructure for CHPP-2 and CHPP-3 in Almaty. The project was implemented ahead of schedule in accordance

with the instruction of the Head of State to convert Almaty CHPPs to gas.

Conversion of Almaty CHPPs from coal to gas will have a multiplier effect on business development and job creation, as well as improve the environmental situation in the region.

We started construction of a new main Taldykorgan-Usharal gas pipeline, which will provide natural gas to 66 settlements of Aksu, Sarkan, Alakol districts, where 124,000 residents live. This will contribute to sustainable development of the region and improve the quality of life. An additional positive effect will be the growth of business activity, development of small and medium-sized businesses with the creation of new jobs.

A number of co-operation agreements were signed with Qatar's UCC Holding for the construction of a compressor station and gas trunklines.

Thus, one of the agreements provides for attraction of investments for construction of a new compressor station "KS-14" and the main gas pipeline "KS-14 – Kostanay" in Aktobe and Kostanay regions.

This project is of strategic importance and is aimed at covering the prospective demand for gas in the Kostanay region and providing gas to large production facilities, such as plants for production of hot-briquetted iron, production of KIA cars, production of cast iron castings for internal combustion engines and others.

Taking into account the workload of the operating 1st string of Beineu-Bozoy-Shymkent pipeline, for the development of gas supply of the southern and central regions of the country, including new energy projects for the commissioning of generating capacities, signed a second agreement with the Qatari partner on the construction of the 2nd string of the main gas pipeline "Beineu-Bozoy-Shymkent" with a length of 1,450 km.

In 2024, feasibility studies for the above projects were finalised and uploaded to the Gosexpertiza Expert Review Board's portal to undergo a comprehensive non-departmental expert review.

#### MODERNISATION OF THE GAS TRANSMISSION SYSTEM

The implementation of projects continues, including the gasification of northeastern regions of Kazakhstan, the major overhaul of the Central Asia-Center gas trunkline, the construction of the second line of the Beineu-Bozoh-Shymkent gas pipeline, the Aktobe-Kostanai gas pipeline, and Compressor Station KS-14.

The wide geography of QazaqGaz presence contributes to the annual growth of the level of gasification of settlements. As of today, the level of gasification of Kazakhstan is 62.4% (or 12.3 million people).

Work continues on the implementation of important infrastructure projects in the gas industry: gasification of north-eastern regions of Kazakhstan, overhaul of the Central Asia-Centre gas trunkline, construction of the 2nd string of the Beineu-Bozoi-Shymkent gas pipeline, Aktobe-Kostanai gas trunkline and compressor station KS-14.

It should be noted that the problem of unprofitable tariff for natural gas supply to Kazakh consumers is still relevant. Losses of QazaqGaz amounted to KZT 178.5 billion in 2024 due to insufficient increase in wholesale prices on average in Kazakhstan (by 14.6%).







QazaqGaz is working towards strengthening its transit potential. In particular, a joint Action Plan was developed and approved to organise work to prepare the Central Asia-Centre gas trunkline (hereinafter referred to as CAC trunkline) for the transportation of Russian gas to the Republic of Uzbekistan, which includes 2 stages of co-operation:

**GAS TRANSIT VOLUME** 

5.6

billion m<sup>3</sup>

Stage 1: Combined dedicated route of CAC-4 trunkline/SAC-5 trunkline. All activities under this stage have been completed on time and Russian gas transit started on 1 October 2023.

There is a dynamic increase in gas transit. While in 2023 the transit was 1.3 billion m³, by the end of 2024 this indicator reached 5.6 billion m³. The planned gas transit is 5.5 billion m³ for 2025.

Within the framework of implementation of Phase 2 along the dedicated route of the CAC-4 trunkline, it is planned to increase transit to 11 billion m³/year.

To ensure the necessary amount of Russian pipeline gas transportation, repair works started in 2024 and will continue until the end of 2026.

Transit of Russian gas to Uzbekistan and Kyrgyzstan was done in the agreed volumes.

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GAS SALES FOR EXPORT AND DOMESTIC MARKET

As part of the development of the initiative for mutually beneficial co-operation in this area, the following tasks were implemented:

- NC QazaqGaz JSC and Gazprom Export signed 2 contracts for Russian gas supplies to Kazakhstan to implement the agreements set out in the Protocol between the Government of the Republic of Kazakhstan and PJSC Gazprom on co-operation in the gas sector in 2023–2024;
- On 27 December 2024 NC QazaqGaz JSC and Gazprom Export signed a contract for the supply of Russian gas to the Republic of Kazakhstan for 2025–2026 under the Agreement between the Government of the Republic of Kazakhstan and PJSC Gazprom.

