

JSC NC KazMunayGas 2021 Trading Update

Nur-Sultan, 28 February 2022 - Joint-stock (JSC) National Company (NC) KazMunayGas (“KMG” or “Company”), Kazakhstan's national vertically integrated oil and gas company, announces its operating results for 2021.

Alik Aidarbayev, CEO:

“In 2021, we updated our development strategy. Along with the traditional activities, a special place among the strategic goals is given to sustainable development of the Company. In the reporting year, the Low Carbon Development Program was also approved, which includes both current opportunities to reduce the carbon footprint and additional areas of activity for decarbonisation.

As part of business diversification, the Company continues to develop petrochemistry as a promising line of business. At the end of 2021, the main construction of the KPI petrochemical complex with an annual capacity up to 500 thousand tonnes of polypropylene was fully completed.

In November 2021, KMG's gas transportation and marketing business was transferred to the main shareholder Samruk-Kazyna for the focused development of the country's gas industry.

Being a socially and environmentally responsible Company, KMG continues to implement a number of projects in this area, including desalination plants at the Karazhanbas field and in the village of Kendirli, the reconstruction of the Astrakhan-Mangyshlak water pipeline and the environmental project TAZAL YQ, designed to improve the environment in the Atyrau city. In 2021, KMG signed a number of agreements with major international companies such as Eni, Shell, Total, Air Liquide and Linde”, as part of the development in a green technologies sector.

Highlights 2021:

- Oil and gas condensate production amounted to 21,651 thous. tonnes compared to 21,752 thous. tonnes in 2020
- Oil transportation increased by 1.9% and amounted to 74,565 thous. tonnes
- Hydrocarbons refining volumes at the Kazakh and Romanian refineries has grown noticeably by 4.2% to 18,833 thous. tonnes

	2021 (net to KMG)	2020 (net to KMG)	%
Oil production, thous. tonnes	21,651	21,752	-0.5%
Gas production, mln m ³	8,081	8,191	-1.4%
Oil transportation, thous. tonnes	74,565	73,171	1.9%
Gas transportation ¹ , mln m ³	81,851	86,590	-5.5%
Oil refining, thous. tonnes	18,833	18,077	4.2%

¹ Volumes for 2021 on gas transportation, as well as on gas and condensate production at Amangeldy Gas, taking into account volumes for the period from January 1 to November 8, in connection with the transfer of 100% shares of KazTransGas JSC (NC QazagGaz JSC) in favor of Samruk-Kazyna JSC in November 9, 2021.

Operating results are represented in accordance with KMG's ownership interest in joint ventures and associates and 100% of results for consolidated subsidiaries, unless otherwise stated.

Upstream

In 2021 KMG's oil and gas condensate production volume amounted to 21,651 thous. tonnes (444 kbopd) representing a decrease of 0.5% compared to previous year. Production volume of natural and associated gas decreased by 1.4% to 8,081 mln m³.

Oil and condensate production, thous. tonnes	2021 (net to KMG)	2020 (net to KMG)	%
OMG	5,332	5,347	-0.3%
MMG	2,944	2,977	-1.1%
EMG	2,522	2,601	-3.0%
Tengiz	5,311	5,292	0.4%
Kashagan	1,344	1,253	7.2%
Karachaganak	1,034	1,094	-5.5%
Others	3,165	3,188	-0.7%
Total	21,651	21,752	-0.5%

Oil production at Tengiz increased by 0.4% compared to the last year, amounting to 5,311 thous. tonnes (116 kbopd). Gas production slightly increased by 0.1%, amounting to 2,953 million m³. The increase was due to the easing of restrictions under the OPEC+ agreement, as well as the successful completion of the units' overhaul of the second-generation plant and the re-injection of sour gas ahead of schedule.

Oil production at Kashagan in 2021 soared to 1,253 thous. tonnes (29kbopd), representing an increase of 7.2% on the back of restrictions eases under the OPEC+ agreement. Additionally, in the 4th quarter of 2021, sour gas injection compressors were successfully tested for performance, that in turn created opportunity to increase the gas re-injection level to 15 mln m³ per day. The volume of production of natural and associated gas increased by 7.9% and amounted to 818 million m³.

