KAZMUNAYGAS JSC NC MANAGEMENT REPORT ON FINANCIAL AND OPERATING PERFORMANCE

for year ended December 31, 2019

The objective of the following document is to assist in understanding and assessment of the trends and material changes in the Group's operating and financial performance. This overview is based on the Group's interim condensed consolidated financial statements and shall be considered together with the interim condensed consolidated financial statements and related notes. All financial data and their discussion are based on the interim condensed consolidated financial statements prepared in accordance with the International Financial Reporting Standards (IFRS). In accordance with the Group's accounting policies, investments in joint ventures and associates are accounted for using the equity method and, therefore, are not consolidated line by line ("equity method treated enterprises").

All KZT amounts are given in billions, except as otherwise expressly provided for herein. The figures are rounded, however, actual indicators before rounding are taken to calculate rates per unit.

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1. GENERAL

KazMunayGas JSC NC is a vertically integrated company operating in exploration, production, transportation, refining and marketing of oil and gas, as well as selling crude oil, gas and refined products in Kazakhstan and abroad.

KazMunayGas JSC NC is a state-owned oil and gas enterprise of the Republic of Kazakhstan established by Decree No. 811 of the President of the Republic of Kazakhstan of February 20, 2002 and by Regulation No. 248 of the Government of the Republic of Kazakhstan of February 25, 2002. KazMunayGas JSC NC was established by the merger of the national oil and gas company Kazakhoil CJSC and the national company Oil and Gas Transportation. As a result of the merger, KazMunayGas JSC NC acquired all the assets and liabilities, including stakes in all businesses owned by these companies.

The shareholders of KMG are Samruk-Kazyna JSC SWF (90.42% – 1 share) and the National Bank of the Republic of Kazakhstan (9.58% + 1 share). The Group produces more than a quarter of Kazakhstan national market of oil and gas condensate and dominates in national oil refining and transportation of oil and natural gas through trunk pipelines.

The Group's largest and most important contributors to the consolidated business in the reporting period are:

- OzenMunayGas JSC and EmbaMunayGas JSC (oil and gas exploration and production);
- KazTransOil JSC (oil transportation);
- KazTransGas JSC (gas transportation and sales);
- KazMunayTeniz JSC (offshore oil operations);
- Atyrau Refinery LLP (crude oil refining);
- Pavlodar Oil Chemistry Refinery LLP (crude oil refining);
- KMG International N.V. (refining and marketing of crude oil and refined products in Romania and countries of the Black Sea and Mediterranean basin);
- Large investment projects:
  - North Caspian Operating Company B.V. (share – 8.44%);
  - Karachaganak Petroleum Operating B.V. (share – 10%);
  - Tengizchevroil (share – 20%).

Key corporate events:

- On February 22, 2019, KazMunayGas Exploration Production JSC (KMG EP) completed its preferred shares buyback program. Thus, KMG EP repurchased 1,239,087 preferred shares out of 1,905,209 shares (65.0%) for a total amount of KZT 15.9 billion. As of May 14, 2019, the preferred shares of KMG EP were delisted from the KASE.
- In February 2019, in accordance with its strategy and the government plan, KMG completed the sale of its KazMunayGas-branded fuel station network for KZT 60,512 million.
- In March 2019, the Fitch International Rating Agency confirmed KMG's rating at the level "BBB-/Stable outlook", while increasing the individual rating (stand-alone credit profile) from "b" to "bb-".
- On March 29, 2019, KMG obtained the consent of the holders of Eurobonds to be redeemed in 2022, 2023, 2027 and 2047 (Eurobonds issued before 2018) for (1) alignment of the covenant package with the terms of the issue of Eurobonds of 2018, and (2) early repayment of Eurobonds in the amount of USD 30.1 million due for repayment in 2044.
- On April 29, 2019, Mr. Luis Maria Viana Palha Da Silva was elected a Board Member and Independent Director of KMG.
- On May 17, 2019, KMG and BP signed the Memorandum of Understanding whereby they agreed to study available technical data and existing assets of KMG and third parties. The companies are also going to consider their possible further cooperation.
- On May 20, 2019, Mr. Anthony Espina was elected a Board Member of KMG representing Samruk-Kazyna JSC.
- In accordance with the instruction of the President, financing of the construction of social facilities (a 7,000-seat stadium and a congress hall) in Turkestan for a total amount of about KZT 21 billion was approved. Along with this, in August 2019, KMG financed the construction of a 1,000-seat amphitheater worth KZT 1.8 billion in Turkestan.
- On August 22, 2019, the Moody's Rating Agency upgraded KMG's standalone rating from "Ba3" to "Ba2", without taking into account support of the Kazakhstan government. KMG's long-term rating was confirmed at "Baa3", and the outlook was revised from "Stable" to "Positive".
- KazMunayGas finished construction of the Saryarka trunk gas pipeline, one of the largest investment projects in the independent Kazakhstan. On December27, 2019, the commissioning certificate was signed.

Production events

- On February 16, 2019, the implementation of an investment project for the modernization of a jack-up self-elevating drilling rig (JUDR) for KZT 21.6 billion or USD 57 million was approved for the participation in drilling projects in the Azerbaijani sector of the Caspian Sea. KMG and the State Oil Company of Azerbaijan Republic (SOCAR) signed an agreement on trust management of the JUDR.
- From April 15 to May 19, a scheduled turnaround was completed at Kashagan field within 35 days instead of planned 45 days. Production was resumed on May 19.
- In April, a contract for the exploration and production of hydrocarbons in the Zhenis site was signed. KMG, LUKOIL, and the Ministry of Energy of the Republic of Kazakhstan signed a contract for the exploration and production of hydrocarbons on the Zhenis site located in the Kazakhstan sector of the Caspian Sea. The project operator is Zhenis Operating LLP (a 50:50 joint venture of KMG and LUKOIL).
- In April 2019, KMG launched the feeder transportation on the Trans-Caspian International Transport Route. The marine operator of this route is KMTF.
- On May 17, 2019, KMG and British Petroleum (BP) signed a Memorandum of Understanding for the joint study and research of the available technical data, and existing assets of KMG and third parties.
- In May 2019, the shareholders of the Caspian Pipeline Consortium (CPC) decided to implement a project to eliminate the bottlenecks of the CPC pipeline to increase its capacity in the Kazakhstan sector to 72.5 million tons per annum with a project implementation period from 2019 to 2023.
- On June 7, 2019, the KMG Chairman and LUKOIL signed an agreement on the principles of the I-P-2 project at the St. Petersburg International Economic Forum. In this document, the parties agreed on the main cooperation conditions and expressed their readiness for the joint implementation of the I-P-2 project the same-named site whereof is located in the Kazakhstan sector of the Caspian Sea.
- On July 26, 2019, the Ministry of Energy of the Republic of Kazakhstan, KMG and Eni S.p.A. (Eni) signed a contract for the exploration of hydrocarbon crude in the Abai area located in the Kazakhstan sector of the Caspian Sea. The project operator is Isatay Operating Company LLP (a 50:50 joint venture of KMG and Eni).
- The scheduled turnaround took place at KTL-1 plant at Tengiz for 40 days, from August 1 to September 10.
- The scheduled turnaround took place at KPO production facilities for 25 days, from September 16 to October 10.
- On September 20, 2019, KMG and LUKOIL signed an agreement for joint site explorations in the Republic of Kazakhstan (RK).
- On September 24, 2019, KMG and Equinor signed an agreement for joint explorations which provides for geological and geophysical surveys to identify the hydrocarbon potential of oil and gas sites in the Republic of Kazakhstan.

Financial events

- In January 2019, Atyrau Refinery refinanced the loan of the Development Bank of Kazakhstan (DBK) for the amount of USD 300 million via (1) the issuance of bonds for an amount of USD 150 million at Astana International Exchange and (2) a loan obtained from Halyk Bank in the amount of USD 150 million, in order to reduce funding costs.
- In April 2019, KMG fully repaid the Eurobonds due in 2044 in the amount of USD 30.1 million.
- During the nine months of 2019, KMG fully repaid debt on bonds solely held by DBK in the approximate amount of USD 113 million.
- In July 2019, Atyrau Refinery changed the currency of the loan received from DBK in the amount equivalent to USD 152 million from “USD” to “KZT” for the purpose of foreign exchange risk management.
- In August 2019, KMG and KTG issued a joint financial guarantee to refinance the loan raised by Beineu-Shymkent Gas Pipeline LLP from a syndicate of foreign banks in the amount of USD 720 million in order to improve the terms of financing and the credit documentation.
- In 2019, KMG discharged, ahead of schedule, its obligations under oil and LPG financing deal with TCO in the amount of USD 2.25 billion, including the accelerated repayment in the amount of USD 1,250 million.
- In December 2019, Atyrau Refinery entered into a credit agreement with DBK against the KMG’s guarantee in KZT for an amount equivalent to USD 200 million, inter alia, to refinance part of a foreign currency loan issued by Exim Bank of China in January 2020.