The company achieved the following key results in 2024:

- Increased the annual contracted quantity for the first year of supply to 5.5–6.2 billion m³ under under the natural gas purchase agreement with PetroChina International Alashankou Company Limited (2023–2026).
- Gas supplies for export in the summer period were increased, which allows to increase revenues from export operations of QazaqGaz Group.
- Discounts for under-delivery and deterioration of gas quality during export deliveries were reduced.
- Export deliveries were made in the agreed volumes without prejudice to the domestic market.
- Russian gas supplies were organised to increase export potential to China.
- Provision is made for compensating supplies

during unscheduled maintenance works at the Orenburg GPP. It is important to note that QazaqGaz maintains gas exports to international markets without affecting the domestic market.

### SUSTAINABLE DEVELOPMENT

In recent years, QazaqGaz has successfully implemented a number of major projects in the field of sustainable development. For two years, the Company has been following the best international practices, forming and publishing reports according to the GRI (Global Reporting Initiative) Standards. Thus, by the end of 2024, the Company joined the UN Global Compact as part of the implementation of the comprehensive Development Strategy of QazaqGaz until 2032.

In addition, in 2024 QazaqGaz joined PARYZ, the National Confederation of Employers (Entrepreneurs) of the Republic of Kazakhstan. All this testifies to the company's commitment to ESG principles and social responsibility of business.

As a result, QazaqGaz improved its ESG ranking from 19.2 to 18.2 according to MorningStar Sustainalytics.

An equally significant achievement is receiving a high rating from the key rating agency MSCI at AA level.

According to the 2024 disclosure results, under the CDP Climate Programme, QazaqGaz improved its performance in the climate ranking, raising its position by three points to level "B".

### PLANS FOR 2025

Within the framework of the Development Strategy of QazaqGaz, work is planned in the following areas:

- implementation of measures envisaged by the updated Comprehensive Development Plan for the gas industry of the Republic of Kazakhstan, including work on increasing the resource base of marketable gas, development of the domestic gas market, development of gas transit and export, gas chemistry and deep processing, investment and operational efficiency;
- implementation of the project to construct a gas processing plant at the Kashagan deposit;

- continuing work on the projects on construction of the new compressor station KS-14 and the KS-14-Kostanai gas trunkline and on construction of the second string of the main gas pipeline, Beineu-Bozoi-Shymkent;
- construction of the Taldykorgan-Usharal gas pipeline, the completion of which will provide access to gas to about 66 settlements in Zhetysu region.





# Development of chemical production



### **KEY PERFORMANCE RESULTS 2024**

| Indicator   | 2023    | 2024     |
|---|---------|----------|
| Production figures:                                   |         |          |
| Liquid glyphosate production, '000 litres             | 37.5    | 175.76   |
| Sulphuric acid production, '000 tonnes                | 193.94  | 197.88   |
| Electricity production, '000 kWh                      | 1,995   | 1,743.01 |
| Financial indicators, billion KZT:                    |         |          |
| Revenue   | 33.7    | 39.3     |
| Gross profit  | 8.6     | 13.5     |
| Net profit  | -23.7   | 24.7     |
| Costs   | 79.1    | 112.9    |
| Operating profit                                      | 2.6     | 6.5      |
| Net debt  | 60.3    | -10.7    |
| Taxes paid  | 2.8     | 3.9      |
| Sustainable development indicators:                   |         |          |
| Greenhouse gas emissions, tonnes CO <sub>2</sub> -eq. | 158.225 | 350.67   |
| Accidents   | 0       | 0        |
| Fatal accidents                                       | 0       | 0        |

SULFURIC ACID PRODUCTION VOLUME

197.9

thousand tonnes

In 2024, the main reason for failure to achieve production and financial indicators was changes in market conditions, failure to fulfil contractual obligations on the part of partners, failure of production equipment, as well as introduction of amendments to the Law of the Republic of Kazakhstan On Electricity.

In particular, the subsidiary company producing agrochemical products (KHIM-plus LLP) did not fulfil its production targets due to uncompetitive selling price and consequently weak demand from customers. Given the overstocked warehouses and the availability of raw materials purchased in previous periods during 2024 production was not carried out, production was resumed only by the end of the period in the amount of 175,760 litres.

At the end of 2024, sulphuric acid production indicators (SSAP LLP) exceeded the annual design capacity of the enterprise by 2%. This improvement in production performance was possible due to proper planning of production time for monthly preventive maintenance works and, as a result, a reduction in the time spent.

SSAP LLP finished the year with positive financial indicators, the plan on net profit was exceeded by KZT 1,069.8 million or 83%.

According to the results of 2024, KUS LLP did not fulfil the targeted electricity generation and

sales due to the introduction of the mechanism of the Single Buyer from 1 July 2023. In order to minimise the impact of this mechanism of electricity sales, in September 2024 KUS LLP entered into an agreement with KAZ ECOTRANS LLP, which acted as a provider in the balancing energy market and purchased the rest of the electricity generated by KUS LLP for its further sale.