Oil and condensate production at Karachaganak decreased by 5.5% and amounted to 1,034 thous. tonnes (22 kbopd). Gas production decreased by 6.1% and amounted to 1,898 mln m³. Downward shift in production was caused by restrictions on the acceptance of gas sent for processing to the Orenburg gas processing plant, which carried out unscheduled repairs in August. Also, scheduled maintenance was carried out at Karachaganak in the 3rd quarter of 2021 to download the software for the 4th compressor and scheduled preventive maintenance of the gas re-injection compressors of the Integrated Gas Treatment Unit 2.

The volume of oil and condensate production at operating assets decreased by 1.1% to 13,963 thous. tonnes (277 kbopd) and gas production decreased by 2.1% to 2,411 mln m³. The decline in oil and condensate production was mainly due to commitments made to limit production under the OPEC+ agreement, as well as the shutdown of some wells, due to repair works to eliminate problems in the liquid oxidation-reduction system at the Embamunaigaz fields. In addition to that, there is an organic decrease in production levels at mature fields that slightly impacts downward shift of total production of mature fields.

Hydrocarbon reserves

According to reserves report prepared in compliance with international PRMS standards by the international independent firm DeGolyer & MacNaughton, KMG's proved plus probable hydrocarbon reserves (2P) amounted to 645 mln tonnes of oil equivalent (4,983 mln boe) as of 31 December 2021. Compared to 2020, the level of 2P reserves increased by 1.8% due to a set of measures implicated to hydrocarbon reserves management, including recalculation of hydrocarbon reserves at the Uzen, Kashagan and other upstream fields, as well as due to improved macroeconomic parameters (increase in the price of oil).

Net reserves under PRMS as of 31 December 2021

Reserves, mln toe	2021 (net to KMG)	2020 (net to KMG)	%
Proved (1P)	477	459	3.8%
Proved plus Probable (2P)	645	635	1.6%
Proved plus Probable plus Possible (3P)	761	757	0.5%

Reserves, mln boe	2021 (net to KMG)	2020 (net to KMG)	%
Proved (1P)	3,694	3,550	4.1%
Proved plus Probable (2P)	4,983	4,895	1.8%
Proved plus Probable plus Possible (3P)	5,869	5,832	0.6%

Midstream

The volume of oil trunk pipelines and sea transportation in 2021 increased by 1.9% to 74,565 thous. tonnes¹.

Oil transportation, thous. tonnes	2021 (100%)	2021 (net to KMG)	2020 (net to KMG)	%
KazTransOil	41,224	41,224	42,298	-2.5%
Kazakhstan-China Pipeline	17,412	8,706	7,942	9.6%
MunaiTas ²	4,273	2,179	1,694	28.7%
Caspian Pipeline Consortium	60,728	12,601	12,248	2.9%
Kazmortransflot	9,855	9,855	8,990	9.6%
Total	-	74,565	73,171	1.9%

¹ Part of the volume of oil can be transported by two or three pipeline companies, and correspondingly these volumes are counted more than once in the consolidated volume of oil transportation.

² Munaitas is an equity-consolidated joint venture and transportation volumes are quoted at a 51% ownership interest.

In 2021 the volume of oil transportation through trunk pipelines slightly increased by 0.8% and amounted to 64,710 thous. tonnes. The growth is explained by an increase in the volume of domestic transportation towards Kazakhstan's refineries to ensure the required volumes in the domestic market. At the same time, there is a decrease in the volume of oil export transportation due to the fulfillment of obligations by subsoil users to limit oil production under the OPEC + agreement and due to some natural decline in oil production at mature fields.

Compared to last year, the total volume of oil transportation by sea in 2021 increased by 9.6% to 9,855 thous. tonnes, mainly by the increase in transportation in the Mediterranean Sea, on the back of the world recovery of the oil shipping market.