2. KEY MACROECONOMIC FACTORS

The key factors that affected the Company's performance are:

- fluctuations of prices for crude oil and refined products;
- effect of exchange rate changes;
- changes in the tariffs for oil and gas transportation;
- taxation.

Below are macroeconomic indicators for 12 months of 2019, which influenced the group's operations.

Description	Unit of measurement	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Change	
				absolute	%
End-of-period inflation rate (CPI, % to the corresponding month of the preceding year)	%	105.4	105.3	0.1	0
Oil export customs duty	USD/ton	60	67	-2	-3.1
Monthly calculation index (MCI)	KZT	2,525	2,405	120	5.0
Minimum wage amount (MWA)	KZT	42,500	28,284	14,216	50.3

2.1. Changes in the market prices for crude oil and oil products

Crude oil and oil product prices in the international and Kazakh markets have a significant influence on the Company's performance.

Changes in the global oil prices (USD/barrel)	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, %
Brent	64.21	71.31	-10.0
Urals	63.78	71.65	-11.0

Source: Thomson Reuters

Generally, the change in crude oil prices in 2019 was driven by a number of global factors, including extension of the OPEC+ deal till the end of March 2020, the geopolitical situation in some countries (Venezuela, Middle East), trade disputes between the US and China, and market expectations about the slowdown of the global economic growth.

The price trends of oil products in the international and Kazakh markets are determined by a number of factors, the most important of which are crude oil prices, oil products supply and demand ratio, competition, remoteness of the sales markets from the enterprises that refine oil into end products or petroleum intermediates, and the seasonal shortage/surplus in oil product supplies.

Average global prices for oil products	Unit of measurement	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, %
Fuel oil	USD/ton	389	409	-4.9
Naphtha	USD/ton	503	602	-16.4
Jet fuel	USD/ton	631	686	-8.1

Average wholesale prices for oil products in RK*	Unit of measurement	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, %
AI-95 Gasoline	KZT/ton	166,143	179,236	-7.3
AI-92 Gasoline	KZT/ton	154,935	169,118	-8.4
Diesel fuel (summer)	KZT/ton	196,574	177,024	11.0
Jet fuel	KZT/ton	220,324	213,250	3.3

Source: Argus Caspian market of oil products produced at the RK refineries

The increase in the average wholesale market prices for diesel and jet fuel in the Kazakh domestic market as of the end of 2019 exceeded the 2018 prices by more than 11% and 3%, respectively.

The decline in the average wholesale market prices for high-octane gasolines in the Kazakh domestic market as of the end of 2019 was about -8% as compared to 2018. The negative trend of the wholesale prices was shaped by gasoline surplus in the domestic market since early 2019.

2.2. Change in foreign exchange rate

The change of the KZT-to-USD exchange rate has significantly affected and is most likely to continue to affect the consolidated performance of the Company, since a significant share of the Company's revenues from sales of crude oil and refined products is denominated in USD, while a significant portion of the Company's expenses is denominated in KZT. Besides, most of the Company's borrowings and accounts payable are denominated in USD.

	Average exchange rate for the period	As of the end of the period
For 12 months, as of December 31, 2019 (KZT per 1.00 USD)	382.87	382.59
For 12 months, as of December 31, 2018 (KZT per 1.00 USD)	345.04	384.20

Source: foreign exchange rates established by the Kazakhstan Stock Exchange

2.3. Oil and gas transportation tariffs

Oil transportation by trunk pipeline

Since most of the regions of oil production in Kazakhstan are located far from the main sales markets for crude oil and petroleum products, oil companies depend on transportation infrastructure development, as well as on its accessibility.

The Group transports a considerable portion of crude oil volumes to be sold for export and to the domestic market, through the Kazakh trunk pipeline system owned by KazTransOil JSC, a subsidiary company. Furthermore, the Group owns 20.75% of the share capital in the Caspian Pipeline Consortium.

Crude oil is transported through the trunk pipelines by the KazTransOil Group under oil transportation services contracts signed by them with consumers in accordance with the standard contract form approved by Order No. 58 of the Minister of National Economy of the Republic of Kazakhstan dated June 24, 2019. These contracts established rights and obligations of the parties during oil transportation. The Group's oil is transported through the trunk pipelines of KazTransOil Group to the domestic market and for export in admixture with oil of other producers.

Pursuant to the amendments to the Republic of Kazakhstan Act “Amendments to Certain Natural Monopolies and Regulated Markets Legislative Acts of the Republic of Kazakhstan” adopted in May 2015, transportation of oil for the purpose of transit across the Republic of Kazakhstan and export outside the Republic of Kazakhstan, is not anymore considered a natural monopoly. In February 2018, KazTransOil JSC approved (Order No. 46, Order No. 47) the following tariffs for oil transportation by the trunk pipelines:

- export outside the Republic of Kazakhstan – KZT 6,398.92 per ton per 1,000 km (excluding VAT) effective since April 1, 2018, having increased from KZT 5,817.2 in Q1 2018 per ton per 1,000 km (excluding VAT);
- transit across the Republic of Kazakhstan through the Kazakhstan sector of the trunk pipeline Tuimazy-Omsk-Novosibirsk-2 – KZT 4,292.4 per ton per 1,000 km (excluding VAT) effective since April 1, 2018, having increased from KZT 1,727.1 in Q1 2018 per ton per 1,000 km (excluding VAT).

In December 2018, the Minister of Energy of the Republic of Kazakhstan approved (Order No. 545) the tariff for transporting Russian oil for 2019–2023 in the amount of 10 million tons annually through the territory of the Republic of Kazakhstan to the People’s Republic of China along the transportation route: border of the Russian Federation – border of the Republic of Kazakhstan (Priirtyshsk) – Atasu (Republic of Kazakhstan) – Alashankou (People’s Republic of China), in the amount of USD 15 per ton (excluding VAT), including:

- section border of the Russian Federation – border of the Republic of Kazakhstan (Priirtyshsk) – Atasu (Republic of Kazakhstan), including oil transshipment at the main pump station Atasu – USD 4.23 per ton (excluding VAT), having increased from USD 3.11 per ton (excluding VAT) in 2018;
- section Atasu (Republic of Kazakhstan) – Alashankou (People’s Republic of China) – USD 10.77 per ton (excluding VAT), having increased from USD 8.25 per ton (excluding VAT) in 2018.

Cap tariffs for the regulated service of oil pumping to the Kazakhstan domestic market through the trunk pipeline system of KazTransOil JSC for 2015–2019 have been approved by the Committee on Regulation of Natural Monopolies and Protection of Competition (Order No. 347-OD dated August 21, 2015), and will come into force on October 1, 2015 as follows:

- in 2015 – KZT 3,225.04 per ton per 1,000 km (excluding VAT);
- in 2016 – KZT 3,547.46 per ton per 1,000 km (excluding VAT);
- in 2017 – KZT 3,902.13 per ton per 1,000 km (excluding VAT);
- in 2018 – KZT 4,292.40 per ton per 1,000 km (excluding VAT);
- in 2019 – KZT 4,721.72 per ton per 1,000 km (excluding VAT).

Temporary compensatory tariff for the regulated service of oil pumping to the Kazakhstan domestic market of KZT 4,716.62 per ton per 1,000 km (excluding VAT) has been approved by Order No. 204-OD of Acting Chairman of the Committee on

Regulation of Natural Monopolies and Protection of Competition of July 31, 2019, and will be in force from September 1, 2019 to August 31, 2020.

Gas transportation

Gas is transported by the trunk gas pipelines and gas distribution systems of KazTransGas Group. Gas is mainly transported by the trunk pipelines of Intergas Central Asia JSC and joint ventures of Asia Gas Pipeline LLP and Beineu-Shymkent Gas Pipeline LLP. Gas transportation by the distribution gas pipelines is provided by KazTransGas Aimak JSC.

