ҚазМұнайГаз
NATIONAL COMPANY ҰЛТТЫҚ КОМПАНИЯСЫ

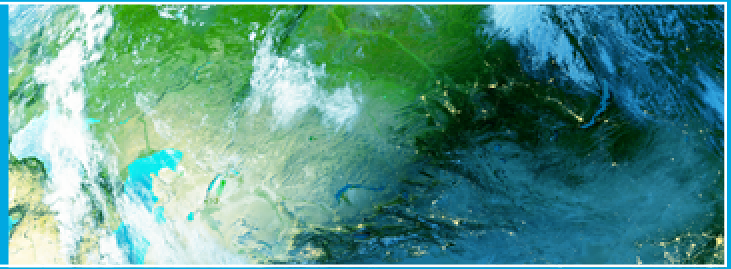
Annual Report 2019

STEADY leader

STEADY **leader**

38 UPSTREAM

56 MIDSTREAM



65 DOWNSTREAM

26% of oil and condensate production and 15% of gas production in Kazakhstan

57% of total oil transportation

79% of total gas transportation in the country

KMG has interests in all major modern refineries in Kazakhstan, with a combined market share of 81%

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STRATEGIC REPORT

CORPORATE GOVERNANCE

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NEXT:
STRATEGIC REPORT

#1

BY

OIL PRODUCTION

IN KAZAKHSTAN

The Company occupies more than a quarter of the Republic of Kazakhstan's oil and gas condensate production.

THE GIANT KASHAGAN FIELD IS THE LARGEST OIL DISCOVERY IN THE LAST FOUR DECADES. THE ESTIMATED 2P OIL AND CONDENSATE RESERVES LIFE IS OVER 120 YEARS AT THE 2019 PRODUCTION LEVEL.

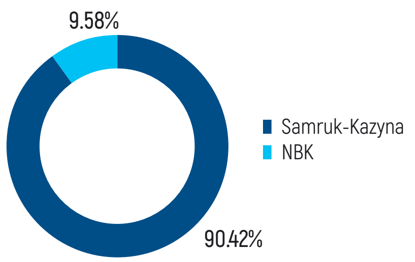
The development of the Kashagan field in the harsh marine conditions of the North Caspian represents a unique combination of technical and logistical challenges.

COMPANY OVERVIEW

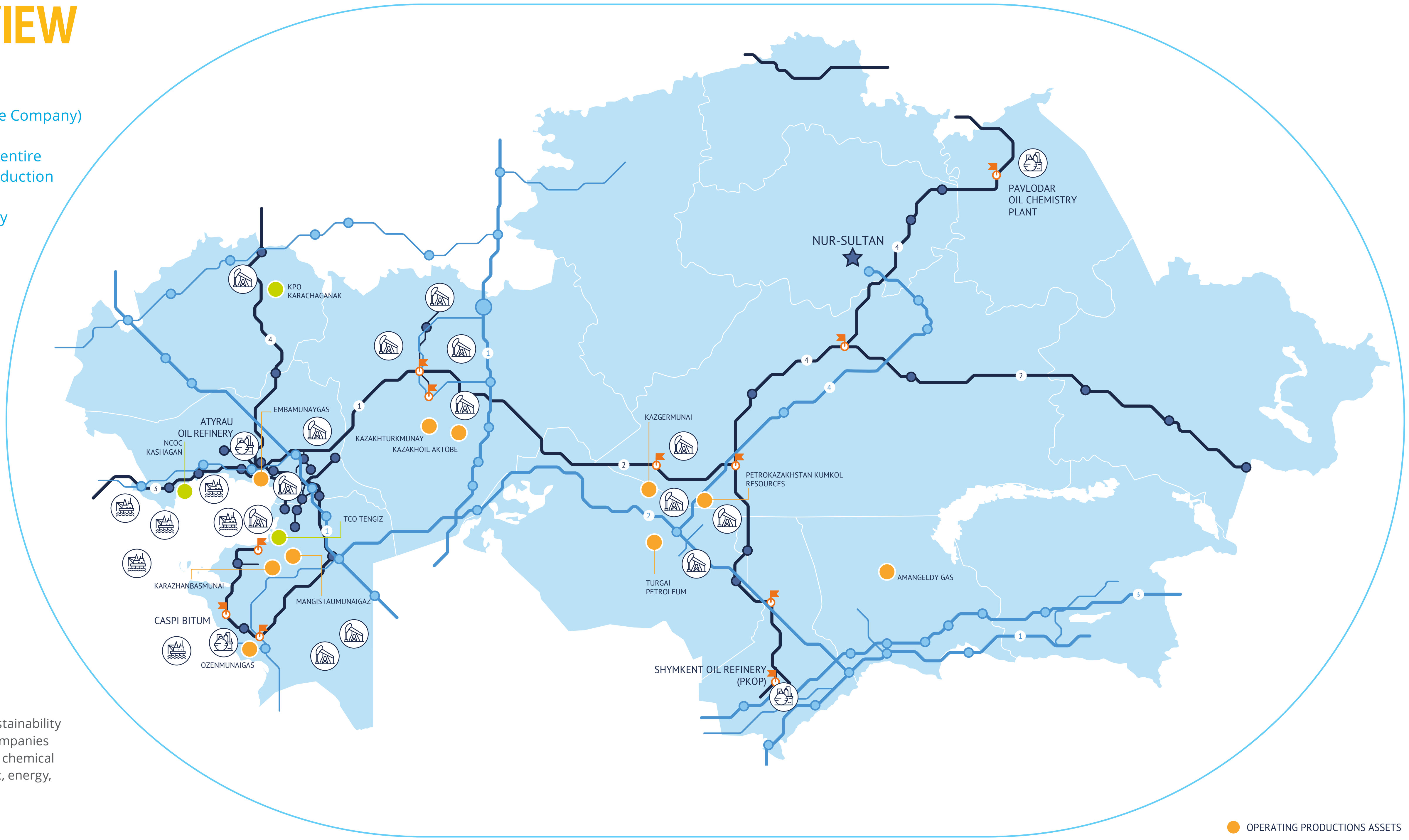
JSC National Company KazMunayGas (KMG, the Company) is Kazakhstan's leading vertically integrated oil and gas company, operating assets across the entire production cycle from the exploration and production of hydrocarbons to transportation, refining and services. Established in 2002, the Company represents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

CAPITAL STRUCTURE

KMG is owned by Sovereign Wealth Fund Samruk-Kazyna Joint-Stock Company (hereinafter – Samruk-Kazyna JSC, the Fund) (90.42%) and the National Bank of Kazakhstan (hereinafter – NBK) (9.58%). Samruk-Kazyna JSC is the Fund, the sole shareholder of which is the Government of the Republic of Kazakhstan.