The volume of gas transported through the trunk gas pipelines of KMG from January 1 to November 8, 2021 amounted to 81,851 mln m³. At the same time, comparing the full annual volumes for 2020 and 2021, gas transportation through main gas pipelines increased by 10.2% and amounted to 95,422 mln m³. The increase is mainly associated with an increase in transit flows of Central Asian gas to Russia and China, as well as an increase in gas consumption in the domestic market of Kazakhstan. In addition, there is a decrease in the volume of gas export transportation due to the redistribution of the gas volumes to meet the needs of the domestic market, as well as due to a decrease in the production of commercial gas by large suppliers.

Gas transportation ² , mln m ³	Until 8 November, 2021 (100%)	Until 8 November, 2021 (net to KMG)	2020 (net to KMG)	%
Intergas Central Asia	54,874	54,874	57,753	-5.0%
Asia Gas Pipeline	41,611	20,805	19,888	4.6%
Beineu-Shymkent Gas Pipeline	10,709	5,354	6,347	-15.6%
KazTransGas Aimak ¹	816	816	2,602	68.6%
Total	-	81,851	86,590	-5.5%

¹KazTransGas Aimak (KTGA) entered into a sale and purchase agreement for gas trunk pipelines and attributable facilities dated 19.03.21. Under the agreement, the Zhanaozen-Aktau gas pipeline was transferred to ICA. In this connection, since April 2021, the KTGA does not account trunk pipelines transportation.

Trading

Sales volumes of KMG's own produced oil and gas condensate in 2021 decreased by 1.5% compared to last year and amounted to 21,673 thous. tonnes, 63.4% of which is attributable to export volumes.

Supplies of own produced oil and gas condensate volumes to the domestic market amounted to 7,928 thous. tonnes, including supplies of crude oil from operating assets (Ozenmunaigas, Embamunaigaz, Kazakhturkmunai and Urikhtau Operating) in the amount of 4,458 thous. tonnes to the Atyrau Refinery, Shymkent refinery and Pavlodar refinery for further oil refining and sale of oil products.

The sales of commercial gas from January 1 to November 8, 2021 amounted to 18,019 mln m³, while comparing the full annual volumes for 2020 and 2021, there is a slight decrease by 0.8% to 22,473 mln m³. The prevailing share of commercial gas in the amount of 73.1% falls on the domestic market, where consumption increased by 10.9%. Export volumes decreased by 23.0% and amounted to 6,044 mln m³ due to reduced gas supplies to Russia and China.

² Volumes for 2021 on gas transportation take into account volumes for the period from January 1 to November 8, in connection with the transfer of 100% shares of KazTransGas JSC (NC QazagGaz JSC) in favor of Samruk-Kazyna JSC in November 9, 2021.

Downstream

Hydrocarbon refining, thous. tonnes	2021 (net to KMG)	2020 (net to KMG)	%
Atyrau refinery	5,473	5,016	9.1%
Pavlodar refinery	5,407	5,004	8.1%
Shymkent refinery ¹	2,582	2,397	7.7%
Caspi Bitum	464	433	7.3%
Petromidia	4,586	4,864	-5.7%
Vega	321	364	-11.8%
Total	18,833	18,077	4.2%

¹ Shymkent refinery processing volume is indicated at a share of 50%

Total refining volume in 2021 increased by 4.2% and amounted to 18,833 thous. tonnes:

- Kazakh refineries' volume of hydrocarbon refining increased by 8.4% and amounted to 13,927 thous. tonnes. A significant increase in refining volumes at all 4 refineries in the reporting year was due to the restoration of pre-pandemic refining volumes and a return to average annual indicators
- The volume of refining at the KMG International refineries (Petromidia, Vega) in Romania decreased by 6.1% and amounted to 4,907 thous. tonnes. The decrease in refining volumes is associated with a complete shutdown of the plant for three months due to the fire of a diesel fuel hydrotreater at Petromidia on July 2, 2021. The refinery was launched on September 24, 2021

In 2021, the volume of oil products production at Kazakh and Romanian refineries increased by 3.5% and amounted to 17,404 thous. tonnes:

- Kazakhstani refineries produced 12,614 thous. tonnes of oil products, which is 7.7% more than last year, due to the recovery in demand for petroleum products in 2021
- Refineries of KMG International (Petromidia, Vega) produced 4,790 thous. tonnes of oil products, which is less by 6.3% than in 2020.

