

# OIL AND GAS

## Transforming commodity revenues



NATIONAL COMPANY  
KAZMUNAIGAS JSC (HEREINAFTER — KMG) IS THE LEADING VERTICALLY INTEGRATED OIL AND GAS COMPANY IN KAZAKHSTAN.

Hydrocarbon reserves (2P)

# 733

million TOE

Founded in 2002, KMG covers the full range of activities in the oil and gas sector, including prospecting, production, transportation, and processing of hydrocarbons, as well as providing core services in 15 regions. KMG plays a key role in representing Kazakhstan's interests in the oil and gas market, operating four major domestic refineries and two refineries in Romania. KMG participates in projects

at major fields: Tengiz (20%), Kashagan (16.87%) and Karachaganak (10%), cooperating with strategic investors. The Company maintains its competitive advantage through a stable cycle of production, transportation, and processing of hydrocarbons. KMG is actively exercising its priority right to acquire subsoil use assets, which contributes to the replenishment of the resource base.

### KEY PERFORMANCE RESULTS FOR 2023

Indicator	2022	2023
<b>Production indicators, million tons:</b>		
Oil and gas condensate production volume	22.0	23.5
Oil refining volume <sup>6</sup>	19.9	19.6
Oil refining volume in the Republic of Kazakhstan	14.3	14.2
Oil transportation volume	74.7	80.4
Gas production, billion m <sup>3</sup> <sup>7</sup>	8.2	9.5
<b>Financial indicators, KZT billion:</b>		
Revenue	8,693	8,320
Dividends	200	300
Net profit	1,307	925
Costs	8,028.4	8,047.8
Operating profit	1,698.1	1,486.2
Net debt	2,154	1,645
<b>Sustainability indicators:</b>		
CO <sub>2</sub> emissions into the atmosphere, million tons	7.6	11.93
Volume of disposed waste, thousand tons	693.7	1,145
Accidents	36	29
Fatal accidents	1	2

In 2023, KMG faced a number of challenges, including price fluctuations, geopolitical instability, unofficial export of oil products to neighboring countries, increased competition and various subjective difficulties. Nevertheless, the Company successfully overcame these obstacles, demonstrating growth in all aspects of its operations, covering the value chain from hydrocarbon exploration and production to transportation and refining.

In 2023, an operating company was established to run the Kalamkas Sea and Hazar project, and in parallel basic engineering and design (hereinafter — FEED) work is actively underway.

Seismic and data interpretation works were completed at 5 sites of geological study of subsurface (hereinafter — GSS).



Rehabilitation works were launched at Uzen and Karamandybas fields, where special attention is paid to the integration of advanced technologies and equipment.

At the end of November 2023, the acquisition of a 60% stake from France's TotalEnergies in the Dunga oil and gas field located in the Mangistau region was completed, and negotiations on the purchase of the remaining 40% have also been initiated.

In addition, production was launched at the Rozhkovskoye, East Urikhtau and Aksai South gas fields.

Pre-FEED development was completed for the Karachaganak Gas Processing Plant (hereinafter — GPP) (4.5 billion m<sup>3</sup> per year).

As part of the development of the Trans-Caspian international transport route, the Company initiated oil transportation in the direction of Baku and further through the Baku-Tbilisi-Ceyhan pipeline, thanks to which about 1 million tons of oil was shipped in 2023. As part of the strategy of diversification of transport routes, the Company also started oil transportation through the Atyrau-Samara pipeline and further through the Transneft pipeline system to Germany, where the volume of deliveries for the year also amounted to about 1 million tons of oil.

January of the current year was marked by a significant event for the Company: a joint venture with Abu Dhabi Ports from the United Arab Emirates was established, as a result of which two tankers, Taraz and Liwa, each with deadweight of 8 thousand tons, were acquired. These vessels are already actively involved in the transportation of Kazakh oil across the Caspian Sea, with plans to further expand the fleet. In addition, the establishment of a shipbuilding and ship repair enterprise in the Republic of Kazakhstan is being studied.

As part of ensuring uninterrupted operation of the Caspian Pipeline Consortium (hereinafter — CPC), KMG, in agreement with the shareholders of the CPC, entered into a contract with Bluewater (Holland) for the construction of 2 outriggers and their delivery to the CPC marine terminal in 2026.

In 2023, KMG successfully ensured stability in the domestic market of oil products by implementing measures that led to a reduction of "gray" exports in border areas to 20%. The Company is actively working on the transition to a three-year non-stop overhaul period and improving the productivity of oil refineries (hereinafter — refineries). At the Pavlodar Refinery, a new furnace was commissioned at the bitumen production unit, and projects are underway to create hydrogen production units and produce winter diesel fuel.

A pre-feasibility study was completed for the expansion of PetroKazakhstan Oil Products LLP's (hereinafter — PKOP) refinery, and the adaptation process has begun.

CASPI BITUM LLP is actively developing a working project aimed at increasing production capacity from 500 to 750 thousand tons per year.

In addition, the reconstruction and expansion of the first stage of the Astrakhan-Mangyshlak water pipeline has been successfully completed and the construction of the water pipeline at the Kashagan Integrated Gas Treatment Plant has been fully completed, which contributes to improved infrastructure capabilities and operational efficiency.

**HYDROCARBON RESERVES**

Recorded proved and probable (2P) hydrocarbon reserves

**5,680**  
 million barrels

In 2023, KMG recorded proved and probable (2P) hydrocarbon reserves of 733 million tons of oil equivalent, equal to 5,680 million barrels of oil equivalent. This reflects an increase of 26 million tons compared to the previous year, with a reserve replacement ratio of 110%. The reserves replacement was achieved through increased geological and engineering activities and drilling of wells at Uzen-Karamandybas fields as part of the rehabili-

tation program, as well as through revised development plans, including geological and engineering activities, operational studies and drilling of new wells at Kashagan, Alibekmola, Novobogatinskoye SE and South Karatobe fields, as well as the development of East and Central Urrikhtau fields, including well abandonment.