The Fund's mission is to improve the sovereign welfare of the Republic of Kazakhstan and ensure long-term sustainability for future generations. The Fund's portfolio includes companies operating in oil and gas, transport and logistics sectors, chemical and nuclear industry, mining and metallurgical complex, energy, and real estate.



23.62	8.46	78.07	103.49	20.59
MLN TONNES	BLN M³	MLN TONNES	BLN M³	MLN TONNES
OIL AND CONDENSATE PRODUCTION	GAS PRODUCTION	OIL TRANSPORTATION	GAS TRANSPORTATION	OIL REFINING

ASSET STRUCTURE

KMG'S SIGNIFICANT ASSETS INCLUDE

UPSTREAM

Mega projects
- Tengizchevroil LLP (TCO)................20%
- Karachaganak Petroleum Operating B.V................................. 10%
- KMG Kashagan B.V. .... 8.44%[1]

Operating assets:
- JSC Ozenmunaigas 100%
- JSC Mangistaumunaigaz 50%
- JSC Embamunaigas 100%
- JV Kazgermunai LLP........................50%
- PetroKazakhstan Inc. 33%
- JSC Karazhanbasmunai..................50%
- Kazakhoil Aktobe LLP.....................50%
- Kazakhturkmunay LLP 100%
- KazMunayTeniz LLP 100%

[1] In October 2015, Samruk-Kazyna acquired a 50% stake in Kashagan with a right to purchase shares under an option agreement in 2020 and 2022. KMG and Samruk-Kazyna jointly hold 16.88% in Kashagan.

MIDSTREAM

- JSC KazTransOil 90%
  - Kazakhstan–China Pipeline LLP... 50%
  - MunaiTas North-West Pipeline Company LLP.............................51%
  - OJSC Batumi Oil Terminal 100%
- Caspian Pipeline Consortium ....20.75%[1]
- LLP NMSC Kazmotransflot 100%
- JSC KazTransGas 100%
  - JSC Intergas Central Asia........100%
  - Asia Gas Pipeline LLP................50%
  - JSC KazTransGas Aimak 100%
  - Beineu–Shymkent Gas Pipeline LLP................................50%
- KazRosGas 50%

[2] 19% via KMG and 1.75% via Kazakhstan Pipeline Ventures.

DOWNSTREAM

- Pavlodar Refinery LLP..................100%
- Atyrau Refinery LLP.................. 99.53%
- PetroKazakhstan Oil Products LLP (Shymkent Refinery)..................49.72%
- KMG International 100%
  - Petromidia Refinery...........54.63%
  - Vega Refinery 54.63%

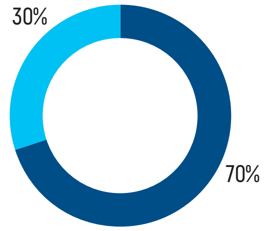
OILFIELD SERVICES

- KMG Nabors Drilling Company LLP 49%
- KMG Parker Drilling Company LLP49%
- KMG Automation LLP 49%

[3] As the national gas operator KMG exercises the state's pre-emptive right to purchase raw and commercial gas from subsoil users, supplies gas to the domestic market, and engages in export operations via its subsidiary JSC KazTransGas.

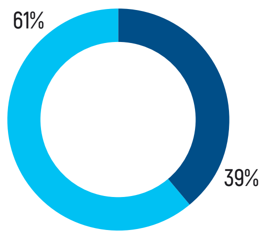
KEY MARKETS

OIL SALES



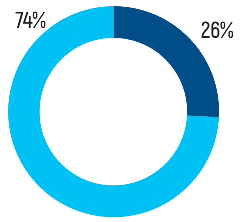
- Exports (Europe, China)
- Domestic market

GAS SALES[3]



- Exports (81% to China, 11% to Russia)
- Domestic market

PETROLEUM PRODUCT SALES



- Exports (Europe, China, Russia, Tajikistan)
- Domestic market

BUSINESS MODEL

To monitor its financial position, KMG has identified the following segments: Exploration and Production, Oil Transportation, Gas Transportation and Marketing, Refining, KMG International, Oilfield Service and Other Companies. The segments were identified based on the nature of operations. Results in identified segments are regularly assessed by the Group's management.

RESOURCES

EXPLORATION
16 exporation projects

PROVED PLUS PROBABLE RESERVES
676 mmtoe
(5.2 bln boe)

HYDROCARBON PRODUCTION
23.62 mln tonnes
of oil and condensate (485 kbopd)

8.5 bln m³of gas

MAIN PIPELINE CAPACITY
67.3 mln tonnes
Oil transportation

103.5 bln m³
Gas transportation

LIQUID HYDROCARBON REFINING
6.5 mln tonnes per year
Refining capacity in Romania

15 mln tonnes per year
(net to KMG's interest)
Refining capacity in Kazakhstan

EBITDA BY IFRS SEGMENT

	UPSTREAM	MIDSTREAM		DOWNSTREAM	OTHERS
	Exploration and production	Oil transportation	Gas transportation and marketing	Refining, Trading, KMG I	Sercie projects, Corporate centre, other assets
$ 5 126 MLN	49 %	11 %	23 %	14 %	3 %
• 100% fully consolidated subsidiaries	• OMG (100%) • EMG (100%) • KMG Karachaganak (100%) • KTM (100%)	• KTO (90%), • KMTF (100%),	• KTG (100%)	• Atyrau refinery (99.53%), • Parlodar refinery (100%), • KMG I (100%)	
• JV and Associates by equity method	• TCO (20%) • MMG (50%) • Kashagan (8.44%) • KGM (50%) • Others	• CPC (20.75%), • Others	• AGP (50%) • BSGP (50%) • KazRosGas (50%) • Others	• Shymkent refinery (49.72%), • Others	

