

25 February 2021

JSC NC KazMunayGas 2020 Trading Update

Nur-Sultan, 25 February 2020 - Joint-stock (JSC) National Company (NC) KazMunayGas ("**KMG**" or "**Company**"), Kazakhstan's national vertically integrated oil and gas company, announces its operating results for 2020.

Alik Aidarbayev, CEO:

"2020 became a sever challenge for the whole world and the oil and gas industry in particular. The COVID-19 pandemic, and as a result, a drop in demand for energy resources and restrictions under the OPEC + agreement led to a decrease in key production indicators. In order to overcome the negative consequences of the pandemic for KMG, anti-crisis measures were developed and successfully implemented in a timely manner, which allowed the Company to significantly mitigate the impact of the crisis, while maintaining stability and potential for future development. Despite the epidemiological situation and the collapse in oil prices, the Company did not stop production activities in all streams to ensure the continuity of the production process.

While maintaining a focus on the health and safety of employees and their families, the Company has taken all necessary measures to minimize the spread of COVID-19. Moreover, despite the current challenges, we have made a significant step in our sustainable development, in confirmation of which the international rating agency Sustainalytics awarded the Company a high mark at the level of 69 points. It is also very encouraging that in 2020 no fatal accidents related to work were registered, this result was achieved for the first time in the history of the Company. In addition, the number of accidents has been significantly reduced, while the KMG injury rate for the first time is lower than the industry average indicators of the International Association of Oil & Gas Producers (IOGP).

Successful overcoming of hardships were achieved through well-coordinated teamwork and dedication of each employee to their work. I express my gratitude to all employees for their hard work, which allowed not only to pass the trials, but also creates prospects for the further development of the Company in the future."

Highlights for 2020:

- Oil and condensate production decreased by 7.9% year-on-year to 21,752 thous.tonnes;
- Oil and gas transportation segment showed a decrease of 6.3% and 16.3%, and amounted to 73,172 thous. tonnes of oil and 86,590 mln m³ of gas, respectively;
- Refining volumes at Kazakh and Romanian refineries decreased by 12.2% to 18,077 thous. tonnes.

	2020 2019		%
	(net to KMG)	(net to KMG)	
Oil production, thous. tonnes	21,752	23,618	-7.9%
Gas production, mln m ³	8,191	8,455	-3.1%
Oil transportation, thous. tonnes	73,171	78,066	-6.3%
Gas transportation, mln m ³	86,590	103,494	-16.3%
Oil refining, thous. tonnes	18,077	20,589	-12.2%

Operational results of 2020

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

Upstream

In 2020, KMG's oil and gas condensate production amounted to 21,752 thous. tonnes (445 kbopd), having decreased by 7.9% year-on-year. Natural and associated gas production decreased by 3.1% to 8,191 mln m³.

Oil and condensate production, thous. tonnes	2020	2019	%
	(net to KMG)	(net to KMG)	
OMG	5,347	5,586	-4.3%
MMG	2,977	3,204	-7.1%
EMG	2,601	2,900	-10.3%
Tengiz	5,292	5,958	-11.2%
Kashagan	1,253	1,169	7.2%
Karachaganak	1,094	1,015	7.8%
Others	3,189	3,786	-15.8%
Total	21,752	23,618	-7.9%

KMG's share in oil production at Tengiz declined by 11.2% year-on-year to 5,292 thous. tonnes (115 kbopd), and gas production decreased by 9.5% to 2,950 mln m³. Obligations to restrict oil production under the OPEC+ agreement had a significant impact on the decline in oil production.

Oil production at Kashagan increased by 7.2% to 1,253 thous. tonnes (27 kbopd). Natural and associated gas production increased by 8.3% to 758 mln m³. Oil and gas production increased as a result of the conducted overhaul in 2019, which led to the higher operational efficiency of offshore and onshore facilities, as well as an increase the injection fund from 4 to 6 wells, installation of additional reboilers on oil processing lines. The planned potential oil production at 1,332 thous. tonnes was not achieved due to restrictions under the OPEC+ agreement. In 2020, the average gross daily production at Kashagan (100%) amounted to 328 kbopd.

Oil and condensate production at Karachaganak increased by 7.8% to 1,094 thous.tonnes (23 kbopd). Gas production amounted to 2,021 mln m³, up by 8.6% year-on-year. The growth of oil and gas production is associated with modernisation of the facilities of Karachaganak Processing Complex and gas-processing units after planned preventive maintenance in September-October 2019 as well as an increase in gas injection in the summer after the commissioning of new gas injection wells of the 5th trunk line.