**NET INVENTORIES BY PRMS (AS OF DECEMBER 31, 2023)**

Reserves category, million TOE	2022 (KMG share)	2023 (KMG share)
Proven (1P)	486	507
Proven plus probable (2P)	707	733
Proven plus probable plus possible (3P)	816	842

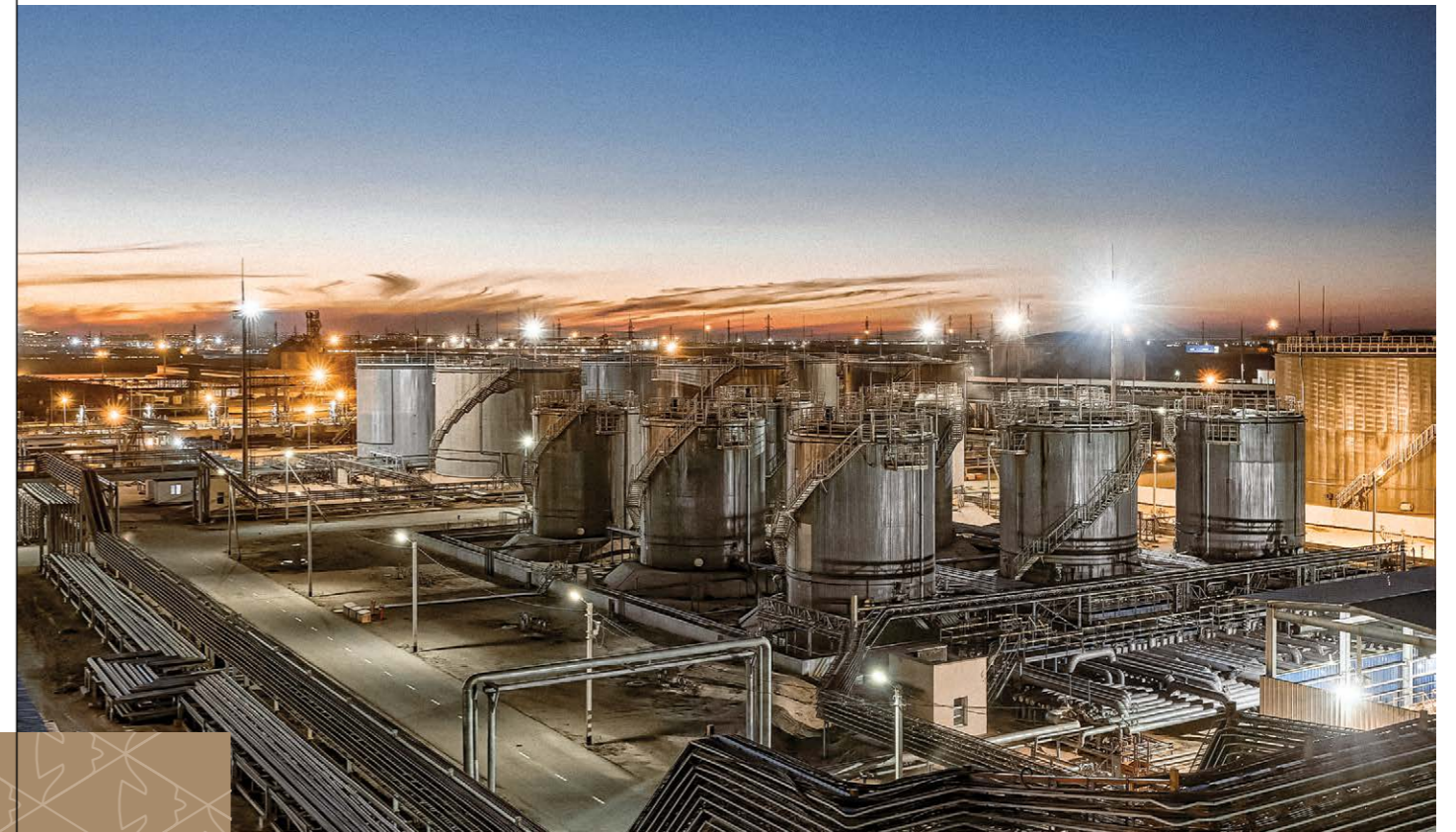
**EXPLORATION AND PRODUCTION OF OIL AND GAS**

KMG'S INVESTMENT PORTFOLIO LARGELY CONSISTS OF OIL AND GAS EXPLORATION AND PRODUCTION PROJECTS BOTH ONSHORE AND OFFSHORE.

In 2022, in order to enhance the investment potential of the oil and gas sector in Kazakhstan, the Government, in cooperation with international investors and KMG, introduced a training and discipline package providing regulatory and tax incentives for technically complex projects, including new onshore, offshore and gas exploration projects. In December of the same year, the President of Kazakhstan signed amendments to the Code on Subsoil and Subsoil Use and the Tax Code, which stimulated the activation of KMG's projects on the Caspian shelf and complex onshore gas projects.

In 2023, thanks to the training and methodological complex, work on the complex and capital-intensive projects "Kalamkas Sea – Khazar", "Karaton Podsolevoy" and "Urrikhtau" was activated, and the relevant contracts were concluded. In 2024, active exploration work is planned for the Abay and Al-Farabi offshore projects.

In 2022, GSS licenses were obtained for 5 areas: Mugodzhary, Berezovsky, Zharkyn, Bolashak and North Ozen. In 2023, an advance seismic survey was carried out as part of the program of geological study of subsurface resources ahead of schedule. Field seismic exploration works were completed at 3 sites in Mangistau and West Kazakhstan regions. Field work is being carried out at the Mugodzhary site in Aktobe region. The re-processing and re-interpretation of historical profiles for the Bolashak area, as well as the processing and interpretation of seismic data for the North Ozen, Zharkyn and Berezovsky areas are being finalized. In the period 2024-2025 it is planned to complete advanced seismic exploration works with subsequent processing and interpretation of the results, the purpose of which is to reduce geological risks and obtain data for geological and technical and economic evaluation.



In the period 2022-2023, preparatory stages for the drilling of an exploration well were completed within the framework of the Turgai Paleozoic Project, and in 2024 it is planned to implement the drilling of an exploration well to a depth of 5,500 meters. In addition, in 2023, contracts were successfully obtained for the Karaton Podsolevoy and Kalamkas Sea-Khazar areas, after which operating companies were established and strategic partners were engaged for the implementation of each project. Specifically, for the Karaton Podsolevoy area, the first exploration well is scheduled to be drilled in 2024 with the strategic partner funding, with completion of testing anticipated in 2025. For the Kalamkas Sea-Khazar prospect, design work is scheduled to be completed in 2024.