International transit and export tariffs for gas transportation

In accordance with the amendments to the Natural Monopolies Act introduced in May 2015, gas transportation for transit and export is no longer subject to governmental regulation. Tariffs for gas transit and export are established on a contractual basis without approval by the Committee on Regulation of Natural Monopolies, Protection of Competition and Consumer Rights of the Ministry of National Economy of the Republic of Kazakhstan.
Effective tariffs for gas transportation for transit and export in 2019 were as follows:

- Intergas Central Asia JSC:
  - gas transit – USD 2 per 1,000 m^3 per 100 km, excluding VAT, for Gazprom PJSC and its subsidiaries; USD 2.9 per 1,000 m^3 per 100 km, excluding VAT, for Uztransgas JSC;
  - gas export – USD 5 per 1,000 m^3 per 100 km, excluding VAT, for Tengizchevroil LLP, KazTransGas JSC;
  - gas export – USD 2 per 1,000 m^3 per 100 km, excluding VAT, for KazRosGas LLP;
- Asia Gas Pipeline LLP – gas transit and export, USD 3.58 per 1,000 m^3 per 100 km, excluding VAT;
- Beineu-Shymkent Gas Pipeline LLP – a single tariff for gas transportation in the domestic market, gas transit and export: KZT 18,071 per 1,000 m^3 (excluding VAT); from May 1, 2019: KZT 16,574 per 1,000 m^3 (excluding VAT).

Tariffs for domestic gas transportation by trunk and distribution gas pipelines

Tariffs for gas transportation in the domestic market are subject to regulation by the Committee on Regulation of Natural Monopolies and Protection of Competition and Consumer Rights, as prescribed by law.

Tariffs for marketable gas transportation by the trunk pipelines to consumers of the Republic of Kazakhstan have been approved as follows:

- Intergas Central Asia JSC from January 1, 2017 – KZT 2,212.7 per 1,000 m^3 (excluding VAT);
- Asia Gas Pipeline LLP from March 1, 2016 – KZT 3,494.4 per 1,000 m^3 (excluding VAT). A cap tariff of KZT 555.5 per 1,000 m^3 per 100 km for 2020–2024 has been approved by Order No. 159-OD of the Almaty Department of the Committee on Regulation of Natural Monopolies, Protection of Competition and Consumer Rights of August 23, 2019, and will become effective on January 1, 2020;
- Beineu-Shymkent Gas Pipeline LLP from 1 March 2016 – KZT 18,071 per 1,000 m^3 (excluding VAT); from May 1, 2019 – KZT 16,574 per 1,000 m^3 (excluding VAT). A cap tariff of KZT 1,200.15 per 1,000 m^3 per 100 km for 2020–2024 has been approved by Order No. 4-OD of the Almaty Department of the Committee on Regulation of Natural Monopolies, Protection of Competition and Consumer Rights of September 27, 2019, and will become effective on January 1, 2020.

Tariffs for marketable gas transportation by the trunk pipelines of KazTransGas Aimak JSC to consumers of the Republic of Kazakhstan as of October 1, 2019 have been approved as follows:

No.	Region	Transportation tariff, KZT per 1,000 m^3, excl. VAT
1.	South Kazakhstan region	7,036.87
2.	Zhambyl region	6,443.38
3.	Kyzylorda region	9,083.51
4.	Kostanay region	4,922.51
5.	West Kazakhstan region	2,615.37
6.	Atyrau region	1,769.16
7.	Aktobe region	4,890.80
8.	Mangistau region	2,392.59
9.	East Kazakhstan region	1,546.75
10.	Almaty city and Almaty region	4,380.06

2.4. Tariffs for refining

Starting from 2016, three major local oil refineries (Atyrau Refinery, Pavlodar Refinery, and PetroKazakhstan Oil Products JSC) began utilizing a new refining model, under which the refineries provide only oil refining services at established rates, and do not buy oil for refining and do not sell refined products. These obligations are now owed by oil suppliers, who sell finished refined products independently. Thanks to the vertically integrated structure of the KMG Group and its new refining business model, each business segment is now able to focus on its specific area of expertise, which ultimately increases the operational efficiency of the entire KMG Group. In the light of KMG's transformation and its transition from a strategic manager of its assets to an operational manager, the refining business model helps refineries focus on the production aspects only, which results in optimized refining operations and reduced costs.

In accordance with Act “Amendments to Certain Entrepreneurship Legislative Acts of the Republic of Kazakhstan” No. 376-V dated October 29, 2015, governmental regulation of refining fees was cancelled on January 1, 2017.

Weighted average tariffs effective in 2019 and 2018 are listed below:

Refinery	Unit of measurement	12 months of 2019	12 months of 2018	Δ, %
Atyrau Refinery	KZT/ton	37,436	33,810	10.7
Pavlodar Refinery	KZT/ton	19,805	17,250	14.8
PKOP	KZT/ton	24,485	19,579	25.1
CASPI BITUM	KZT/ton	18,010	18,008	0.0

2.5. Taxation

The table below shows fixed tax rates applicable by the Group in the relevant periods:

Tax	31.12.2019	31.12.2018	Tax base
Corporate income tax (CIT)	20%	20%	Taxable income
Value added tax (VAT)	12%	12%	Sale of goods, works, services
Property tax	1.50%	1.50%	Average annual book value of taxable items determined by the accounting data
Land tax	Variable value, the rate depends on the purpose and quality of the land plot	Variable value, the rate depends on the purpose and quality of the land plot	Land plot area
Environmental emissions fee	Variable value, the rate depends on the type of emissions	Variable value, the rate depends on the type of emissions	Actual volume of emissions within and/or exceeding the limits of environmental emissions
Export rent tax	0–32% On a scale linked to the world oil price	0–32%	Crude oil and oil products export volume
Mineral extraction tax (MET)	0–18%	0–18%	Value of produced crude oil, gas condensate and natural gas
Excess profits tax (EPT)	0–60% at a sliding scale of rates	0–60% at a sliding scale of rates	Portion of the subsurface user’s net income defined as a difference between the total annual income and deductions (in the amount of actual CAPEX for fixed assets) and CIT exceeding an amount of 25% of these deductions. EPT is calculated for each individual subsurface use contract.
Crude oil and gas condensate excise	0 KZT/ton	0 KZT/ton	Amount of crude oil and gas condensate produced and sold

<table>
<tr><th colspan="6">Excise rates for 1 ton (KZT) and duties</th></tr>
<tr><th></th><th colspan="2">31.12.2019</th><th colspan="2">31.12.2018</th><th>Tax base</th></tr>
<tr><td>Oil products excise tax</td><td>Gasoline (except jet fuel) (EAEU FEACN code 2710 12 411 0-2710 12590 0)</td><td>Diesel fuel (EAEU FEACN code 2710 19310 0-2710 19 480 0)</td><td>Gasoline (except jet fuel) (EAEU FEACN code 2710 12 411 0-2710 12590 0)</td><td>Diesel fuel (EAEU FEACN code 2710 19310 0-2710 19 480 0)</td><td rowspan="2">Produced, sold, and imported oil products</td></tr>
<tr><td>Wholesaling of own gasoline (except jet fuel) and diesel fuel by producers (July – November)</td><td>10,500</td><td>9,300</td><td>10,500</td><td>9,300</td></tr>
</table>

Tax	31.12.2019		31.12.2018		Tax base
Wholesaling of gasoline (except jet fuel) and diesel fuel by individuals and entities	0	0	0	0	
Retailing of own gasoline (except jet fuel) and diesel fuel by producers, utilization for own operating needs (July – November)	11,000	9,360	11,000	9,360	
Retailing of gasoline (except jet fuel) and diesel fuel by individuals and entities, utilization for own operating needs	500	60	500	60	
Imports	10,500	540	10,500	540	
Transfer of excisable goods specified in Article 462 (5) of the Tax Code, which are the product of toll refining (July – November)	10,500	9,300	10,500	9,300	
Crude oil export duty	On a scale linked to the world oil price		On a scale linked to the world oil price		Export volume

Mineral extraction tax, rental export tax and export customs duty rates for oil and oil products are tied to the world oil price and change accordingly. If crude oil and gas condensate is sold and/or transferred within the domestic market of the Republic of Kazakhstan, including sale/transfer in kind towards payment of the mineral extraction tax, rental export tax, royalties and share of the Republic of Kazakhstan under product sharing to the beneficiary on behalf of the State, or if used for the own operating needs, a 0.5 decreasing factor shall be applied to the established rates.

Mineral extraction tax rate for sour gas is 10%. When sour gas is sold in the domestic market, the mineral extraction tax is paid at the rates depending on the annual production (from 0.5% to 1.5%).

In February 2016, the Ministry of National Economy of the Republic of Kazakhstan introduced a progressive scale of export customs duties for crude oil. According to the new scheme, export duties are calculated based on the average market price of crude oil established on the world Brent and Urals markets. Based on the oil prices scale, given the world prices below USD 25 per barrel, the export duty rate is 0, and if the world oil price is above USD 25 per barrel, the export duty rate is to be determined in accordance with the scale. Rental export tax is calculated based on the rate scale, given the world oil price is above USD 40 per barrel.