The E&P segment comprises hydrocarbon (mainly oil) exploration, development, and production companies. The Oil Transportation segment comprises KazTransOil, NMSC Kazmortransflot, and Caspian Pipeline Consortium engaged in oil transportation. The Gas Transportation and Marketing segment comprises KMG's subsidiary KazTransGas. The Refining segment comprises all refineries located in Kazakhstan (Atyrau Refinery, Pavlodar Refinery, Shymkent Refinery). KMG International is identified as a separate segment since it is an integrated, diversified oil company operating in international markets and engaged in refining, petrochemical production, oil and petroleum product sales. The Oilfield Service and Other Companies segment comprises the oilfield service operations of KMG and other KMG Group companies engaged in non-core operations.

STAKEHOLDER VALUE

Leadership and presence across all sectors of Kazakhstan's oil and gas industry, from exploration to product sales to consumers, enable KMG to create value for a wide range of stakeholders. KMG makes regular payouts to shareholders, duly meets its obligations to investors and creditors, and is a major employer and taxpayer. The Company promotes mutually beneficial cooperation with partners, invests in social projects, and ensures high standards of environmental protection.

KEY STRENGTHS

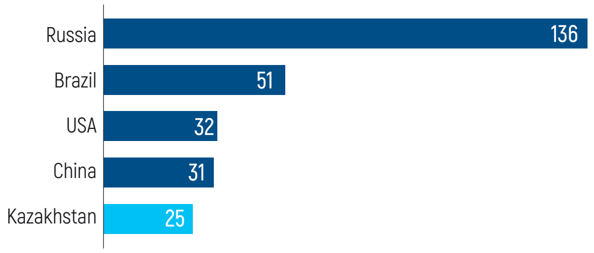
UNIQUE GEOGRAPHY

Kazakhstan has an extensive resource base, favourable location, and a unique opportunity to export to Europe and fast-growing Asian markets, including China.

Kazakhstan's economy has grown eleven-fold over the last 20 years due to political and social stability, natural resources development, and enhanced industrial infrastructure.

The oil and gas industry is the leading economic sector in Kazakhstan. The oil and gas segment contributes significantly to Kazakhstan's aggregate income from taxes and exports and remains a key investment destination. Foreign direct investments (FDI) into the industry were at higher than USD 70 bln over the last decade. The presence of global energy majors evidences Kazakhstan as an attractive investment region. Kazakhstan is among the Top 5 non-OPEC countries by the remaining 2P oil reserves.[1]

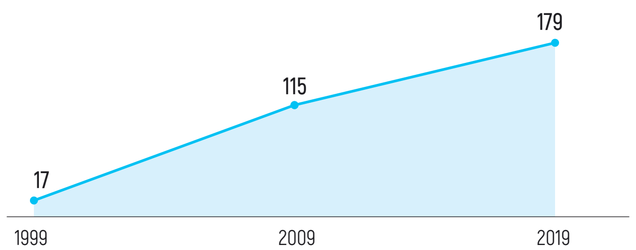
TOP 5 NON-OPEC COUNTRIES BY CONVENTIONAL OIL RESERVES
REMAINING 2P OIL RESERVES, BLN BARRELS (2019)



Source: IHS Markit

Based on EDIN & Vantage Data as of 18 January 2020, excluding North American unconventional reserves (e.g., US onshore and Canada oil sands)

KAZAKHSTAN'S GDP, USD BLN
A PRELIMINARY ESTIMATE OF GDP FOR 2019 AS OF 24 FEBRUARY 2020



Source: Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan

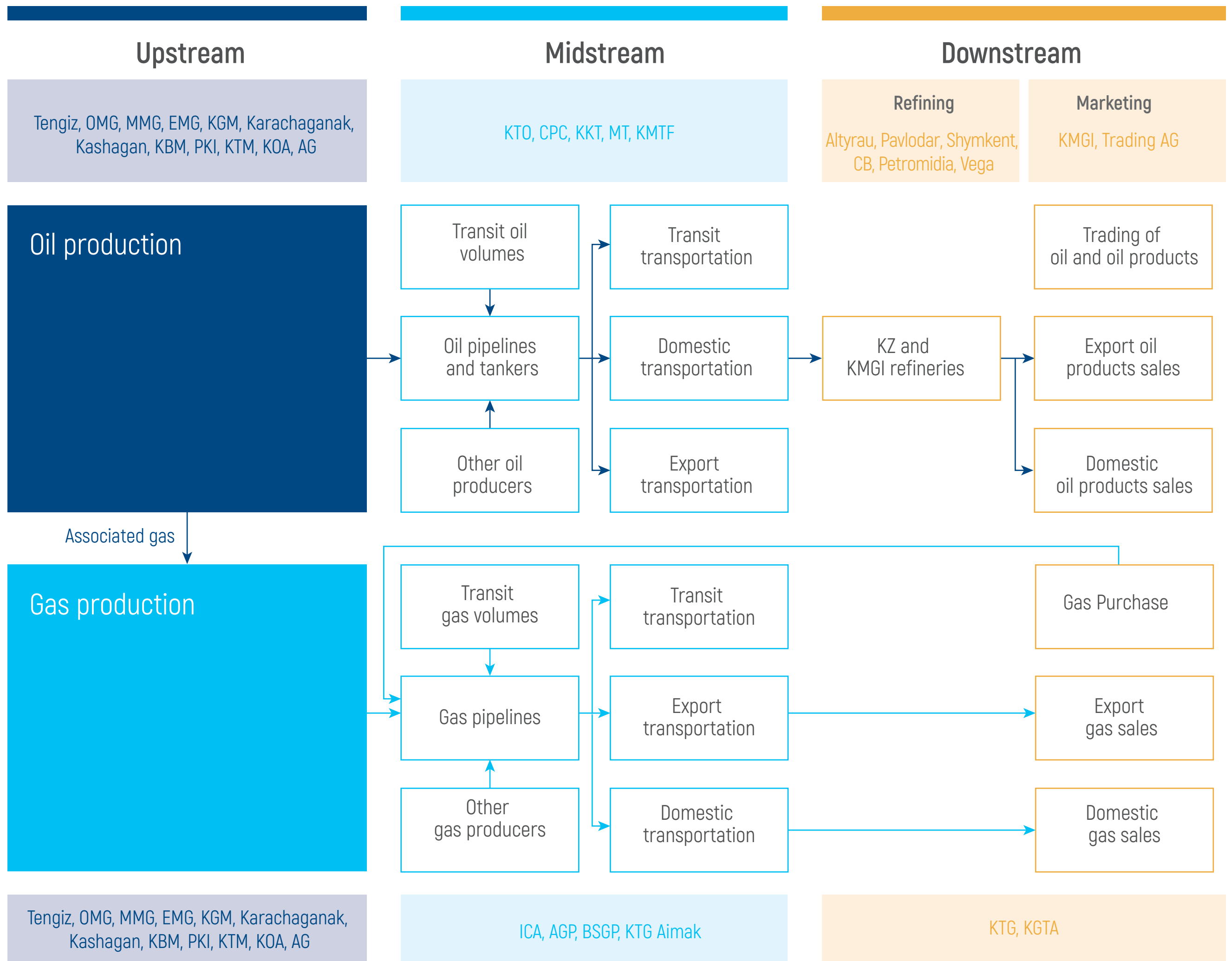
[1] IHS Markit's estimates.