In the Eastern Urrikhtau and Rozhkovskoye field development projects, the pilot operation stages have been completed. The event of November 2023 was the launch of production at the Vostochny Urrikhtau project. Also in December 2023, well U-21 was put into operation under the Rozhkovskoye Field Development project, which demonstrates the progress and effectiveness of the Company's development plans.

Drilling of an exploration well was completed in 2023 at the Zhenis prospect in the Kazakhstan sector of the Caspian Sea. The drilling results did not reveal oil and gas deposits and it was decided to stop further exploration in this area. The risk of non-discovery of oil and gas deposits was realized at the expense of a strategic partner in the project.

The Company continues to increase reserves through additional exploration of existing onshore fields. Additional exploration is underway at the Karasor West field of Embamnaigas JSC. It is planned to drill two appraisal wells and complete design and survey work on the field development in 2024.

In 2024 it is planned to implement the drilling of an exploration well to a depth of

**5,500**  
 meters

HYDROCARBON PRODUCTION

KMG'S OIL AND GAS CONDENSATE PRODUCTION IN 2023 AMOUNT-ED TO 23,532 THOUSAND TONS (486 THOUSAND BARRELS PER DAY), UP 6.9%. PRODUCTION OF ASSOCIATED AND NATU-RAL GAS (BEFORE REINJEC-TION) INCREASED BY 14.8% TO 9,460 MILLION M<sup>3</sup>.

In 2023, the Tengiz field saw a 1.0% decrease in oil production to 5,779 thousand tons (126 thousand barrels per day). The decrease in production was due to the suspension of oil intake in the CPC system during sched-uled maintenance of the oil pipeline and down-time at the marine terminal due to unfavorable weather conditions in the fourth quarter.

Associated gas production decreased by 0.9% to 3,202 million m<sup>3</sup>.

At the Kashagan field, KMG's share in oil production reached 3,108 thousand tons (68 thousand barrels per day), showing an increase of 121.8%, while gas production in-creased by 123.8% to 1,963 million m<sup>3</sup>. The pro-duction growth was mainly due to the increase of KMG's share in the project from 8.44% to 16.88% as a result of the completion of the buy-back of 50% of KMG Kashagan B.V. from Samruk- Kazyna JSC in September 2022, as well as due to the shutdown of production in the summer of 2022 and the overhaul and rehabilitation of the offshore and onshore complexes.

At Karachaganak, oil and condensate produc-tion increased by 7.1% to 1,086 thousand tons (23 thousand barrels per day) and gas pro-duction increased by 15.1% to 2,239 million m<sup>3</sup>. The growth in production was driven by an in-crease in the ability to receive crude gas from the Orenburg gas processing plant.

In 2023, oil and condensate production at KMG's operating assets decreased by 1.5% to 13,559 thousand tons (269 thousand barrels

per day). Emergency power outages and power restrictions emanating from the Mangistau Nuclear Power Plant from July to September had a significant impact on the production decline at the Ozenmunaigas fields and other areas. Production declines are also observed at brownfields as a result of natural production decline. However, this decline was partially off-set by an increase in production at Embamun-aigas fields following successful geological and engineering measures, including at the East Wing of the field S. Nurzhanov and Uaz North.

In November 2023, KMG successfully complet-ed the purchase of 100% of Total E&P Dunga GmbH from TotalEnergies EP Danmark A/S, a subsidiary of TotalEnergies S.E., thereby increasing its stake in the Dunga project to 60%. The Dunga oil and gas field, located in the Tupkaragan district of the Mangistau re-gion, was discovered in 1966 and has geological reserves of 93 million tons of oil and more than 7 billion m<sup>3</sup> of gas.

Three gas projects were launched in 2023. On May 10, 2023, JV Kazgermunai LLP started supplying gas from the Aksai Yuzhny field. The field is being developed by JV Kazger-munai LLP, where KMG holds a 50% interest. On November 29, 2023, Urikhtau Operating, with KMG 100% participation, put into com-mercial operation the Eastern Urikhtau field, which is the first in the Republic of Kazakh-stan to apply the Enhanced Model Contract. On December 21, 2023, Ural Oil and Gas, 50% owned by KMG, put into commercial opera-tion the Rozhkovskoye gas condensate field in the West Kazakhstan region.

OIL AND CONDENSATE PRODUCTION IN 2023, THOUSAND TONS

Oil and condensate production	2022 (KMG share)	2023 (KMG share)
Ozenmunaigas	5,096	4,877
Mangistaumunaigas	3,049	3,075
Embamunaigas	2,581	2,722
Tengiz	5,836	5,779
Kashagan <sup>8</sup>	1,400	3,108
Karachaganak	1,013	1,086
Others	3,036	2,883
<b>Total</b>	<b>22,011</b>	<b>23,520</b>

A number of gas projects launched in 2023

3

gas projects

<sup>8</sup> KMG's share in the project 16.88% after September 15, 2022

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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. At Tengiz, the "Wellhead Pressure Management Project/ Future Expansion Project", aimed at increasing annual oil production by 12 million tons, is progressing well. As of the end of 2023, the project has made significant progress of 99.3%, with full completion of mechanical works. The Joint Production Control Center has also been commissioned, and preparation of systems for operation and commissioning has commenced.

The Karachaganak field is actively pursu-ing projects to maintain production levels. In 2023, a concept was developed for the con-struction of a gas processing plant with an an-nual capacity of 4 billion m<sup>3</sup> of marketable gas, which facilitates the monetization of recovered raw materials and their processed products. For 2024, the "Fifth Gas Injection Compressor (5IC) Installation Project" is scheduled for completion, while the "Sixth Gas Injection Compressor Installation Project" is under active construction, with 43% completion of the total works.

Oil production from the Kashagan field is being carried out as part of the Phase 1 development. Within Phase 2 of the field development, projects are currently under consideration to increase oil and conden-sate production levels over the next 10 years to ~710 thousand barrels per day (~89.5 thousand tons per day).

OIL TRANSPORTATION

The total volume of trunk and marine oil transportation increased by 7.6% to 80,359 thousand tons. In December 2022, the "CPC Oil Pipeline System Bottleneck Elimination Project", which allows increasing the ca-pacity of the CPC pipeline to 80 million tons per year, ensured readiness to increase oil pumping volumes to 81.5 million tons per year. In 2023, the Tengiz and Atyrau oil pumping stations were completed and put into operation.