3. GROUP'S OPERATING PERFORMANCE

Operating results	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
Oil and condensate production, taking into account share in joint ventures (thousand tons)	23,618	23,606	12	0.1
Gas production, including share in joint ventures (million m^3)	8,455	8,137	318	3.9
Refining of hydrocarbon crude at own refineries and refineries of joint ventures (thousand tons)	20,588	19,715	874	4.4
Oil transportation by trunk pipeline (thousand tons)	67,337	67,959	-622	-0.9
Crude oil circulation (million tons * km)	62,800	62,832	-32	-0.1
Oil transportation by sea (thousand tons)	10,729	7,077	3,653	51.6
Gas transportation by trunk gas pipelines (million m^3)	103,494	111,567	-8,073	-7.2
Gas transportation operations (billion m^3 * km)	58,462	56,699	1,763	3.1

3.1. Production of crude oil and condensate

Consolidated oil and condensate production (thousand tons)	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
	23,618	**23,606**	**12**	**0.1**
OzenMunayGas JSC (100%) + Kazakh Gas Processing Plant (100%)	5,586	5,488	98	1.8
Embamunaygas JSC (100%)	2,900	2,895	4	0.2
Kazakhturkmunay LLP (100%)	409	376	34	9.0
KazTransGas JSC (Amangeldy Gas – 100%)	17	19	-2	-10.9
Kazgermunai JV LLP (50%)	1,114	1,354	-240	-17.7
MangistauMunaiGaz LLP (50%)	3,204	3,187	18	0.6
Karazhanbasmunai JSC (50%)	1,082	1,081	1	0.1
Kazakhoil-Aktobe LLP (50%)	320	295	25	8.4
Petrokazakhstan, Inc (33%)	844	998	-155	-15.5
Tengizchevroil LLP (20%)	5,958	5,724	234	4.1
Karachaganak Petroleum Operating b.v. (10%)	1,015	1,095	-80	-7.3
KMG Kashagan B.V. (50%)	1,169	1,094	75	6.9

The consolidated amount of oil and condensate production over the reporting period amounted to 23,618 thousand tons, which is 12,000 tons more than the amount of the past year.
The main reasons for the growing amounts of oil and condensate production:

- at TCO – stable operation and enhanced reliability of IPL/SGI/SGP (Integrated process line/Sour Gas Injection/Second Generation Plant) plants; reduction of the IPL turnaround period by two days, and cancellation of 10 days' turnaround at SGI in the reporting period;
- at OMG – geological and technical activities, and commissioning of 37 new wells in the reporting period;
- at Kashagan – conversion of the production well to the injection one during the turnaround in April – May 2019, and a respective increase in the injection volume along with the increase of the utilization factor.

Furthermore, certain companies showed production decline due to following reasons:

- natural decrease in the production level at the fields of Petrokazakhstan, Inc. and Kazgermunai JV LLP;
- preventive maintenance of the production facilities of Karachaganak Petroleum Operating b.v. from September 16, to October 10.

Gas production

Consolidated gas (associated and natural) production, million m³	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
	8,455	**8,137**	**318**	**3.9**
OzenMunayGas JSC (100%) + Kazakh Gas Processing Plant (100%)	709	630	79	12.5
Embamunaygas JSC (100%)	260	221	39	17.7
Kazakhturkmunay LLP (100%)	143	161	-18	-11.0
KazTransGas JSC (Amangeldy Gas – 100%)	350	349	1	0.3
Kazgermunai JV LLP (50%)	224	262	-38	-14.4
MangistauMunaiGaz LLP (50%)	394	393	1	0.2
Karazhanbasmunai JSC (50%)	27	22	5	20.6
Kazakhoil-Aktobe LLP (50%)	348	249	99	39.9
Petrokazakhstan, Inc (33%)	181	195	-15	-7.6
Tengizchevroil LLP (20%)	3,258	3,125	133	4.2
Karachaganak Petroleum Operating b.v. (10%)	1,861	1,891	-30	-1.6
KMG Kashagan B.V. (50%)	700	637	63	9.8

The consolidated amount of gas production over the reporting period amounted to 8,454 thousand tons, which is 318,000 tons more than the amount of the past year.

The main reasons of such growth are:

- increased oil production volumes at OMG and EMG;
- commissioning of an integrated gas treatment unit-40 at KOA;
- increased oil production volumes due to the growth in the average daily capacity of the TCO plants (actual for 2019 – 81,620 tons/day vs. actual for 2018 – 78,416 tons/day); reduction of the IPL turnaround period by two days, and cancellation of 10 days' turnaround at SGI in the reporting period.

At the same time, gas production by KTM decreased because of the downtime of wells Laktybai-34 and SE Saztobe-46 due to accident response activities and a decreased flow rate of gas condensate well E Saztobe-3; for KGM and PKI, due to natural depletion of reserves; and for Karachaganak, due to preventive maintenance of production facilities.

3.2. Oil transportation by trunk pipeline

The main export pipeline routes for Kazakh oil are:

- Atyrau-Samara pipeline (KazTransOil JSC – 100%);
- Atasu-Alashankou pipeline (KazTransOil JSC – 50%);
- Caspian Pipeline Consortium pipeline (KazMunayGas JSC NC – 20.75%).

KazTransOil JSC provides the services of oil transportation to the domestic market, for exports, as well as transit operations.

Consolidated oil transportation by trunk pipelines by companies (thousand tons)	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
	67,337	**67,959**	**-622**	**-0.9**
KazTransOil JSC	44,463	45,308	-845	-1.9
MunaiTas North-West Pipeline Company JSC (51%)	1,648	1,978	-330	-16.7
Kazakhstan-China Pipeline LLP (50%)	8,100	7,998	102	1.3
Caspian Pipeline Consortium JSC (20.75%)	13,126	12,675	451	3.6
Consolidated crude oil cargo turnover (million tons * km)	**62,800**	**62,832**	**-32**	**-0.1**
KazTransOil JSC	37,657	38,040	-383	-1.0
MunaiTas North-West Pipeline Company JSC (51%)	628	776	-148	-19.1
Kazakhstan-China Pipeline LLP (50%)	7,295	7,304	-9	-0.1
Caspian Pipeline Consortium JSC (20.75%)	17,221	16,713	508	3.0

Consolidated oil transportation by trunk pipelines over the reporting period amounted to 67,337 thousand tons, which is 622,000 tons less than for the same period of the past year.

A decrease in oil transportation by the pipelines of KazTransOil JSC is mainly due to a decrease in oil delivery to the oil pipeline system by shippers in Kyzylorda region. Besides, the volumes from the Kenkiyak-Atyrau oil pipeline in Aktobe region (NWPC Munaitas LLP) to the Kenkiyak-Kumkol oil pipeline (Kazakh-Chinese Pipeline LLP) have been redistributed according to the schedules of the Ministry of Energy of the Republic of Kazakhstan.

3.3. Oil transportation by sea

The main sea transportation routes are the following:
- the waters of the Caspian Sea;
- the waters of the Black and Mediterranean Seas.

Consolidated sea oil transportation with the breakdown by directions (thousand tons)	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
	10,729	**7,077**	**3,653**	**51.6**
Aktau-Makhachkala	505	1,875	-1,369	-73.0
Black Sea	3,677	1,861	1,816	97.6
Mediterranean Sea	6,509	2,478	4,031	162.7
Turkmenbashi/Baku, Makhachkala	38	0	38	-
Makhachkala-Baku	0	863	-863	-100.0

Consolidated oil transportation by sea over the reporting period amounted to 10,729 thousand tons, which is 3,653 thousand tons more than for the same period of the past year.

The main reasons of growth are additional transportation volumes and increased number of sails in the Black and Mediterranean Seas in the reporting period. At the same time, the volume in the Aktau-Makhachkala direction declined given the additional volumes from shippers during the same period of the past year. Further, oil transportation in the direction of Makhachkala-Baku has been suspended from August 2018 because of the bareboat chartering of five Caspian tankers.

3.4. Gas transportation

Gas is transported in the following directions: international gas transit, gas transportation for exports, and gas transportation to domestic consumers.