FULL INTEGRATION ACROSS THE VALUE CHAIN

KMG is the national leader in Kazakhstan's oil and gas industry with a fully integrated added value chain.

As a national leader and a vertically integrated business, KMG has a strong foundation to support its long-term sustainable development. KMG's assets comprise an entire hydrocarbon added value chain including exploration, production, transportation, refining, and marketing. The Company operates in Kazakhstan and Romania.

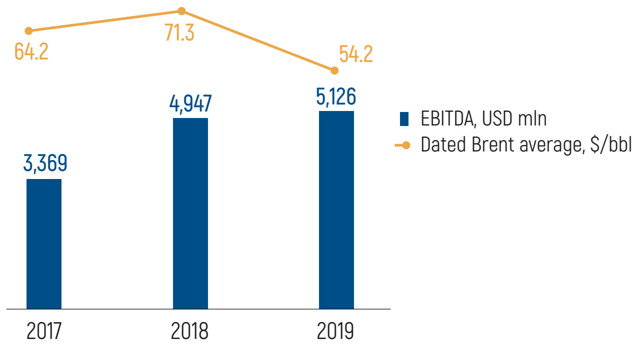
KMG VALUE CHAIN



SOLID FINANCIAL PERFORMANCE

Despite heightened volatility of commodity markets and lower oil prices in 2019, financial performance remained solid. The average Dated Brent oil price decreased by 10% year-on-year, while key financial indicators, such as EBITDA, Free Cash Flow, and Net profit showed positive growth dynamics (3.6%, 27.5% and 50.5%, respectively).

EBITDA AND OIL PRICES



Source: S&P Global Platts

DIFFERENTIATED UPSTREAM PORTFOLIO

KMG has a differentiated portfolio of oil and gas production assets with attractive growth potential.

The Company also has unique access to new licenses and oil and gas assets put on sale in Kazakhstan to sustain inorganic growth.

KMG partners with international companies for major oil and gas projects on a global scale with the potential to boost hydrocarbon production: Tengiz, Kashagan, Karachaganak. Operating assets are mainly mature fields with stable production levels, efficiency improvement of which is considered as a key objective for the Company.

2P reserves life of oil & condensate (based on 2019 oil and condensate production level) is at 23 years.

26%
share of total oil & condensate production in Kazakhstan

15%
share of total gas production in Kazakhstan

MODERN OIL REFINERIES

The Company operates the four largest refineries in Kazakhstan and two in Romania. As a result of their comprehensive modernisation, KMG improved refining depth. Domestic demand for high-quality light petroleum products was fully covered. In addition, KMG started exporting light petroleum products to Europe and Central Asia.

81%
share of total oil refining in Kazakhstan

LEADING POSITION IN KAZAKHSTAN'S MIDSTREAM SECTOR

The oil transportation system managed by KMG is well-diversified and has a high transit and export potential. Active investment phase in this segment has been completed, and the capacities have been ramped up to meet the needs of growing production volumes in Kazakhstan.

57%
of oil transportation volumes in Kazakhstan

79%
of gas transportation volumes in Kazakhstan

ADVANCED CORPORATE GOVERNANCE FRAMEWORK AND COMMITMENT TO SUSTAINABLE DEVELOPMENT PRINCIPLES

KMG is committed to environmental sustainability and social stability and recognises its responsibility to current and future generations.

The World Bank Initiative «Complete Cessation of Regular Flaring of APG by 2030»

UN 17 Sustainable Development Goals Initiative

CDP Climate Program

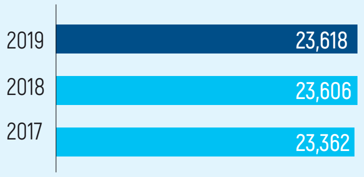
Global Methane Initiative

PERFORMANCE HIGHLIGHTS

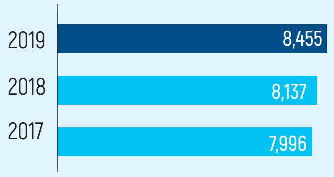
OPERATIONAL HIGHLIGHTS

2P HYDROCARBON RESERVES, MLN TONNES

OIL AND GAS CONDENSATE PRODUCTION, THOUS. TONNES

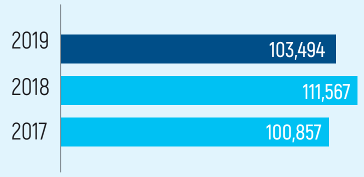


NATURAL AND ASSOCIATED GAS PRODUCTION, MLN M³

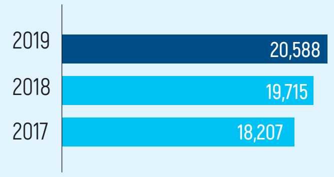


OIL TRANSPORTATION, THOUS. TONNES

GAS TRANSPORTATION, MLN M³



OIL REFINING, THOUS. TONNES



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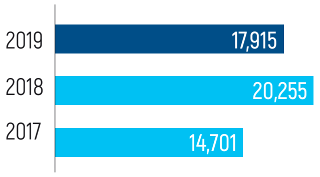
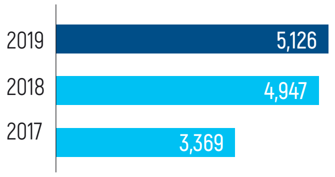
FINANCIAL HIGHLIGHTS