The volume of oil transportation through main pipelines increased by 6.5% and amounted to 69,581 thousand tons. The growth was due to an increase in oil transportation for export through the KazTransOil system in the direc-tion of Germany, oil shipment through the port of Aktau in the direction of Baku-Tbilisi-Cey-han, as well as an increase in oil delivery from the Kashagan field to the CPC system.

The total volume of sea transportation of oil in the reporting year increased by 15.4% to 10,778 thousand tons. The increase in transportation volumes was mainly due to an increase in exports of Kazakh oil via the Aktau port-Baku port route and further via the Baku-Tbilisi-Ceyhan pipeline.

In 2023, the joint project of KMTF and International Maritime Investments Ltd – "Acquisition of 2 oil tankers with deadweight of 8,000 tons" – was completed. The tank-ers meet all international safety standards and environmental requirements. Since 2024 tankers "Taraz" and "Liwa" are involved in oil transportation on the Aktau-Baku route. These tankers will fully cover the obligations of the Kazakh side to transport 750,000 tons of oil per year along the Aktau-Baku route.

OIL TRANSPORTATION VOLUME IN 2023, THOUSAND TONS

Oil transportation <sup>9</sup>	2022 (KMG share)	2023 (KMG share)
KazTransOil	40,656	44,188
Kazakhstan-China Pipeline	9,618	9,403
MunaiTas <sup>10</sup>	2,859	2,819
Caspian Pipeline Consortium	12,183	13,171
Kazmortransflot	9,343	10,778
<b>Total</b>	<b>74,658</b>	<b>80,359</b>

The volume of oil transportation through main pipelines increased by

6.5%

<sup>9</sup> Some crude oil volumes 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 transportation.

<sup>10</sup> MunaiTas is an equity consolidated joint venture and therefore transportation volumes are shown according to a 39% ownership interest.

REFINING AND MARKETING OF PETROLEUM PRODUCTS

Refining volumes at KMG International (Petromidia, Vega) in Romania

5,387

thousand tons

The volume of hydrocarbon feedstock processed at Kazakhstan refineries decreased by 0.4% to 14,206 thousand tons. The decrease in refining throughput was mainly at the PKOP refinery due to lower utilization in the middle of the reporting year due to unscheduled repair of the heat exchanger at the catalytic reforming and catalyst regeneration unit. The increase in refining volumes at Atyrau Refinery in 2023 partially offset the decrease at PKOP.

Refining volumes at KMG International (Petromidia, Vega) in Romania decreased by 4.3% to 5,387 thousand tons. The decrease in refining volume followed an incident at the soft hydrocracking unit in mid-summer 2023. Remediation work at the unit continues, with completion delayed to 2024, due to the large volume of reactor remediation work associated with ensuring the integrity of the equipment and the continued safe operation of the unit.

HYDROCARBON FEEDSTOCK PROCESSING VOLUME IN 2023, THOUSAND TONS

Hydrocarbon feedstock processing	2022 (KMG share)	2023 (KMG share)
Atyrau Oil Refinery	5,224	5,475
Pavlodar Oil Chemistry Refinery	5,480	5,434
PKOP <sup>11</sup>	3,103	2,870
Caspi Bitum <sup>12</sup>	461	427
Petromidia	5,258	5,012
<b>Total</b>	<b>19,526</b>	<b>19,593</b>

Production of petroleum products at Kazakhstani and Romanian refineries decreased by 2.7% to 18,138 thousand tons in 2023. Kazakhstan refineries produced 12,951 thousand tons of petroleum products, which is 1.3% less than in 2022 due to lower utilization at PKOP refinery. KMG International refineries (Petromidia, Vega) produced 5.3% less petroleum products, which amounted to 5,221 thousand tons compared to 5,512 thousand tons a year earlier.

KMG faces the important task of supplying Kazakhstan's domestic market with domestic oil products against the backdrop of expected consumption growth. In response to this, the Company started implementing measures to improve the reliability of equipment at the Atyrau Oil Refinery and Pavlodar Oil Chemistry Refinery, aiming to increase the period between repairs to three years and to increase the production of light oil products at the Atyrau Oil Refinery by processing Tengiz oil.

To address the problematic issues related to the shortage of bitumen in the domestic market, KMG started implementation of the project to increase the capacity of JV CASPI BITUM LLP on oil refining to 1.5 million tons per year with production of road bitumen up to 750 thousand tons per year. Realization of this project will allow to continuously provide bitumen to the road sector of the country from 2025.

The study of expansion of Pavlodar Oil Chemistry Refinery capacity continues. The pre-feasibility study for the project is scheduled for completion in 2024.

In the direction of oil marketing development, projects implemented by KMG-Aero were included in KMG's investment portfolio in 2023. The projects provide for investments in construction and/or modernization of fuel refueling complexes at key airports of the country for storage of Jet A-1, RT/TS-1 jet fuel and will allow to provide services for storage and refueling of fuel "on the wing" to domestic and foreign airlines without intermediaries.



<sup>11</sup> The volume of PKOP and Caspi Bitum processing is indicated at a share of 50%.

<sup>12</sup> The processing volume of PKOP and Caspi Bitum is indicated at a share of 50%, while the other plants have a share of 100%.

OIL AND GAS CHEMISTRY

Since December 2022, a polypropylene production line at the plant of KPI Inc. LLP has been in operation with an annual production capacity of up to

500

thousand tons

As part of its strategy to diversify its business and expand its product portfolio, KMG intensified its efforts to form an oil and gas chemical cluster in Kazakhstan, opening a new page in the Company's development. Since December 2022, a polypropylene production line at the plant of KPI Inc. LLP has been in operation with an annual production capacity of up to 500 thousand tons. In 2023, the plant produced 180 thousand tons of polypropylene, serving the markets of Kazakhstan, China, European countries, and CIS. To date, production of 6 grades of products has been mastered KMG in cooperation with key partners,

including SIBUR and Sinopec, is constructing a polyethylene plant with a planned production capacity of 1,250 thousand tons per year, where design work is already underway.

In addition, KMG is implementing infrastructure projects, including the construction of a gas separation complex and trunk pipelines for transportation of ethane and propane, in order to provide resources for the future polyethylene plant.