ESG

2021 was declared the Year of Ecology for the KMG group of companies as part of taking measures to comply with new ecological requirements and global trends to increase attention to environmental protection and reduce negative environmental impacts.

The company managed to reduce emissions of air pollutants, and compared to 2017, there is a substantial decrease in emissions by 19%. Measures are being actively taken to dispose oil waste and clean up oil-contaminated lands, including historical ones. According to the independent rating agency Sustainalytics, the ESG rating of KMG has increased from 69 points in 2020 to 72 points in 2021. The ESG risk rating level in 2021 improved to 28.4 points, in 2020 this indicator was 34.7 points. These results allowed KMG to move into the medium risk range and now KMG ranks 16th out of 251 companies in the oil and gas industry in the world.

In addition, a diagnostic of corporate governance was carried out in 2021, initiated by the main shareholder Samruk-Kazyna JSC. The result of this diagnostic with a BBB rating showed a

significant improvement in the Company's corporate governance system compared to 2018 with the rating of B. The diagnostic shows that among the positive trends there are significant improvements in the effectiveness of the Board of Directors and the executive body, risk management, internal control and audit, sustainable development.

	UoM	2021	2020	%	IOGP ¹
NO _x emissions	tonnes per 1,000 tonnes of raw hydrocarbon production	0.24	0.22	9.1%	0.29
SO _x emissions	tonnes per 1,000 tonnes of raw hydrocarbon production	0.22	0.23	-4.3%	0.19
Associated petroleum gas flaring intensity	tonnes per 1,000 tonnes of raw hydrocarbon production	2.1	2.2	-4.5%	8.0
Lost time incident rate (LTIR)	1 mln people-hours	0.31	0.25	24.0%	0.20
Fatality accident rate (FAR)	100 mln people-hours	2.93	0.0	-	0.56

¹ Available IOGP (International Association of Oil & Gas Producers) figures for 2020 (<https://www.iogp.org/>).

For further information, please visit <http://www.kmg.kz>

Contacts:

Email: ir@kmg.kz

Tel: +7 7172 78 63 43

About JSC National Company KazMunayGas:

JSC National Company KazMunayGas (KMG) is Kazakhstan's leading vertically integrated oil and gas company, operating assets across the entire production cycle from the exploration and production of hydrocarbons to transportation, refining and specialized services. Established in 2002, the company represents Kazakhstan's interests in the national oil and gas industry.

KMG's main assets are as follows:

Upstream: Ozenmunaigas (OMG) – 100%, Embamunaigaz (EMG) – 100%, KazakhTurkmenai (KTM) – 100%, KazMunayTeniz – 100%, Urikhtau (UO) – 100%, Mangistaumunaigaz (MMG) – 50%, Kazgermunai (KGM) – 50%, Karazhanbasmunai (KBM) – 50%, KazakhOil Aktobe (KOA) – 50%, Petrokazakhstan Inc (PKI) – 33%, Tengizchevroil (Tengiz) – 20%, Karachaganak – 10%, Kashagan – 8.44%.

Midstream: KazTransOil – 90%, Kazakhstan China Pipeline (KCP) – 50%, Munai Tas – 51%, Batumi Oil Terminal – 100%, Caspian Pipeline Consortium (CPC) – 20.75%, Kazmortransflot – 100%, KazRosGas – 50%.

Downstream: Pavlodar refinery – 100%, Atyrau refinery – 99,53%, Shymkent refinery – 49,72%, KMG International – 100%, Petromidia – 54,63%, Vega – 54,63%.