Oil production at KMG-operated assets decreased by 8.8% year-on-year to 14,113 thous. tonnes (279 kbopd). Gas production decreased by 6.6% to 2,463 mln m³. The decrease in oil production volumes at KMG-operated assets was mainly attributable to obligations undertaken under OPEC+ agreement, as well as the natural decline in production levels at mature fields.

Hydrocarbon reserves

According to reserves report prepared in compliance with international PRMS standards by the international independent consulting firm DeGolyer & MacNaughton, KMG's proved plus probable hydrocarbon reserves (2P) amounted to 635 mln tonnes of oil equivalent (4,895 mmboe) as of 31 December 2020. Compared to 2019, the level of 2P reserves decreased by 6.1%. The decline in

indicators is mainly due to technological reasons (natural decline of production at mature fields), as well as macroeconomic (decline in the forecast oil price and exchange rate volatility).

Net reserves under PRMS as of 31 December 2020

Reserves, mmtoe	2020 (net to KMG)	2019 (net to KMG)	%		
Proved (1P)	459	499	-8.0%		
Proved plus Probable (2P)	635	676	-6.1%		
Proved plus Probable plus Possible (3P)	757	790	-4.2%		

Reserves, mmboe	2020 (net to KMG)	2019 (net to KMG)	%
Proved (1P)	3 550	3 860	-8.0%
Proved plus Probable (2P)	4 894	5 220	-6.1%
Proved plus Probable plus Possible (3P)	5 832	6 089	-4.1%

Midstream

In 2020, volumes of oil transportation through pipeline and sea decreased by 6.3% to 73,171 thous. tonnes¹.

Oil transportation, thous. tonnes	2020 (100%)	2020 (net to KMG)	2019 (net to KMG)	%
KazTransOil	42,298	42,298	44,463	-4.9%
Kazakhstan-China Pipeline	15,883	7,942	8,100	-2.0%
MunaiTas ²	3,321	1,694	1,648	2.8%
Caspian Pipeline Consortium	59,027	12,248	13,126	-6.7%
Kazmortransflot	8,990	8,990	10,729	-16.2%
Total	-	73,171	78,066	-6.3%

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.

The volume of oil transportation through the trunk pipelines decreased by 4.7% year-on-year to 64,181 thous. tonnes. The decrease is attributable to the limited oil supply from CNPC Aktobemunaigas JSC due to finding and crucial excess of organochlorine compounds in oil, the decrease in oil supply from oil companies operating the Kumkol group of fields, affected by the natural decline in oil production, and restrictions under OPEC+ agreement.

Offshore oil transportation decreased by 16.2% to 8,990 thous. tonnes, affected by lower volumes in the Mediterranean Sea as a result of delays in anticipation of loading, as well as adverse weather conditions.

Gas transportation through KMG's gas pipelines decreased by 16.3% to 86,590 mln m³. The decline is mainly attributable to lower Central Asian gas transit volumes to China, lower transit volumes of Russian gas from PJSC Gazprom through the territory of Kazakhstan, a decrease in export supplies of Karachaganak gas to Russia, and lower export volumes of Tengiz gas due to a decline in its production.

Gas transportation, mln m ³	2020 (100%)	2020 (net to KMG)	2019 (net to KMG)	%
Intergas Central Asia	57,753	57,753	72,961	-20.8%
Asia Gas Pipeline	39,776	19,888	22,935	-13.3%
Beineu-Shymkent Gas Pipeline	12,694	6,347	5,044	25.8%
KazTransGas Aimak	2,603	2,603	2,554	1.9%
Total	-	86,590	103,494	-16.3%

Trading

In 2020, the sales volume of KMG's own produced oil and gas condensate decreased by 7.6% year-on-year to 22,012 thous. tonnes, of which 68.9% was exported.

The domestic supply of own produced oil and gas condensate amounted to 6,851 thous. tonnes, including crude oil supplies from KMG-operated assets (OzenMunayGas, EmbaMunayGas, Kazakhturkmunay and Urikhtau Operating) in the amount of 3,517 thous. tonnes to Atyrau and Pavlodar refineries for further oil refining and sale of oil products.