DIVIDENDS

In 2023, KMG paid dividends in favor of Shareholders in the amount of KZT 300 billion.

PLANS FOR 2024

IN 2024, KMG SETS AMBITIOUS AND BROAD GOALS, DEMONSTRATING ITS COMMITMENT TO DEVELOPMENT. WITH THE DISCOVERY OF NEW OIL AND GAS DEPOSITS IN VARIOUS FIELDS, THE COMPANY PLANS TO EXPAND ITS ENERGY PRODUCTION OPERATIONS.

The Company has set a target for oil production during 2024 of over

23

million tons

This approach is critical to meeting its obligations to the Government and shareholders, emphasizing KMG's reputation as a reliable and strategic player in the energy sector. As part of these strategic plans, the Company has set a target for oil production of over 23 million tons during 2024.

The Company has also decided to study the possibility of constructing a plant for the production of polyethylene terephthalate. Within this direction PetroChem LLP in partnership with Sinopec started to prepare a pre-feasibility study for this project.

The Company has developed a geological exploration strategy with the prospect of increasing reserves through both internal development and acquisitions. As part of this strategy, drilling activities are planned for the next five years in key areas such as the Turgai Paleozoic (KMG), Abai (Eni) and Karaton Podsolovoy (Tatneft), emphasizing the active pursuit of expanding and strengthening the resource base.

Particular importance is attached to the completion of the construction of a 120 MW hybrid power plant implemented jointly with Eni in the Mangistau region. This unique hybrid project in Kazakhstan combines solar (50 MW), wind (77 MW) and gas (120 MW) power plants, providing electricity generation for KMG's subsidiaries in the region.

KMG attaches great importance to the provision of clean drinking water to the population. In the context of social responsibility, the Company is constructing a new desalination plant in the Mangistau region. In addition, KMG plans to expand its activities in the oil and gas chemical industry, including the construction of a gas chemical complex to produce polyethylene.

## Gas supply to the domestic market



NATIONAL COMPANY QAZAQGAZ JSC (HEREINAFTER — QAZAQGAZ) IS A VERTICALLY INTEGRATED GAS COMPANY ENGAGED IN MANAGEMENT OF CENTRALIZED INFRASTRUCTURE FOR TRANSPORTATION OF MARKETABLE GAS THROUGH MAIN GAS PIPELINES AND GAS DISTRIBUTION NETWORKS, AS WELL AS PROVISION OF INTERNATIONAL TRANSIT AND SALE OF GAS IN DOMESTIC AND FOREIGN MARKETS.

Annual throughput capacity

# 240

billion m<sup>3</sup>

### QAZAQGAZ: MILESTONES OF HISTORY

THE BEGINNING OF QAZAQGAZ HISTORY DATES BACK TO FEBRUARY 5, 2000, WHEN THE RESOLUTION OF THE GOVERNMENT OF THE REPUBLIC OF KAZAKHSTAN ON THE ESTABLISHMENT OF CLOSED KAZTRANSOIL JSC WAS SIGNED, WHICH WAS RENAMED INTO KAZTRANSOIL JSC IN 2004.

In addition, QazaqGaz participates in designing, financing construction and operation of pipelines and gas storage facilities in the territories of presence in 14 regions and 3 cities of republican importance — 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 21.2 thousand km (including gas pipelines — branches of 3 thousand km), and gas distribution networks, the length of which is more than 68.7 thousand km.

### KEY PERFORMANCE RESULTS FOR 2023

Indicator	2022	2023
<b>Production indicators, billion m<sup>3</sup>:</b>		
Gas transportation volume	83.8	79.4
Volume of gas sold	22.7	24.1
Gas sales volume (export)	4.3	5.8
<b>Financial indicators<sup>13</sup>, KZT billion:</b>		
Revenue	952.3	1,081.2
Dividends	-	27
Net profit	386.6	325.9
Costs	839.1	1,038.2
Operating profit	103.7	-6.1
Net debt	425.1	392.3
Taxes paid	90.4	50.2
<b>Sustainability indicators:</b>		
Air emissions, tons		
- pollutants	121,981	136,595
- greenhouse gases	5,137,784	6,234.5
Volume of disposed waste, tons		
- hazardous	3,574.2	1,344.7
- non-hazardous	2,440.8	2,622.8
Accidents	4	3
Death in accidents	0	1



KazTransGaz JSC received the status of a national company on November 30, 2021, and in December of the same year KazTransGaz JSC was renamed QazaqGaz.

Over the years, QazaqGaz has been working purposefully to strengthen the country's energy security and improve the quality of life of the population. Its extensive geographical presence allows increasing the level of gasification of the country's settlements every year. To date, the level of gasification has reached 60%, covering more than 2.3 million subscribers.

As part of further measures to ensure uninterrupted gas supply, it is planned to increase the length of main gas pipelines and distribution networks up to 89 thousand kilometers.

One of the key events was the approval and implementation of a comprehensive Development Strategy of QazaqGaz until 2032, aimed at strengthening the energy security of the country and improving the quality of life of the population through stabili-

zation of cost-effective gas supplies. The main objective of this strategy is to maximize the investment attractiveness of Kazakhstan's gas industry and unlock its potential.

As part of the implementation of the Development Strategy, the first sectoral scientific and technical center was established to develop scientific and technical potential for efficient operation of the gas industry, to improve the level of knowledge and competence of QazaqGaz personnel, as well as a comprehensive solution of technologically complex tasks of the Company.

Work continues to expand the gas resource base through the introduction of new exploration projects with a total potential of 1 trillion m<sup>3</sup>. A new gas field Anabai in Moyinkum district of Zhambyl region was commissioned, and an agreement on joint development of the Pridorozhnoye and Pridorozhnoye Yuzhnoye fields was signed with Geo-Jade Petroleum Corporation.

Important evidence of the Company's compliance with high standards of responsible business and low risk in the field of sustainable development is the receipt of ESG-rating of 19.2. According to the international rating agency Morningstar Sustainability, QazaqGaz ranked 1st among the group of companies of Samruk-Kazyna JSC and 7th among global gas companies and entered the TOP-3 rating for ESG information disclosure according to PwC Kazakhstan.

For 2023 QazaqGaz received the "Best Social Partner" award in the "Reliable Employer" nomination.