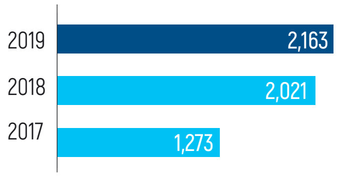
REVENUE, USD MLN



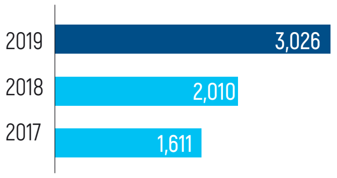
EBITDA, USD MLN



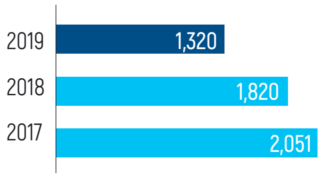
SHARE IN PROFIT OF JVS AND ASSOCIATES, USD MLN



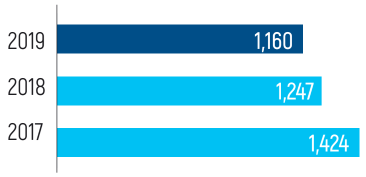
NET PROFIT, USD MLN



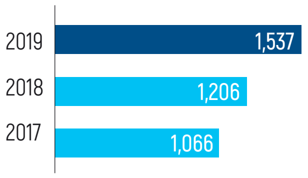
CAPITAL EXPENDITURES BASED ON ACCRUED BASIS, USD MLN



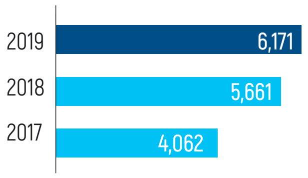
CAPITAL EXPENDITURES BASED ON CASH BASIS, USD MLN



FREE CASH FLOW, USD MLN



NET DEBT, USD MLN

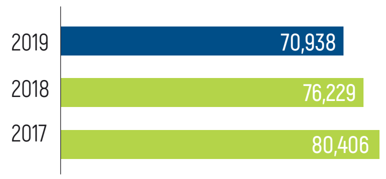


NET DEBT/EBITDA, X

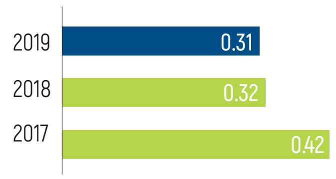
72 For more details see the CFO financial review section

SOCIAL HIGHLIGHTS

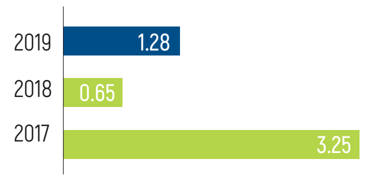
ACTUAL NUMBER OF EMPLOYEES[1]



LOST TIME INCIDENT RATE (LTIR), PER 1 MLN MAN-HOURS



FATAL ACCIDENT RATE (FAR), PER 100 MLN MAN-HOURS

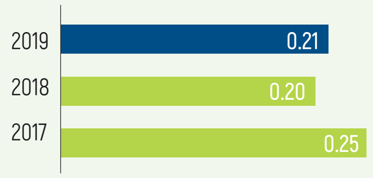


[1] From 2019 the Company revised the methodology to calculate the Actual number of employees (calculation includes employees from the companies with share of 50% and more). Figures for previous periods were also recalculated.

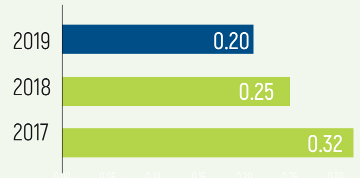
92 For more details see the Occupational health and safety section

ENVIRONMENTAL HIGHLIGHTS

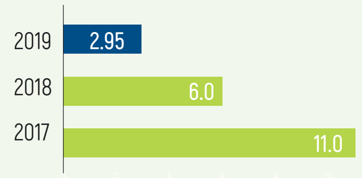
NO_x EMISSIONS, TONNES PER 1,000 TONNES OF PRODUCED HYDROCARBONS



SO_x EMISSIONS, TONNES PER 1,000 TONNES OF PRODUCED HYDROCARBONS



APG FLARING RATE, TONNES PER 1,000 TONNES OF PRODUCED HYDROCARBONS



81 For more details see the Sustainability management section

STATEMENT FROM THE CHAIRMAN OF THE BOARD OF DIRECTORS

Dear Investors, Shareholders, Colleagues and Partners,

I am pleased to report that the continued effort and commitment of our management team and employees delivered positive results in 2019. We successfully met many of our important objectives and achieved positive operating and financial results. This underpins the steady growth of our Company and increases shareholder value. It was achieved by strengthening our financial position and by maintaining stable production levels at both our own assets, as well as joint projects.

STRATEGY

During the year, we continued to work towards our strategic goals and we successfully achieved the Company's key 2019 financial and operational goals and objectives. Our operational results in 2019 confirmed KMG's role as the vertically integrated market leader in the country's oil and gas sector.

In order to deliver on KMG's strategic objective of growing our reserves, we signed two exploration and production contracts with major international oil companies: Eni and LUKOIL. These contracts are in regard to the Abay and Zhenis offshore projects. Additionally, a heads of agreement for the I-P-2 project was signed with LUKOIL, as well as several other agreements and memoranda with BP, Equinor, LUKOIL, Tatneft, and Socar. We anticipate further progress on joint ventures and collaborations in 2020.