In December 2024, amendments were made to the Rules for Organisation and Operation of the Wholesale Electricity Market, namely, the priority of electricity purchases by the Unified Purchaser from combined heat and power plants was changed.

According to the new edition of the Rules, electricity produced by CHPP above the technical minimum, intended to cover the daily consumption schedule, is sold at the auction simultaneously with KUS LLP according to the market demand.

Taking into account that KUS LLP sells electricity with the lowest marginal tariff in the Western region of Kazakhstan, the company ensures maximum utilisation of the available power generation capacities.





The project involves the installation of the second line of the existing sulphuric acid plant in Stepnogorsk and a 2-fold increase in production capacity. As a result of the project implementation, the annual capacity of the enterprise will be 360,000 tonnes of

sulphuric acid oriented to the northern regions of the country.

The company received a positive opinion on the feasibility study in 2024.

### **SULPHURIC ACID PRODUCTION 800,000 TONNES PER YEAR** (TQZ LLP PROJECT)

TQZ LLP is the operator of a project to build a sulphuric acid plant in the village of Taikonur, Turkestan region. The plant will have a production capacity of 800,000 tonnes of sulphuric acid per year. The project is aimed at reducing the uranium mining industry's dependence on imported sulphuric acid.

The project is being implemented by Kazatomprom-SaUran LLP (40%) together with private partner Asia Pipeline (60%).

At the same time, 40% of Kazatomprom-SaUran LLP's share is held in trust by SK Ondeu.

On 22 January 2024, the feasibility study of the project was completed. As part of the project implementation, the partners agreed and signed a project implementation agreement, offtake agreement and strategic partnership agreement.

### **ELECTRICITY GENERATION (CHPP PROJECT (165 MW))**

The planned combined heat and power plant (CHPP Project) with an electrical capacity of 165 MW is designed to provide uninterrupted power supply to strategic oil and gas chemical enterprises and other participants of the special economic zone, National Industrial Petrochemical Technopark, in the Atyrau region. The new power unit will be an addition to the existing 310 MW of CHP.

In June 2024, a favourable opinion on the feasibility study was received from Gosekspertiza Expert Review Board. Commercial offers for construction have been received under the project.

Work is currently underway to develop a comparative analysis between the 154 MW ANPZ and 165 MW CHP projects to determine the operator and project location.

### PRODUCTION OF BUTADIENE AND ITS DERIVATIVES

Butadiene LLP is a joint project of the Republic of Kazakhstan and the Russian Federation in the field of oil and gas chemistry, namely production of butadiene rubbers. The project is operated by Butadiene LLP, a joint venture between Tatneft (75%) and SK Ondeu (25%).

The project is located on the territory of a special economic zone for the development of petrochemicals in Kazakhstan at the Karabatan site 43 kilometres from Atyrau.

The project plans to produce butadiene and its derivatives by processing butane blend feedstock from TCO.

Within the framework of the realised project it is planned to produce five different types of products:

Styrene-butadiene-styrene TPE up to 30,000;

- Divinyl styrene synthetic rubber up to 60,000;
- Butadiene up to 45,000;
- → Isobutane-isobutylene fraction up to 130,000 tonnes;
- Methyl tert-butyl ether up to 40,000.

Planned markets: Europe, CIS, China, Turkey and other markets.

Following the results of competitive procedures, a contract was signed on 1 October 2024 with the Chinese company Tianchen Engineering Corporation for the development of the extended basic design. The extended basic design is currently under development.

### TRADE INTEGRATION ON SULPHUR

In accordance with the commission agreement concluded between the Company and Tengizchevroil LLP 03 March 2011SK Ondeu sold 222,300 tonnes of sulphur to Kazakhstan sulphuric acid plants by the end of 2024.

In 2025, it is planned to sell 252,000 tonnes of sulphur to Kazakhstan's sulphuric acid plants.

### PLANS FOR 2025

The company expects to commence the development of design and estimate documentation for the sulphuric acid production project (expansion of SSAP LLP) in Q2-3 2025, following receipt of additional approvals and tender procedures. Completion of construction and reaching the design capacity is planned for 2028.

The TQZ LLP project is to conclude a loan agreement with the lender in 2025, finalise the design and estimate documentation for the project, start construction work and place an order for equipment. The launch of production is scheduled for December 2026.

In 2025, a final investment decision on the Butadiene project is planned based on the results of the extended baseline project and the selection of a contractor for the next phase of the

In 2025 it is planned to attract debt financing and start construction of a sulphuric acid plant with a capacity of 800,000 tonnes per year in Taikonyr, Turkestan region.