### FITCH AFFIRMED THE RATING OF QAZAQGAZ

In 2023, the international agency Fitch Ratings once again confirmed the position of QazaqGaz as a strong player in the domestic market with a diversified business profile related to production, trade, domestic and international transit. Thus, the long-term foreign and local currency issuer ratings of QazaqGaz and its wholly owned subsidiaries, Intergas Central Asia JSC and KazTransGas Aimak JSC, are rated at BBB-.

Within the framework of evaluation of the main criteria, Fitch Ratings notes strong ties with the state as a factor that means systematic support of QazaqGaz initiatives from the Government of the Republic of Kazakhstan in the implementation of state policy in the field of energy security.

In addition, the strategic and operational incentives of the above-mentioned subsidiaries, which were able to effectively incorporate management strategy, overall planning and development of business plans, are rated at a high level.

### NEW GAS PROCESSING PLANT

In 2023, a project team was formed and mobilized to implement the project after its transfer to the trust management of GPC Investment LLP (operator of the 1 billion m<sup>3</sup> Kashagan gas processing plant project) to QazaqGaz. With the support of the Government of Kazakhstan, the project team organized the logistics of equipment supplies.



<sup>13</sup> Financial indicators for 2022 are as per the Company's 2022 Consolidated Financial Statements

As part of the comprehensive audit with participation of international companies, ILF technical audit, KPMG due diligence, PWC financial audit and HAZOP session in cooperation with NCOC were completed for all process units of the GPP.

In addition, a positive conclusion of the state expert review was obtained for the adjusted project documentation.

RESOURCE BASE

IN 2023, THERE IS AN INCREASE IN GAS CONSUMPTION IN KAZAKHSTAN, WHICH REACHED THE LEVEL OF 24.1 BILLION M<sup>3</sup>.

Considering the current annual growth, domestic gas consumption is expected to increase to 40 billion m<sup>3</sup> by 2030. Positive dynamics in gas exports is also noticeable: compared to 2022, it increased by 12% to 5.6 billion m<sup>3</sup>.

Given the growing consumption, expanding the gas resource base becomes a strategic necessity.

Current data show that recoverable gas reserves in Kazakhstan reach 3.8 trillion m<sup>3</sup>. 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 2023 assessment revealed that total residual natural gas reserves amount to 15.8 billion m<sup>3</sup>. Of these, the Amangeldy field accounts for 10.01 billion m<sup>3</sup>, the Zharkum

In 2023, the project employed 700 people. At the peak of construction, it is planned to employ up to 2,000 people, use 300 units of specialized machinery and 991 units of equipment. Once the GPP is commissioned, it is planned to create 600 permanent jobs, contributing to the development of the regional economy.

To ensure a continuous supply of inert materials, construction of the railroad tracks of the first start-up complex was successfully completed.

The construction of a shift camp for the employees of GPC Investment LLP has also started, providing comfortable conditions for their stay during the project implementation period.



field for 0.05 billion m<sup>3</sup>, the Ayraqty field for 2.45 billion m<sup>3</sup> and the Anabai field for 2.22 billion m<sup>3</sup>.

As part of the development of the adopted Pridorozhnoye field (previously owned by Samruk-Energy JSC), in October 2023 QazaqGaz signed a cooperation agreement with Geo-Jade Petroleum Corporation on joint development of Pridorozhnoye and Pridorozhnoye South fields. According to forecast data, recoverable reserves of this field are about 9.5 billion m<sup>3</sup>.

In accordance with the objectives of the Roadmap for increasing marketable gas volumes approved by the Ministry of Energy of the Republic of Kazakhstan, QazaqGaz commissioned the Anabai gas field in Zhambyl region in the fourth quarter of 2023 with initial production of 6.8 million m<sup>3</sup> per year.

During 2023, activities under the GSS license for the Akkuduk area in the Mangistau region were carried out, which led to the receipt of environmental permits for the commencement of field seismic surveys.

MODERNIZATION OF THE GAS TRANSPORTATION SYSTEM

The pace of gasification of regions is conditioned by the need to achieve the strategic goal of covering 65% of the country's population (or 13.5 million people). Given the introduction of new industrial facilities and the need to implement large gas chemical projects, QazaqGaz faces the task of commissioning new gas infrastructure facilities and modernizing existing ones.

Based on the results of 2023, a number of priority projects aimed at expanding the gas transportation infrastructure were completed. In particular, the looping of the Makat-North Caucasus main gas pipeline was built and put into operation, the second string of Beineu-Zhanozen was launched, gasification of Sarsha locality and Warm Beach resort area in Mangistau region was carried out, as well

as the first stage of construction of gas infrastructure for Almaty energy complex (CHPP-2, CHPP-3) was completed.

QazaqGaz continues to implement investment projects related to the construction, modernization, and reconstruction of gas transport infrastructure and the gasification of regions, as well as attracting investors in this direction.

The main barrier to the modernization of the gas infrastructure is the unprofitable tariff for the supply of natural gas to Kazakhstani consumers, which has resulted in losses for QazaqGaz. The Company's losses in 2023 amounted to KZT 175 billion due to an average increase in wholesale prices across Kazakhstan by 12.2%.

Given the current situation, QazaqGaz is purposefully working on a socially equitable reform of the pricing system for commercial gas. Specifically, in 2023, an incentivizing formula for the purchase price of new gas volumes from subsoil users was approved, and maximum wholesale prices were established.

As a result of negotiations between NC QazaqGaz JSC/Intergas Central Asia JSC and Gazprom PJSC, which took place from April 17 to 21, 2023, a joint Action Plan was developed and approved. This plan organizes the preparatory work for the "Central Asia – Center" gas pipeline (hereafter "CAC") to transport Russian gas to the Republic of Uzbekistan, comprising two stages of cooperation.

Stage 1. Combined dedicated route of the "Central Asia – Center-4" (CAC-4)/"Central Asia – Center-5" (CAC-5).

The Kazakhstani side is to complete a set of measures by October 1, 2023, to facilitate the transportation of Russian gas via the combined dedicated route of CAC-4/CAC-5.

Stage 2. Dedicated route of CAC-4 starting from October 1, 2025.

The agreement on medium-term and long-term needs for the volumes of transportation of Russian gas via the dedicated CAC-4 route.