We continue to follow our 10-year strategy, approved in 2018, while also regularly reviewing it to ensure it remains relevant and fit for purpose. When implementing our strategy and KPI framework in 2019, we focused on updating the high-level initiatives for our gas segment. Currently we are working on a more detailed gas strategy, which is likely to shift the Group's production mix from predominantly crude oil to a more balanced gas and liquid production mix.

To help reduce our financial and non-financial commitments, we accelerated our payment schedule for crude oil and liquefied petroleum gas supplies under the Tengizchevroil prepayment facility. In total, we paid down 2.25 bln USD in 2019 for the settlement of TCO prepayment facilities. Within the last two years we have also extended our debt maturity profile by converting short-term debt into long-term debt and aligning the covenant packages of our Eurobonds. This prompted Fitch Ratings in March 2019 and Moody's in August 2019 to upgrade KMG's standalone credit rating. Both agencies have us at investment grade and one rating at two notches below the sovereign rating of the Republic of Kazakhstan.

During our recent capital-intensive period, we maintained strong capital discipline and kept our debt leverage to an appropriate level. Although our 2019 capex was $1.3 bln, we had free cash flow of about $1.5 bln and a stable balance sheet. Looking forward we expect to commercialize the benefits of our well-vested asset portfolio.

During the last two years we have worked on analyzing and prioritizing investment projects and we plan to adopt an increasingly regimented portfolio management approach based on the criteria of each project's profitability index, how it fits with our strategy and its cost.

With respect to a possible IPO of the Company, you will be aware that KMG is a part of the government's privatisation programme. A final decision on any IPO will be made by our major shareholders and will depend on various factors.

CORPORATE GOVERNANCE

The Board of Directors accords corporate governance a high priority and seeks continuous improvement.

KMG's Board is currently composed of four independent directors, four directors nominated by the major shareholder (of whom three are non-executive directors), and the Chairman. The Chairman of the Board and all Committee Chairmen are independent directors, which brings a unique and professional perspective to all important issues related to the Company's operations. The Board's composition is aligned with our skill and expertise matrix.

In 2019, Mr Luís Maria Viana Palha da Silva was appointed to the Board as an Independent Director and was elected as the Chairman of the Nomination and Remuneration Committee. Luís has experience in oil refining and petrochemicals, which will greatly benefit the Company as we ramp up production at our upgraded refineries.

I would also like to welcome Mr Anthony Espina, as a new non-executive Director, nominated by our major shareholder. He has considerable experience in equity markets and is an invaluable asset to KMG as we continue to improve our financial stability and evaluate IPO options with our majority shareholder.

In 2019, the Board of Directors expanded the range of issues that it has asked committees to oversee and review in depth. These measures were aimed at allowing the Board to focus on key strategic issues without compromising the quality and effectiveness of Board oversight.

SUSTAINABILITY

We have a strong commitment to sustainability and improving the transparency of our ESG performance. For the last 4 years, we have significantly enhanced our environmental and safety performance with major improvements in key indicators. Lost Time Injury Rate decreased by 37%, Fatal Accident Rate fell by 72%, CO2 emissions dropped by 12% and APG flaring intensity was lowered by 75%. Notwithstanding these improvements, I would like to stress that zero injuries and fatalities in the workplace are the only acceptable results and we will continue to strive to meet these targets. In 2019, we published our Sustainability Report in line with GRI Standards and we became the first oil and gas company in Kazakhstan to publish a verified report on greenhouse gas emissions (Scope 1, 2 and 3) under the Carbon Disclosure Project. This discloses the Company's performance and development plans for global climate change adaptation. The CDP Report also allows us and our stakeholders to benchmark our environmental progress against peers and other companies.

In line with our commitment to follow the United Nations Sustainable Development Goals, in 2020 we will incorporate key goals into our strategy, business plans and operations. In 2020 we also intend to obtain an international ESG rating and include a Water Disclosure Project in our Sustainability Report.

I am particularly proud that 2019 saw the launch of the Health, Safety, Environment and Sustainable Development Committee under the Board of Directors. This demonstrates the Board's commitment to best practice, and contributes to our improved performance in this area.

STAKEHOLDER ENGAGEMENT

I believe it is important to maintain regular dialogue with all stakeholders, investors, partners, and our employees. During 2019, in line with monitoring the implementation of strategic initiatives our independent directors visited a number of KMG production sites, including JV Kazgermunai, PetroKazakhstan Oil Products, and Shymkent Refinery. I intend to continue this practice by visiting several production sites this year. In addition, my fellow directors and I hold regular meetings with the Company's top and middle management. I also participated in meetings with Eurobond holders and investors as part of the roadshows.

KazMunayGas looks to the future with confidence and is committed to maintaining the highest international standards and corporate best practices.

2019 was a successful year for the Company, driven by the strong leadership of Mr Alik Aidarbayev, in his first full year as Chairman of the Management Board. KMG continues to become a stronger, safer and more financially robust business, which benefits our shareholders, our employees and the Republic of Kazakhstan.

Chris Walton,
Chairman of the Board of Directors of "NC KazMunayGas" JSC

CHIEF EXECUTIVE OFFICER'S STATEMENT

Dear Investors, Shareholders, Colleagues and Partners,

2019 was another successful year of strategic delivery for KMG. We significantly strengthened our financial position and achieved a positive operational performance while making further improvements in occupational safety.

GOOD OPERATING PERFORMANCE AND FINANCIAL STABILITY

Our full-year results demonstrate that KMG is strongly positioned, and comfortably on track, to achieve its strategic goals. I am proud of the operational targets we have achieved.

We produced more than 23.6 mln tonnes of oil and gas condensate, slightly above our 2018 results.

Gas exports were a key growth driver for KMG during the year, with 103.5 bcm of gas transported via trunk pipelines. Our gas exports stood at 8.8 bcm, of which around 7 bcm were sent to China.

Three refineries reached a record annual throughput of almost 17 mln tonnes of oil. In 2019, we fully met the domestic demand for light products and started exports to neighbouring countries for the first time in KMG's history.