Gas sales slightly decreased by 0.7% year-on-year to 22,663 mln m³. Exports of sales gas reached 7,852 mln m³, of which 89.3% was exported to China. Because of the pandemic in 2020, gas exports to China were below the planned volumes, however, actual export volumes unchanged compared to last year.

Downstream

In connection with the introduction of quarantine measures in all cities of Kazakhstan in 2020 the demand for the main types of oil products in Kazakhstan decreased, which had a corresponding impact on the production activities of Kazakhstani oil refineries. The volumes of oil refining and production of oil products were reduced to avoid overstocking, while the production process was not stopped, the utilization of refineries was balanced in line with the required volume of oil products products.

Hydrocarbon refining, thous. tonnes	2020	2019	%
	(net to KMG)	(net to KMG)	
Atyrau refinery	5,016	5,388	-6.9%
Pavlodar refinery	5,004	5,290	-5.4%
Shymkent refinery ¹	2,397	2,701	-11.3%
Caspi Bitum	433	443	-2.3%
Petromidia	4,864	6,331	-23.2%
Vega	364	436	-16.6%
Total	18,077	20,589	-12.2%

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

In 2020, refining volume decreased by 12.2% and amounted to 18,077 thous. tonnes:

- Refining volumes at Kazakh refineries declined by 7% to 12,849 thous. tonnes, which is mainly attributable to lower oil refining volumes at three major refineries in line with the level of consumption of petroleum products;
- Refining at KMG International refineries (Petromidia, Vega) in Romania amounted to 5,228 thous. tonnes, down by 22.7% year-on-year. Decline is a result of a production

shutdown at Petromidia refinery related to scheduled overhaul from 15 March to 1 May 2020 as well as a decrease in demand for petroleum products in the region.

In 2020, the production of oil products at Kazakh and Romanian refineries decreased by 12.5% to 16,817 thous. tonnes:

- Production of oil products at Kazakh refineries amounted to 11,707 thous. tonnes, down by 7.1% year-on-year due to lower oil refining volumes, amidst the COVID-19 implications on oil products consumption;
- Oil products production at KMG International refineries (Petromidia, Vega) amounted to 5,110 thous. tonnes, down by 22.7% year-on-year due to production shutdown at Petromidia refinery due to scheduled overhaul.

Ecology and industrial safety

KMG gives priority attention to measures to prevent the negative impact of its activities on the environment and health of personnel.

In 2020, KMG successfully passed the assessment of the international rating agency Sustainalytics at the level of 69 points out of 100, which reflects the Company's rather high indicators in the field of sustainable development. In terms of the components of the ESG rating, KMG received the following assessments: environmental component at 69, social - 70, corporate governance - 67.

In addition, KMG received an ESG risk rating of 34.5 points, which shows a high level of unmanageable ESG risk. The company fell into the fourth out of five risk categories. Analysts of Sustainalytics assessed KMG's ESG risk management as "strong". At the same time, the initial exposure to risks is assessed as "high". The high value of KMG's rating is mainly associated with industry risks that management cannot control.

In 2020, the reporting of the CDP (Carbon Disclosure Project) was expanded, for the first time data on water resources management were published on the CDP site as part of the 2019 water security questionnaire. Also for the second year in a row, KMG published a report on greenhouse gas emissions for 2019 as part of the CDP climate questionnaire, which included data on the volumes of direct and indirect greenhouse gas emissions, issues of greenhouse gas emissions management, main risks and opportunities. Full versions of reports are available at: <u>http://ir.kmg.kz/</u>

	UoM	2020	2019	%	IOGP ¹
Associated petroleum gas flaring intensity	tons per 1,000 tons of raw hydrocarbon production	2.2	2.95	-25.4%	10.6
Lost time incident rate	1 mln people-hours	0.21	0.31	-32.3%	0.24
Fatality accident rate	100 mln people-hours	0.0	1.28	-	0.46

¹ Available IOGP (International Association of Oil & Gas Producers) 2019 average results. (https://www.iogp.org/).

For further information, please visit http://ir.kmg.kz/ru 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%, KazakhTurkmunai (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 (TCO) - 20%, Karachaganak (KPO) - 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%, KazTransGas -100%, Intergas Central Asia (ICA) - 100%, Asia Gas Pipeline (AGP) - 50%, KazTransGas Aimak - 100%, Beineu-Shymkent Gas Pipeline (BSGP) - 50%, KazRosGas - 50%.

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