On June 16, 2023, within the framework of the St. Petersburg International Economic Forum, a contract was signed for the transit of Russian gas through the territory of the Republic of Kazakhstan via the combined dedicated route of CAC-4/CAC-5, covering 823 km, effective from October 1, 2023, to September 30, 2025.

In 2023, the transit amounted to 1.281 billion cubic meters. According to the contract, the transit volume in 2024 is planned to be 2.804 billion cubic meters, and in 2025 (from January to September) – 2.029 billion cubic meters.

To ensure reliable and uninterrupted gas supply to consumers in the Republic of Uzbekistan with natural gas via the dedicated route of the "Central Asia – Center-IV" pipeline, a contract is planned to be signed in 2024 for the transportation of Russian natural gas through the territory of the Republic of Kazakhstan for the needs of consumers in the Republic of Uzbekistan. The contract will be effective from October 1, 2025, to December 31, 2040, with an annual transit volume of up to 11 billion cubic meters.

IPO QAZAQGAZ

One of the strategic tasks for QazaqGaz is to launch an IPO. In this context, the following results were achieved in 2023 to increase the investment attractiveness of the Company:

- ◆ QazaqGaz development strategy was implemented, aimed at consolidating the efforts of all participants in the gas supply market and forming the reputation of a reliable partner.
- ◆ QazaqGaz ranked first among the companies of Samruk-Kazyna JSC and seventh among gas companies worldwide according to the international rating agency Morningstar Sustainalytics (19.2). This confirms the national operator's position as a highly efficient and socially responsible player in the gas market.
- ◆ QazaqGaz was included in the TOP-3 for ESG disclosure according to PwC Kazakhstan, as part of ensuring transparency in operations.
- ◆ An incentivizing formula for the purchase price of new volumes of gas from subsoil users was approved, and maximum wholesale prices for gas were established. This work was conducted as part of the reform of the pricing system for commercial gas to optimize losses.

PLANS FOR 2024

Within the framework of the QazaqGaz Development Strategy, the following directions of work are outlined:

- ◆ Implementation of a comprehensive development plan, including efforts to increase the resource base of commercial gas, development of the domestic gas market, development of gas transit and export, gas chemistry and deep processing, and investment and operational efficiency;
- ◆ Maintaining the position of a leader as a company with low exposure to ESG risks, namely improving corporate governance, social and environmental aspects of operations;
- ◆ Implementation of a number of major investment projects in collaboration with investors in the areas of gas production, transportation, and processing;
- ◆ Completion of the second phase of construction of the feeder infrastructure for the Almaty energy complex;
- ◆ Continuation of projects "Construction of the new compressor station KS-14 and the main gas pipeline "KS-14-Kostanay" and "Construction of the second line of the main gas pipeline "Beineu – Bozoi – Shymkent". These will ensure reliable natural gas supply to the population and system-forming enterprises of Kostanay city and Kostanay region, as well as maintain the volumes

of gas exports to China. Following the receipt of conclusions from RSE "Gosexperiza" on the developed feasibility studies for the above projects, it is planned to proceed to the subsequent stages of project implementation;

- ◆ Continuation of negotiations with the operator of the Kashagan field (NCOC) to reach an agreement on managing the entire volume of liquefied hydrocarbon gas.

## Development of chemical production



SAMRUK-KAZYNA ON-DEU LLP (HEREINAFTER — SK ONDEU, FORMERLY KNOWN AS UNITED CHEMICAL COMPANY LLP) WAS ESTABLISHED IN 2009 BY A DECISION OF THE BOARD OF DIRECTORS OF THE SOVEREIGN WEALTH FUND SAMRUK-KAZYNA JSC DATED NOVEMBER 28, 2008, FOLLOWING A DIRECTIVE FROM THE PRESIDENT OF THE REPUBLIC OF KAZAKHSTAN ISSUED DURING THE EXTENDED SESSION OF THE GOVERNMENT OF THE REPUBLIC OF KAZAKHSTAN ON OCTOBER 13, 2008, TO "CREATE A SPECIAL COMPANY THAT WILL HANDLE PROJECTS IN THE CHEMICAL INDUSTRY".

Sulfuric acid production volume

193.9

thousand tons

The net profit plan was exceeded by

969

KZT million

\* Excluding KUS LLP

The Company's main mission is to facilitate the development of new chemical productions in Kazakhstan through participation in capital.

### KEY PERFORMANCE RESULTS FOR 2023

Indicator	2022	2023
<b>Production indicators:</b>		
liquid glyphosate production volume, thousand liters	603	37.5
sulfuric acid production volume, thousand tons	175.34	193.94
electricity production volume, million kWh	2,052	1,995
<b>Financial indicators, KZT billion:</b>		
Revenue	37.5	33.7
Gross profit	8.9	7.2
Net profit	-145	-23.7
Costs	218.2	79.1
Operating income	3.6	-6.3
Net debt	67.3	60.3
Taxes paid	3.2	2.3
<b>Sustainability indicators:</b>		
CO <sub>2</sub> emissions into the atmosphere, tons	163.475*	158.225*
Volume of disposed waste, tons	463.42*	455.218*
Accidents	0	0
Fatal accidents	0	0

In 2023, the main reasons for not achieving production and financial targets were changes in market conditions, non-fulfillment of contractual obligations by partners, breakdown of production equipment, and the introduction of amendments to the Law of the Republic of Kazakhstan "On Electric Power Engineering".

Specifically, the subsidiary producing agro-chemical products (CHEM-Plus LLP) failed to meet the planned production indicators due to the absence of sales of products manufactured in 2022 (sales were planned for the first half of 2023). Thus, considering the overstocking of warehouse spaces, production was suspended in 2023. Additionally, there was a sharp decline in the market prices of the main raw material (from USD 10.25 to USD 3.4 per kilogram).

The raw material used for the subsidiary's products was purchased at USD 10.25 (before

the price reduction). Consequently, the current selling price is non-competitive in the market due to the high cost of production. Despite these difficulties, by the end of 2023, the Company managed to secure contracts for the sale of products for the 2024 season (remaining inventory at the beginning of 2023 was 437 thousand liters, and at the end of 2023 it was 171 thousand liters).