We have made considerable progress on the Future Growth Project at Tengiz, one of our key expansion projects. TCO partners approved the increase of the total project budget from USD 37 bln to around USD 45 bln due to higher costs of services and equipment.

In 2019, Kashagan reached a new peak production of 400 thousand barrels per day, with the average daily output in 2019 being 307 thousand barrels per day.

We have maintained our focus on strengthening our financial stability. Despite falling Brent prices, our EBITDA increased slightly year-on-year to USD 5.1 bln. We reduced our debt load majorly by accelerated settlement of TCO prepayment facilities. We have also balanced out our debt portfolio through steps, in recent years, to convert short-term into long-term debt and aligning our Eurobond covenants.

In 2019 we reset our Transformation Program: we are increasing the level of our assets digitalization to improve our operational performance. Thus, we create conditions for integrating our Company's business into new digital reality, which is a critical requirement at present times.

Additionally during the year, we put considerable effort into engaging strategic partners in new upstream projects and expanding relations with international oil and gas majors like ENI, LUKOIL, BP, EQUINOR and TATNEFT in exploration.

In 2019, we adopted international reserve estimation standards to underline our commitment to transparency. Our proven plus probable (2P) hydrocarbon reserves stood at 5.2 bln boe at the end of 2019, leaving us well-positioned to focus on driving further economically viable reserve growth.

FURTHER ESG IMPROVEMENTS

We work constantly to improve operational safety, but regretfully in the second half of 2019 we lost two employees in a highway traffic accident and a fire in living quarters. Any fatal accident is unacceptable to us, and I would like to express once again my sincere condolences to the families and friends of the deceased.

Despite these tragedies, we managed to reduce the overall injury rate in 2019 by 4%, the number of major (critical) accidents was down by 11%, and the number of traffic accidents and fires were reduced by 33% and 17%, respectively, year-on-year.

We also made considerable progress in raising the APG utilisation rate to 97% in 2019. Another major achievement was a step forward in sustainable water use: in the reporting year, we signed a Statement of Commitment to Sustainable Water Management and implemented several large-scale projects to treat wastewater and saltwater.

KMG IN KAZAKHSTAN

In the past year, KMG once again confirmed its status as one of the largest taxpayers in Kazakhstan, having paid about USD 4 bln in taxes and other mandatory payments to the national budget.

Our social responsibility strategy aims to facilitate development across our operating regions. During the year, we spent 7.6 bln tenge on social investments under subsoil use contracts across KMG Group. Furthermore, KMG allocated 22.8 bln tenge to develop infrastructure in Turkistan as instructed by the Government of the Republic of Kazakhstan.

In 2020, we will progress towards the targets announced in our development strategy and further maximise efficiencies across our business processes to stay agile in an ever-changing environment. We are committed to openness and transparency in our relations with all stakeholders.

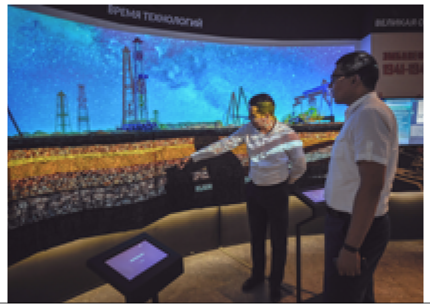
To conclude, I would like to thank each and every member of our team for their dedication and commitment and for working so well together to deliver our corporate values.

Alik Aidarbayev,
Chairman of the Management Board of NC KazMunayGas JSC

STRATEGY

MARKET OVERVIEW

MACROECONOMICS AND GLOBAL TRENDS



GLOBAL TRENDS AND SHORT-TERM DRIVERS	CHANGES IN THE GLOBAL FUEL AND ENERGY BALANCE	DYNAMIC DIGITALISATION AND AUTOMATION IN THE INDUSTRY	INCREASING SIGNIFICANCE OF ESG IN BUSINESS COMMUNICATION	HYDROCARBON PRICE VOLATILITY
CHALLENGE FOR THE INDUSTRY	Increase in demand for liquid fuel in non-OECD Asia. Increase in global demand for gas, including demand in China as the main driver.	Development and implementation of Smart Field technology, digitalisation and automation of business processes in the oil and gas industry.	Introduction of best practices in ESG as a trend in the oil and gas industry.	Oil prices are affected by both fundamental and geopolitical factors, which results in high price volatility.
STRATEGIC RESPONSES TO TRENDS	Market expansion and diversification through developing oil and gas midstream capacities.	KMG is implementing Digital Transformation Programme.	Integrating sustainability principles into core business processes is a key element of KMG's long-term strategy.	KMG is focused on maintaining its financial stability, in particular through financial discipline, and maintaining a well-balanced capital structure.

CHANGES IN THE GLOBAL FUEL AND ENERGY BALANCE

According to the International Energy Outlook by the US Energy Information Administration (EIA) dated 24 September 2019, energy consumption in non-OECD countries will increase by about 70% between 2018 and 2050 versus 15% in OECD countries.

Non-OECD countries will account almost exclusively for liquid fuel consumption growth between 2018 and 2050, following population growth and economic development. Non-OECD Asia accounts for about three-fourths of the increase in global liquid fuel consumption.

STRATEGIC DIRECTION

KMG considers global trends in liquid fuel and natural gas and seeks to maximise the efficiency of its oil transportation infrastructure to increase oil exports. In particular, by developing the Kazakhstan–China Pipeline, KMG will ensure hydrocarbon supply from Western Kazakhstan fields to the high-potential Chinese market, and the Caspian Pipeline Consortium is a key component of the transportation infrastructure targeting Europe.

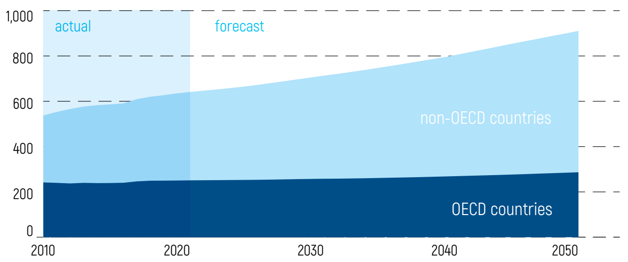
INCREASE IN GLOBAL DEMAND FOR GAS

As a fossil fuel with a relatively low carbon footprint, natural gas plays a critical role in balancing solar and wind energy. Global gas demand will remain solid in the long term.