Consolidated gas transportation (million m^3)	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
	92,229*	**102,633***	**-10,404**	**-10.1**
International transit	59,370	69,173	-9,804	-14.2
Gas transportation for export	19,069	18,873	196	1.0
Gas transportation to domestic consumers	13,790	14,587	-796	-5.5
Consolidated gas transportation (million m^3)	**103,494**	**111,567**	**-8,073**	**-7.2**
Intergas Central Asia JSC	72,961	80,135	-7,173	-9.0
KazTransGas-Aimak JSC	2,554	2,622	-68	-2.6
Asia Gas Pipeline LLP (50%)	22,935	24,635	-1,699	-6.9
Beineu-Shymkent Gas Pipeline LLP (50%)	5,044	4,176	868	20.8
Gas commodity/transportation operations (billion m^3 * km)	58,462	56,699	1,763	3

* These volumes exclude double counting.

Total gas transportation declined by 10,404 million m^3 over the reporting period due to the following:
- Gazprom redirected its gas from the Soyuz-Orenburg-Novopskov trunk gas pipeline to the northern regions of the Russian Federation;
- transit of Uzbek gas by the Central Asia-Centre trunk gas pipeline reduced;
- short supply of Turkmenian gas to the PRC;
- gas transportation to the domestic market reduced because of low gas consumption.

3.5. Hydrocarbon crude refining

- Pavlodar Oil Chemistry Refinery (wholly owned by KazMunayGas JSC NC): POCR can currently refine 6 million tons of crude oil annually. The oil conversion ratio was 86.36% in the reporting period.
- Atyrau Refinery (99.53% owned by KMG): its designed refining capacity is 5.5 million tons annually; the oil conversion ratio was 75.03% in the reporting period.
- Shymkent Refinery (Petro Kazakhstan Oil Products, 49.72% owned by KMG): its designed capacity is 6 million tons annually; the oil conversion ratio was 84.79% in the reporting period.
- CaspiBitum (50% owned by KMG): is a plant to produce road bitumen from the heavy Karazhanbas oil. Its designed refining capacity is 1.0 million tons annually.
- KMG International N.V. (Rompetrol Rafinare) includes two refineries, Petromidia and Vega, and Petrochemicals petrochemical complex (PCC):
    - Petromidia Refinery (wholly owned by Rompetrol Rafinare S.A.), designed capacity is 5.0 million tons of oil annually and 1 million tons of other hydrocarbon crude annually. The PCC is integrated with the Petromidia Refinery.
    - Vega Refinery (wholly owned by Rompetrol Rafinare S.A.), designed capacity – 0.5 million tons annually. The Vega Refinery is the only enterprise in Romania which specializes in the processing of alternative raw materials (naphtha, heavy hydrocarbon fractions, fuel oil).

Consolidated hydrocarbon crude refining, including the operating share (thousand tons)	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
	20,588	**19,715**	**874**	**4.4**
Atyrau Refinery LLP	5,388	5,268	120	2.3
Pavlodar Oil Chemistry Refinery LLP	5,290	5,340	-50	-0.9
PetroKazakhstan Oil Products LLP (50%)	2,701	2,366	335	14.1
CASPI BITUM (50%)	443	409	33	8.1
KMG International N.V. (Rompetrol Rafinare)	6,767	6,331	436	6.9

The main reasons of changes in the processing volumes:

- PKOP – increase in the processing capacity of the refinery following its upgrade;
- AR, POCR – regulated by the Ministry of Energy of the Republic of Kazakhstan;
- KMG International N.V. (Rompetrol Rafinare) – improved crude diet that made it possible to reduce quality fluctuations and achieve the design capacity at the crude oil refining unit.

3.6. Sales of crude oil, oil products and gas

Sales of oil produced by KMG

thousand tons	For 12 months ended on December 31, 2019			For 12 months ended on December 31, 2018		
	Exports	Domestic market	Total	Exports	Domestic market	Total
Operating assets*	8,472	7,120	15,592	8,773	6,980	15,752
Megaprojects**	7,907	10	7,917	7,971	12	7,983
Total	**16,379**	**7,130**	**23,509**	**16,744**	**6,991**	**23,735**

* OzenMunayGas, EmbaMunayGas, Mangistaumunaigas, Karazhanbasmunay, Kazgermunay, PetroKazakhstan Inc., Kazakhoil Aktobe, Kazakhturkmunay.
** Tengizchevroil, Karachaganak Petroleum Operating b.v., KMG Kashagan B.V.

Oil sales in 2019 decreased by 236,000 tons in comparison with 2018.
The decline is mostly observed at KGM and PKI due to natural depletion of reserves at the Kumkol fields, as well as at Karachaganak Petroleum Operating b.v. due to scheduled turnaround from September 16 to October 10, 2019. The decline was partially balanced by the growth reported by TCO and Kashagan due to the growth of oil production volumes.

Sale of oil products

In the reporting period, oil products were sold by KMG, KMGO, KMG Aero, POCR and KMG International N.V.

thousand tons	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
Wholesale	**8,317**	**10,037**	**-1,720**	**-17**
Light oil products	5,556	4,328	1,228	28.4
Dark oil products	1,034	3,369	-2,335	-69
Petrochemicals	194	117	77	66.2
Other	1,534	2,224	-691	-31
Retail	**1,579**	**2,509**	**-931**	**-37**
Light oil products	1,433	2,349	-916	-39.0
Other	145	160	-15	-10
Total refined product sales	**9,895**	**12,546**	**-2,651**	**-21**

KMG's sales of refined products

thousand tons	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
Sale of domestic refined products	**3,343**	**4,201**	**-858**	**-20**
Wholesale*	3,136	2,868	268	9.3
Retail sale	207	1,333	-1,126	-84
KMGI's sales of refined products	**6,552**	**8,345**	**-1,793**	**-21.5**
Wholesale	5,181	7,169	-1,988	-28
Retail sale	1,371	1,176	195	16.6
Total	**9,895**	**12,546**	**-2,651**	**-21**

* Except wholesale distribution of oil products for the retail network of KMG fuel stations.

Refined product sales in the reporting period compared to the same period of 2018 reduced by 2,651 thousand tons, mainly due to reduced trading operations.

The decrease in sales of petroleum products madden in Kazakhstan was due to the implementation of the retail network of petroleum products in 2019.

Sales of KMG Int. refined products reduced due to a decline in demand for refined products on the Asian market, which was partially counter-balanced by the increased volumes of sales to third parties (Petromidia) and increased retail sales.

Gas sales

Natural gas is sold by KazTransGas JSC mainly. The company's functions include natural gas bulk procurements for the domestic market, transportation of gas throughout regional gas distribution networks, operation of gas distribution facilities and networks, and sale of natural gas in the domestic market.

KTG gas sales (million m^3)	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
Gas exports	8,806	8,917	-111	-1
Gas sales to the domestic market	14,028	13,999	29	0
Total gas sales	22,834	22,915	-81	0

Gas exports reduced because of the reduced sales to Russia, Kyrgyzstan and Uzbekistan following the agreements with other suppliers.
Gas sales to the domestic market decreased due to a decreased demand in the reporting period in all regions of Kazakhstan.

4. GROUP FINANCIAL PERFORMANCE

Statement of Profit and Loss

Profit and loss (KZT million)	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
Revenue and other income	**7,970,132**	**7,888,711**	**81,421**	**1%**
Revenue from products sold and services rendered	6,858,856	6,988,964	-130,108	-2%
Share in profit of joint ventures and associates, net	827,979	697,326	130,653	19%
Financial income	240,880	161,027	79,853	50%
Gain from subsidiary disposal	17,481	18,359	-878	-5%
Other operating income	24,936	23,035	1,901	8%
Expenditures and costs	**-6,585,501**	**-6,919,393**	**333,892**	**-5%**
Cost of crude oil, oil products, and other materials purchased	-3,913,744	-4,312,958	399,214	-9%
Production expenses	-721,693	-604,475	-117,218	19%
Taxes other than income tax	-454,295	-477,732	23,437	-5%
Depreciation, depletion and amortization	-337,424	-285,186	-52,238	18%
Transportation and selling expenses	-420,402	-370,777	-49,625	13%
General and administrative expenses	-213,967	-213,485	-482	0%
Impairment of PP&E and intangible assets	-207,819	-165,522	-42,297	26%
Other operating loss	-7,203	-23,283	16,080	-69%
Financial costs	-317,433	-427,655	110,222	-26%
Foreign exchange (loss)/gain, net	8,479	-38,320	46,799	-122%
Profit before income tax	**1,384,631**	**969,318**	**415,313**	**43%**
Corporate income tax expenses	-226,180	-279,260	53,080	-19%
Profit for the year from continuing operations	**1,158,451**	**690,058**	**468,393**	**68%**
Profit/(loss) after tax from discontinued operations	6	3,453	-3,447	-100%
Net profit/(loss) for the year	**1,158,457**	**693,511**	**464,946**	**67%**
Net other comprehensive income/(loss) for the year subject to subsequent reclassification as income or loss	**-33,312**	**478,720**	**-512,032**	**-107%**
Foreign exchange difference from translation of foreign business units statements	-32,072	479,196	-511,268	-107%
Tax effect	-1,240	0	-1,240	-
Reclassified foreign exchange difference of the disposal group	0	-476	476	-100%
Net other comprehensive loss for the year not subject to subsequent reclassification as income or loss	**-4,310**	**-3,904**	**-406**	**10%**
Revaluation of actuarial loss under the provided Group benefit plans	-5,688	-3,658	-2,030	55%
Revaluation of actuarial loss under the provided JV benefit plans	199	-160	359	-224%
Tax effect of comprehensive loss components	1,179	-86	1,265	-1,471%
Other comprehensive income/(loss) for the year	**-37,622**	**474,816**	**-512,438**	**-108%**
Total comprehensive income for the year, net of corporate income tax	**1,120,835**	**1,168,327**	**-47,492**	**-4%**