Additionally, in 2023, there was a slight deviation from the planned production figures for sulfuric acid at SSAP LLP. In the first quarter of 2023, the plant had to reduce its production capacity to 73% due to the non-pickup of finished products by the main consumer. The decrease in capacity utilization was also related to issues starting in December 2022 with the main pump for transferring concentrated sulfuric acid, which had been in operation since 2015. Regular maintenance was conducted, but the pump's capacity dropped in the second half of March 2023.



On March 30, 2023, a scheduled shutdown of the pump for repair was conducted, during which it was discovered that the pump could no longer operate at full capacity. This factor also negatively impacted the fulfillment of the production and sales plan. In the second quarter of 2023, the Company received and installed a new pump and resolved the sulfuric acid pickup issues. The measures taken helped to reduce the deviation from the planned indicators with a gradual increase in production. As a result, by the end of 2023, the plan was almost met, with a deviation of only 0.3%. Despite the issues encountered, SSAP LLP ended the year with positive financial results, exceeding the net profit plan by KZT 969 million, or 136%.

Also, in 2023, KUS LLP did not meet the planned volume of electricity generation and sales due to maintenance work on the waste heat boilers. These maintenance works led to the downtime of steam turbines. Another reason for the deviation was the introduction of the Single Electricity Buyer mechanism on July 1, 2023. The unequal rights of electricity purchasing by the Single Buyer during trades at KO-REM JSC (according to the Law of the Republic of Kazakhstan "On Electric Power

Engineering", electricity from renewable energy sources (hereinafter — RES), thermal power plants (hereinafter — TPP), and stations with investment agreements is purchased outside of trades led to a significant reduction in the volume of electricity sold from the combined cycle power plant. Thus, from July 1, 2023, KUS LLP sold electricity to cover the remaining deficit after the aforementioned stations.

The main issue is the amendments made to the Law of the Republic of Kazakhstan "On Electric Power Engineering", with ongoing work with the Ministry of Energy of the Republic of Kazakhstan to address this matter.

In 2023, the Company incurred additional costs from paying an administrative fine for exceeding greenhouse gas emission quotas, amounting to KZT 7,224,486 thousand. As a result of these additional expenses, the net profit was KZT 4 billion, while without the aforementioned fine, the net profit would have been approximately KZT 3 billion in positive value.

For the first time in the history of SK Ondeu, dividends were paid in 2023 to the Fund amounting to KZT 2.9 billion.

In 2023, obligations to the Fund were reduced by KZT 3.2 billion for the loan to Polymer Production LLP through scheduled loan repayments. SK Ondeu received dividends from two subsidiaries totaling KZT 3.2 billion by the end of 2023, which positively impacted the financial stability of the group of companies.

As part of the Fund's management directive to reform portfolio companies and divest non-core assets, successful work was carried out in 2023 to sell a 100% stake in the charter capital of Polymer Production LLP in favor of NC KazMunayGas JSC. Also, in 2023, the trust management agreement for shares in the charter capital of KPI Inc. LLP was extended, and the participation share in the charter capital of Karabatan Utility Solutions LLP was transferred to the trust management of NC KazMunayGas JSC.



## MODERNISATION

### 1. Sulphuric acid production — 180 thousand tons per year (expansion of SSAP LLP)

The project involves the construction of a second line for an existing sulfuric acid production facility with the development of some infrastructure in Stepnogorsk.

#### Current Status:

- ◆ Completion of the development of the TEJ ("Revision 1") is nearing;
- ◆ Procurement procedures have started for contracting the state expertise of the TEJ;
- ◆ Negotiations are ongoing with licensors to reduce the CAPEX portion of the project.

#### Planned Activities for 2024:

- ◆ In June 2024, receipt of the state expertise of the project is expected;
- ◆ The results of the TEJ are planned to be presented to the corporate bodies of the Partnership in the third quarter of 2024;
- ◆ The commencement of work on the detailed project documentation of the project is expected in the fourth quarter of 2024.

### 2. Production of sulphuric acid 800 thousand tons per year. Project of TQZ LLP

The project entails the construction of a sulfuric acid plant in the Turkistan region in collaboration with a private domestic investor to supply sulfuric acid to NAC Kazatom-prom JSC.

#### Current Status:

- ◆ The agreement on joint project implementation is currently under review by the interested parties;
- ◆ Development of documents for the Fund's import substitution program aimed at concluding an offtake contract (purchase of finished products) is underway;
- ◆ An application has been submitted to include the project in the Industrialization Map.

#### Planned Activities for 2024:

- ◆ The signing of the agreement on joint project implementation is planned for May 2024.

- ◆ Designing and compiling technical specifications for long-lead equipment and building structures is scheduled for July 2024.
- ◆ Orders for long-lead equipment are expected to be placed between August and September 2024.
- ◆ Completion of preparatory works on the site, including the construction camp, fencing, etc., is planned to be completed by the end of 2024.

### 3. Methanol production

The project involves the construction of a methanol production complex in the West Kazakhstan Region, Bayterek District, Beles Rural District.

As part of the project implementation, on September 20, 2023, an agreement on the main terms of cooperation was signed between SK Ondeu LLP and Zhaik Petroleum LLP.

#### Current Status:

- ◆ On October 20, 2023, indicative financing terms for the project were received from the Development Bank of Kazakhstan;
- ◆ In January 2024, the Ministry of Energy of the Republic of Kazakhstan hosted the first meeting of the commission for concluding an investment agreement;
- ◆ In January 2024, an independent evaluation of Zhaik Petroleum LLP's business was completed.

#### Planned Activities for 2024:

- ◆ In May 2024, the project is planned to be presented to the Investment and Strategic Committee of the Fund for approval to move to the "Implementation" stage.
- ◆ Upon receiving a positive Final Investment Decision (FID), it is planned to sign an accession agreement with the project initiator.
- ◆ The commencement of construction works and placement of orders for the manufacturing of the main equipment are expected in the third quarter of 2024.

### 4. Production of butadiene and its derivatives

The project involves the construction of facilities for processing butane mixture to produce butadiene and its derivatives. The project is being implemented by the project company Butadien LLP, a joint venture between Tatneft PJSC (75%) and SK Ondeu LLP (25%).

After completing a two-stage competitive bidding process to select an EP (Engineering, Procurement) contractor, Tatneft PJSC plans to make a final investment decision on the project in May 2024, followed by the conclusion of the EP contract.