4.1. Revenue

Consolidated revenue from products and services

KZT million	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
Oil product sales	1,941,237	2,050,718	-109,482	-5.3
Crude oil sales (including crude oil quality bank)	3,091,720	3,321,165	-229,445	-6.9
Marketable gas sales	874,422	769,458	104,964	13.6
Oil transportation	166,733	163,495	3,238	2.0

Gas transportation	209,623	140,429	69,195	49.3
Oil and oil product refining	195,896	175,618	20,278	11.5
Other	379,225	368,081	11,145	3.0
Total revenue from products and services	**6,858,856**	**6,988,964**	**-130,109**	**-1.9**

Consolidated sales of products and services

Product and service sale volumes	Unit of measurement	For 12 months ended 31 December 2019	For 12 months ended 31 December 2018	Δ, (+/-)	Δ, %
Oil product sales	thousand tons	9,895	11,239	-1,344	-12.0
Crude oil sales	thousand tons	16,941	20,956	-4,016	-19.2
Marketable gas sales	million m^3	22,834	22,915	-81	-0.4
Oil transportation by trunk pipeline	thousand tons * km	23,669	31,188	-7,518	-24.1
Gas transportation	million m^3 * km	51,887	59,255	-7,367	-12.4
Oil refining	thousand tons	7,176	7,316	-141	-1.9

Average established estimated prices

Average established estimated prices	Unit of measurement	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
Oil product sales	KZT per ton	196,177	182,462	13,715	7.5
Crude oil sales	KZT per ton	182,504	158,481	24,024	15.2
Marketable gas sales	KZT per 1,000 m^3	38,295	33,577	4,717	14.0
Oil transportation by trunk pipeline	KZT per ton	6,779	4,922	1,857	37.7
Gas transportation	KZT per 1,000 m^3	4,040	2,370	1,670	70.5
Oil refining	KZT per ton	27,301	24,003	3,297	13.7

Sale revenue in the reporting period amounted to KZT 6,858.9 billion and decreased by 1.9% compared to the previous year. The revenue structure shows growth in the marketable gas sales, oil and gas transportation, oil and oil product processing, and other services.

The main reasons for changes in income by types of activities:

- crude oil sales – a 6.9% decrease is because of decline in trading operations and the weighted average global oil prices;
- refined product sales – a 5.3% decrease is due to reduced amount of refined product sales caused by decreased refined oil products demand in the Asian market;
- marketable gas sales – a 13.6% growth is due to the growth of an average selling price for export gas (from USD 179 per 1,000 m^3 in 2018 to USD 200 per 1,000 m^3 in the reporting period) and growth of KZT-to-USD exchange rate;
- oil transportation – a 2% growth is due to the growth of transportation tariffs (since April 1, 2018, export tariff grew from KZT 5,817.2 to KZT 6,398.9 per ton per 1,000 km (excl. VAT), and tariffs for transit through Kazakhstan along the Kazakh section of the Tuimazy-Omsk-Novosibirsk-2 trunk pipeline to the domestic market grew by 10%);
- gas transportation – a 49.3% growth is caused by the increased international transit and export transportation revenue as the KZT-to-USD exchange rate increased;
- oil refining – an 11.5% growth is caused by the increased oil refining tariff: POCR – from KZT 17,249.54 per ton in 2018 to KZT 19,805.00 per ton in the reporting period; AR – from KZT 31,473 per ton in 2018 to KZT 37,436 per ton in the reporting period.

4.2. Expenditure

Cost of crude oil, oil products, and other materials procured

KZT million	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
Crude oil procured for resale	2,448,412	2,607,706	-159,294	-6%
Cost of oil for refining	638,293	698,473	-60,180	-9%
Gas procured for resale	493,280	356,932	136,348	38%
Stocks and materials	217,138	182,067	35,071	19%
Oil products procured for resale	116,621	467,780	-351,159	-75%
Total	**3,913,744**	**4,312,958**	**-399,214**	**-9%**

The consolidated net cost of crude oil, oil products, and other materials procured in 2019 declined by 9% or by KZT 399.2 billion as compared with 2018.
Reduced costs for crude oil and oil products procured for resale is associated with the reduced oil and oil products trading operations with KMG Int. in the reporting period as the consumer demand in the Asian market fell down because of non-renewal of the contract with Venezuela due to sanctions, and with a lower price for Brent oil in the reporting period (actual for 2019 – USD 64.21 per barrel, actual for 2018 – USD 71.31 per barrel), which was partially counter-balanced by the change of the KZT-to-USD exchange rate (actual for 2019 – KZT 382.87 for USD 1, actual for 2018 – KZT 345.04 for USD 1).
Reduced expenses on the cost of oil for refining was caused by a lower price for Brent oil in the reporting period. A decrease in oil procured for refining is due to changes in oil “diets” (KMG Int.) and a decline in production of petrochemicals. This decline was partially counter-balanced by the change in the KZT-to-USD exchange rate.
Increased expenses on gas procured for resale was caused by an increased weighted average gas procurement price, which was partially counter-balanced by the decline in the procured gas volumes.
Increased expenses on stocks and materials, mostly with respect to refineries, was caused by increased oil refining volumes and changes in the oil products bundle after refineries upgrade. Expenses for reagents, auxiliary materials, alternative raw materials, and other materials procurement increased. Production companies have their expenses grown because of increased chemical reagent procurements.

Production expenses

KZT million	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
Payroll expenses	338,120	291,693	46,427	16%
Overhaul and maintenance services	129,450	98,424	31,026	32%
Electricity	88,910	71,914	16,996	24%
Transportation costs	30,456	21,988	8,468	39%
Lease expenses	52,091	10,085	42,006	417%
Other	82,666	110,371	-27,705	-25%
Total	**721,693**	**604,475**	**117,218**	**19%**

Consolidated production expenses grew by 19% or by KZT 117.2 billion over the reporting period as compared with 2018.
Payroll expenses grew (+16%) mostly due to the distribution of KMG’s retained earnings from oil product sales in 2018 (+ KZT 25 billion), and because of investment projects implementation (hereinafter, the largest investment projects include: reactivation of the Paramax Plant – aromatic hydrocarbons production plant, commissioning of an Advanced Oil Refining Plant (AORP), commissioning of four compressor stations at the Beineu-Bozoy-Shymkent trunk gas pipeline) and salary indexation.
Turnaround and maintenance expenses grew (+32%) mostly due to the distribution of KMG’s retained earnings from sale of oil products in 2018 (+ KZT 11 billion), and because of the investment projects implementation, including maintenance of newly commissioned wells, buildings and structures. Besides, the refining complex and gas treatment units 1 and 2 had scheduled turnarounds in the reporting period (KMG-Karachaganak).
Electricity expenses grew (+24%) mostly due to the tariff growth in Romania (KMG Int.), including due to the change of the KZT-to-USD exchange rate, and following the investment projects implementation by Atyrau Refinery.
Transport expenses grew (+39%) because of the transportation departments (technical inspection, instrumentation and control system, quality control) transit to outsourcing, and increased number of serviced wells (EMG, OMS).
Lease expenses grew (+417%) mostly because of the exceeded production plan for the Caspian Sea and Open Seas (KMTF) in the reporting period.

Other expenses reduced (-25%) mostly due to the distribution of KMG's retained earnings from sale of oil products in 2018 (– KZT 37.7 billion).

Taxes other than income tax

KZT million	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
Rental tax on crude oil exports	133,144	145,523	-12,379	**-9%**
Export customs duty	131,326	131,128	198	**0%**
Mineral extraction tax	100,300	115,968	-15,668	**-14%**
Other taxes	89,525	85,113	4,412	**5%**
Total	**454,295**	**477,732**	**-23,437**	**-5%**

Consolidated tax expenses (other than corporate income tax) in 2019 reduced by 5% or by KZT 23.4 billion as compared with the actual figures of 2018.
The export customs duty expenses grew by KZT 0.2 billion due to the change in the KZT-to-USD exchange rate, which was counter-balanced by fallen global Brent oil price and oil export volume by 42,000 tons.
MET expenses reduced by KZT 15.7 billion mostly due to the entitled reduced rate for OMG hydrocarbon crude fields classified as low-profitable, high-viscosity and water-flooded according to Resolution No. 449 of the RK Government dated June 27, 2019.
Expenses on other taxes except MET grew due to increased excise tax expenses as a result of a bigger production and sale of excisable light oil products, and property tax expenses grew as a result of investment project implementation.

Transportation and selling expenses

KZT million	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
Transportation	374,686	317,402	57,284	**18%**
Payroll expenses	12,542	16,180	-3,638	**-22%**
Other	33,174	37,195	-4,021	**-11%**
Total	**420,402**	**370,777**	**49,625**	**13%**

Consolidated transportation and selling expenses for the reporting period grew by 13% or KZT 49.6 billion, primarily, in response to higher transportation costs. This growth is due to a higher volume of gas transportation for exports to China (+1.607 m^3) and due to changes in the exchange rates (2019 actual – KZT 382.87 for USD 1; 2018 actual – KZT 345.04 for USD 1).
The increase was partially counter-balanced by the reduced payroll and other expenses, mostly because retail fuel stations network (KMG-Onimdery) was sold.

General and administrative expenses

KZT million	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
Payroll expenses	78,055	73,632	4,423	6%
Provision for a lawsuit with the Consortium	34,132	0	34,132	-
Consulting services	25,448	22,435	3,013	13%
Impairment/(reversal) of VAT refundable	15,703	4,215	11,488	273%
Accrual/(reversal) of the provision for expected credit loss on other current assets	12,246	1,225	11,021	900%
Social payments not included in payroll expenses	8,933	24,095	-15,162	-63%
VAT not taken as an offset	6,910	3,031	3,879	128%
Expenses on lease of PP&E and intangible assets	2,309	5,750	-3,441	-60%
Accrual/(reversal) of the provision for expected credit loss on trade receivables	1,892	-1,489	3,381	-227%
Charity	381	1,699	-1,318	-78%
Reversal/accrual of the long-term advance impairment provision	-11	0	-11	-
Less: reduction to the net realizable value	-80	4,339	-4,419	-102%
Reversal/accrual of the provision for taxes, fines and penalties	-19,755	29,836	-49,591	-166%
Other	47,804	44,717	3,087	7%
Total	**213,967**	**213,485**	**482**	**0%**

General and administrative expenses for the reporting period amounted to KZT 214 billion, which is KZT 482 million more than for the same period of the previous year. The main changes in the cost structure were observed in the following cost items:
reversal/accrual of the provision for taxes, fines and penalties – expenses mostly declined due to the formation in 2018 of provisions for fines and penalties for environmental violations by EMG, pursuant to the RK Code of Administrative Offences, following the audit by Ecology Department (+ KZT 35 billion), and their partial reversal in the reporting period according to the judgements of Atyrau Court and Atyrau Regional Court (– KZT 26 billion).
Provision for a lawsuit with the Consortium – provisions (+ KZT 34 billion) for a lawsuit with the Consortium were made in the reporting period: KMG D&S is engaged in arbitration proceedings with the Consortium of Ersai Caspian Contractor LLP and Caspian Offshore and Marine Construction LLP (hereinafter, the "Consortium" or "Claimant") on the matters arising out of the contract for procurement of work packages on construction of a jack-up self-elevating drilling rig (JUDR) dd. July 5, 2012, with the amount of claim USD 192,114 thousand (equivalent to KZT 73,501 million). These arbitration proceedings are conducted by the London Commercial International Arbitration (LCIA).
Social payments not included in the payroll – reduction of expenses due to the reorganization of ANS Group in 2018 (expenses on the termination of employment agreements under the 5/50 program).
Impairment/(reversal) of VAT refundable – an increase is mostly due to the accrual of value added tax not taken as an offset in the reporting period for KMT, as well as due to impairment of value added tax refundable in the reporting period for EMG.
Accrual/(reversal) of the provision for expected credit loss on other current assets – the expenses grew in the reporting period that had been caused by a provision for the construction-in-progress Palace of Martial Arts, a provision for accounts receivable from UnionField Group Ltd. to KMG CC (payment for a 50% stake in the authorized capital of KMG-Ustyurt LLP, payment due date: March 31, 2020).

4.3. Share in profit of jointly controlled entities and associates

KZT million	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
TengizchevrOil LLP	414,940	439,149	-24,209	-6
Mangistau Investments B.V.	81,991	95,510	-13,520	-14
KazGerMunai LLP	19,456	27,915	-8,459	-30
PetroKazakhstan Inc.	-18,244	14,591	-32,835	-225
KazRosGas LLP	18,091	5,254	12,837	244
Kazakhoil-Aktobe LLP	7,826	9,057	-1,231	-14
Ural Group Limited	-18,895	-18,822	-73	0
Beineu-Shymkent Gas Pipeline	56,194	16,710	39,484	236
Asia Gas Pipeline	168,086	0	168,086	-
Caspian Pipeline Consortium	70,869	57,965	12,904	22
KMG Kashagan B.V.	13,114	34,034	-20,920	-61
Valsera Holding B.V.	-6,107	-7,989	1,882	-24
Teniz Service	6,742	13,897	-7,155	-51
KMG Nabors Drilling Co LLP	4,319	1,625	2,694	166
Other	9,596	8,431	1,164	14
Total	**827,979**	**697,326**	**130,653**	**19**

As of the end of 2019, the share in profit of jointly controlled entities and associates grew by KZT 130.7 billion or by 19% as compared with 2018.

The main causes of such growth are as follows:

- At TCO – increased oil production due to the growth of the average daily output at plants (actual for 2019 – 81,620 tons per day, actual for 2018 – 78,416 tons per day), and due to the change of the KZT-to-USD exchange rate (actual for 2019 – KZT 382.87 for USD 1, actual for 2018 – KZT 345.04 for USD 1);
- At KRG – increased selling price of gas under SWAP supplies since April 2019 (weighted average price in 2018 – USD 62 per 1,000 m³, in 2019 – USD 81 per 1,000 m³), and no expenses for the above-limit sponsorship in 2019,

since the general meeting of members held on July 17, 2015 included the above-limit sponsorship in the period of 2014–2018;

- At BSGP – increased gas transportation for exports by 918 million m^3;
- At AGP – full reversal of the accumulated non-recognized share in the loss and recognition of the AGP indicators in KMG's consolidated financial statements since March 2019;
- At CPC – reduced interest expenses due to repayment of loans and depreciation/amortization expenses;
- At Teniz Service – excess profit received under the project "Cargo Transportation Route" in 2018 (100% income from TCO advances was accrued; only the commissioned part of the facility (80%) was depreciated);
- KMG Nabors Drilling Co LLP – downtime of drilling rigs 708 and 707 and the resulting short income in 2018, as well as a stronger US dollar.

At the same time, the net profit of PetroKazakhstan Inc. and KazGerMunai LLP decreased due to the natural decline in oil production, reduced oil export sales and transfer pricing fines and penalties charged. There was also a decrease at KMG Kashagan B.V. due to deferred corporate income tax, increased operating expenses caused by a scheduled turnaround, increased depreciation caused by the growing USD exchange rate and increased sales expenses due to production growth.

In 2019, KMG received KZT 126.5 billion of dividends from joint ventures and associates, which was KZT 33.6 billion or 21% less than for the same period of the previous year. The main reason for the decline is dividends received from TCO and KazRosGas in 2018.

KZT million	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
Dividends received from JVs and associates, net	126,461	160,061	-33,600	-21

4.4. Corporate income tax expenses

KZT million	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
Current income tax:				
Corporate income tax	146 658	160 010	-13 352	-8
Excess profits tax	11 291	-1 128	12 419	-1101
Withholding tax on dividends received	12 893	25 517	-12 624	-49
Deferred income tax:				
Corporate income tax	-1 999	10 093	-12 092	-120
Excess profits tax	-4 904	-7 850	2 946	-38
Withholding tax on dividends received	62 241	92 617	-30 376	-33
Corporate income tax expenses	226 180	279 260	-53 080	-19

Over 12 months of 2019, the Company's corporate income tax expense has amounted to KZT 226 billion, which is 19% less than in the same period in 2018. CIT decline in 2019 versus 2018 is associated with the drop in global Brent oil price to USD 64.21 per barrel as compared with USD 71.31 per barrel in 2018, gas sales for exports, wholesale price of gas to the domestic market, and is partially offset with the KZT/USD exchange rate growth (KZT 382.87 for USD 1 in 2019, KZT 345.04 for USD 1 in 2018), increased transportation of oil to the domestic market, and growth of oil pumping tariff for the domestic market by 10% from January 1, 2019. Due to the application of new approach for EPT calculation, which provides for the one-off deduction of accumulated expenses from January 1, 2009 through January 1, 2018, when calculating the taxable income for EPT. As compared with the same period, KMG CC observes the decline of the withholding tax on the TCO's dividends due to their decline, and the amount of deferred withholding tax was changed at the consolidation level due to the effect of temporary differences.

4.5. Liquidity and capital expenditures

Debt obligations

The Group's total debt on credits and loans raised amounted to KZT 3,837 billion as at the end of the reporting period as compared with KZT 4,153.2 billion as of the beginning of the reporting period. Total debt as of December 31, 2019 decreased by 8.2% vs. total debt as of December 31, 2018. Total debt reduced primarily due to the write-off of a loan from the partners in Pearls project for a total amount of KZT 111 billion (USD 290 million), decline of AR's debt in the amount of KZT 62 billion (about USD 163 million), full early redemption of Eurobonds maturing in 2044 in the amount of KZT 11.6 billion (USD 30.1 million), repayment of bonds of the Development Bank of Kazakhstan (DBK) in the amount of KZT 40.5 billion (USD 113 million), and the decline of KMG Int. by KZT 32 billion (about USD 83 million). The decline in

Group's outstanding credits and loans was partially offset by the interest accrued on bonds placed at LSE for KZT 118 billion to be repaid with semi-annual payments, in April and October.

The Group's net debt made up KZT 2,361.0 billion as of December 31, 2019 as compared with KZT 2,175.0 billion as of December 31, 2018. Increased net debt was due to the reduction in cash and cash equivalents caused by faster fulfilment of oil advancing obligations to TCO.

KZT million	As of 31.12.2019	As of 31.12.2018
Non-current portion	3,584,076	3,822,648
Current portion	253,428	330,590
Total debt	**3,837,504**	**4,153,238**
Cash and cash equivalents	1,064,452	1,539,453
Short-term bank deposits and part of long-term bank deposits	412,030	438,756
Net debt (Total debt - Cash - Current financial assets)	**2,361,022**	**2,175,029**

Liquidity

The Group's cash position over the reporting period decreased from KZT 1,978.2 billion (as of December 31, 2018) to KZT 1,476.5 billion (as of December 31, 2019). The main reason why the Group's cash position decreased was the fulfilled obligations under the TCO oil supply advancing deal.

Liquidity and trend outlooks

The Company expects that the forecast consolidated liquidity will not change significantly over 2020, and will remain adequate to cover current expenses and liabilities. At the same time, if oil price falls significantly or decisions are made to implement new investment projects, and/or other significant events occur that have not been foreseen in the Company's current plans, the forecast liquidity might have a decreasing trend.

Capital expenditures

The Group's capital expenditures include investment projects, expenditures to ensure the current level of production and other expenditures (administrative and social). In the reporting period, capital expenditures amounted to KZT 505 billion, which is 20% or KZT 123 billion less than in 2018.

Capital expenditures broken down by key business areas:

KZT million	For 12 months ended on December 31, 2019	For 12 months ended on December 31, 2018	Δ, (+/-)	Δ, %
Oil and gas exploration and production	256,725	180,033	76,692	43%
Oil transportation	44,926	65,106	-20,180	-31%
Gas sale and transportation	91,744	156,897	-65,153	-42%
Crude oil and oil products processing and sales	79,492	203,702	-124,210	-61%
Other	32,421	22,337	10,084	45%
Total	**505,308**	**628,075**	**-122,767**	**-20%**

In 2019, capital expenditures for Oil and Gas Exploration and Production amounted to KZT 256.7 billion, which is KZT 76.7 billion more than in 2018. Capital expenditures grew due to increased expenses under the KMG Karachaganak projects: gas production debottlenecking at the processing complex; upgrading of the oil treatment system of the processing complex; upgrading of compressors of the gas treatment unit-2; gas re-injection compressor-4. In addition, increased capital expenditures of OMG JSC and EMG JSC over the reporting period were caused by extended scope of geological, geophysical, drilling, construction and installation operations related to the arrangement of operating wells and water intake wells with the existing infrastructure.

Capital expenses for Oil Transportation in the reporting period amounted to KZT 44.9 billion, which is KZT 20.2 billion less than the actual expenses of the previous year. The decrease is caused by the implementation of the following projects: Construction of Three MCV Flat Top Barges for TCO Future Growth Project and Construction of Three Tugboats for TCO Future Growth Project, by KMTF in 2018. In addition, a lot of work was done to replace the pipes and modernize a trunking radio connection network at KTO in 2018.

Capital expenses for Gas Sales and Transportation amounted to KZT 91.7 billion over the reporting period, which was KZT 65.1 billion less than the actual figures of 2018. The decline in capital expenditures as compared with the same period of the previous year was caused by early completion of the major scope of works associated with construction of three compressor stations in 2018.

In 2019, capital expenditures for Crude Oil and Oil Products Processing and Sales amounted to KZT 79.4 billion, which is KZT 124.2 billion less than in 2018. The main cause for the decline was that the modernization projects at Atyrau and Pavlodar Refineries were completed as the major startup, adjustment, construction and assembly operations were done in 2018.

Other capital expenditures in the reporting period amounted to KZT 32.4 billion, which was KZT 10.1 billion more than the actual figures of the previous year. Increased expenses were associated with the geotechnical surveys and appraisal drilling in the reporting period of 2018.
Increased expenses in *Other* is mostly associated with the reorganization of KMG EP Group followed by the reclassification of capital expenditures at oil-service companies, within the KMG EP Group, in this area of operation in the reporting period.

GLOSSARY

KMG Int.– KMG International N.V., an integrated Romanian oil and gas company
CASPI BITUM – CASPI BITUM JV LLP
AGP – Asia Gas Pipeline (trunk gas pipeline for transportation of the Central Asian gas to China)
AR – Atyrau Refinery LLP
BBS – Beineu-Bozoy-Shymkent trunk gas pipeline
BSGP – Beineu-Shymkent Gas Pipeline LLP
Group – KazMunayGas JSC NC and legal entities where fifty or more percent of the voting shares (interest) are directly or indirectly owned or beneficially owned by KMG, as well as legal entities whose operations KMG is entitled to control
SA – subsidiaries and affiliates
SGI/SGP – Sour Gas Injection/Second Generation Plant
PRC – People's Republic of China
KMG, the Company – KazMunayGas JSC NC
KMG-Aero – KazMunayGas-Aero LLP
KMG Karachaganak – KMG Karachaganak LLP
KMGO – KMG-Onimderi JSC
KMTF – Kazmotransflot Offshore Oil Company LLP
AHPP – Aromatic Hydrocarbons Production Plant
KPIs – key performance indicators
KOA – KazakhOil Aktobe LLP
KRG – KazRosGas LLP
KTG – KazTransGas JSC
CPC – Caspian Pipeline Consortium (trunk oil pipeline for oil transportation from the Tengiz field to the Novorossiysk port on the Black Sea)
KTM – Kazakhturkmunay LLP
KTO – KazTransOil JSC
KMG CC – KazMunayGas NC JSC Corporate Centre, head office
TGP – trunk gas pipeline
MMG – MangistauMunaiGas LLP
TOP – trunk oil pipeline
RK MoE – Ministry of Energy of the Republic of Kazakhstan
MET – mineral extraction tax
OPEs – oil producing entities
Refineries – oil refineries
EPT – excess profit tax
OMG – OzenMunayGas JSC
SUC – start-up complex
PKOP – PetroKazakhstan Oil Products JSC, owner of Shymkent Refinery
POCR – Pavlodar Oil Chemistry Refinery
DED – design and estimate documentation
WPMP/FGP – well-head pressure management project/future growth project at the Tengiz field
KMG EP – KazMunayGas Exploration Production JSC
JCE – jointly controlled entity
NCP – North-Caspian Project
CAWs – construction and assembly works
JV – joint venture
JUDR – jack-up self-elevating drilling rig
PSA – production sharing agreement
TCO – Tengizchevroil LLP
HCs – hydrocarbons
HCC – hydrocarbon crude
Fund – Samruk-Kazyna Sovereign Wealth Fund
EMG – EmbaMunayGas JSC
ECD – Export customs duty