According to the International Energy Outlook by the US Energy Information Administration, global natural gas consumption will increase by more than 40% between 2018 and 2050, while in non-OECD countries the increase will reach 70%.

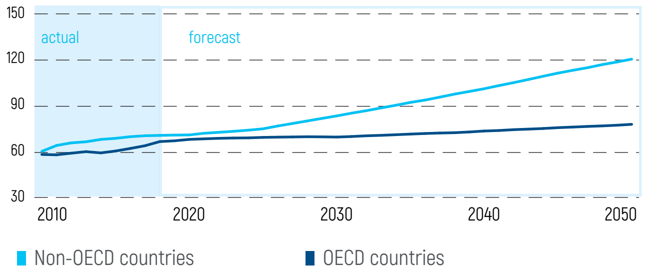
+10%
gas consumption in China in 2019

GLOBAL ENERGY CONSUMPTION, QUADRILLION BTUs



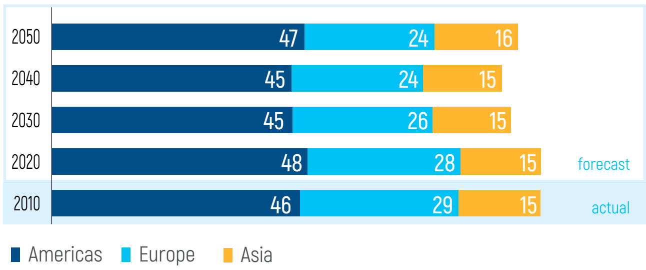
Source: US Energy Information Administration, Report "International Energy Outlook 2019" dated 24 September 2019

GLOBAL NATURAL GAS CONSUMPTION, QUADRILLION BTUs



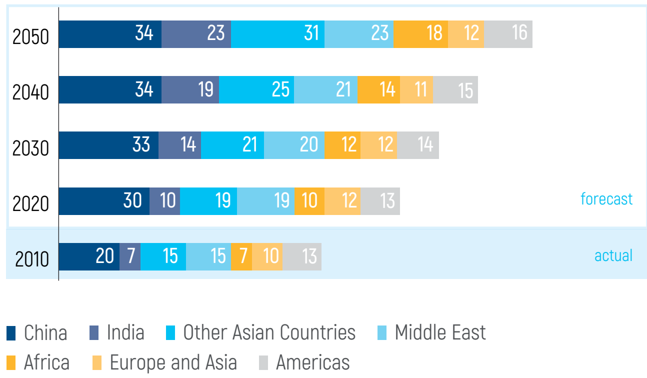
Source: US Energy Information Administration, Report "International Energy Outlook 2019" dated 24 September 2019

LIQUID FUEL CONSUMPTION BY OECD COUNTRIES, QUADRILLION BTUs



Source: US Energy Information Administration, Report "International Energy Outlook 2019" dated 24 September 2019

LIQUID FUEL CONSUMPTION BY NON-OECD COUNTRIES, QUADRILLION BTUs



Source: US Energy Information Administration, Report "International Energy Outlook 2019" dated 24 September 2019

INCREASE IN NATURAL GAS DEMAND IN CHINA

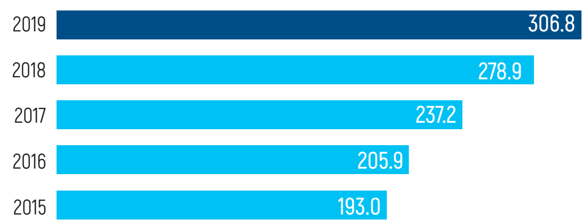
According to the National Development and Reform Commission of the People's Republic of China, apparent natural gas consumption CAGR in 2012–2019 was at 15.4%. In 2019, apparent gas consumption was at 306.8 bln m³, having increased by 10.0% year-on-year.

As Sinopec Gas Company estimated in its report dated 15 October 2019, the long-term gas demand in China will reach 510 bln m³ by 2030, supported by continued industry upgrades and urbanisation. In August 2019, CNPC Economics & Technology Research Institute estimated China's gas demand at 610 bln m³ by 2035, and 690 bln m³ by 2050.

STRATEGIC DIRECTION

KMG aims to implement a number of initiatives to ensure sufficient reserves of commercial gas and adequate pipeline capacities to boost exports to China while meeting growing domestic demand. The Kazakhstan–China trunk gas pipeline, and Beineu–Bozoi–Shymkent trunk gas pipeline are the key projects to unlock KMG's potential for natural gas exports to China.

NATURAL GAS CONSUMPTION IN CHINA, BLN M³



Source: National Development and Reform Commission of the People's Republic of China, Bloomberg

DIGITALISATION

At present, digital technology penetrates in all economic sectors, allowing fundamental improvements in efficiency and safety. Energy is also no exception: leading oil and gas companies around the world efficiently use Big Data, predictive analytics, artificial intelligence, machine learning, robots, etc.

Innovative digital technology means:
- reduced capital expenditures and operating expenses;
- better profitability amidst volatile oil prices;
- improved efficiency, including through data analysis;
- better failure prediction;
- process safety.

Digitalisation can become the engine of the national economy. Digitalisation will become a driver for the development and adaptation of new technologies to the economy of Kazakhstan, which would allow launching a new wave of job creation.

Given the growing relevance of digitalisation in the world, the state has launched the Digital Kazakhstan state programme to ensure the country's competitiveness.

The program covers almost all economic sectors, including the oil and gas industry, for which it provides:
- adopting the Smart Field technology across Kazakhstan's upstream majors;
- ensuring transparency of commercial oil production reports by deploying metering systems;
- Ensuring uninterrupted domestic fuel supplies by deploying automated maintenance and repair management, and control systems, as well as repairs at Kazakhstan's refineries.

The ongoing rollout of the Smart Field project is implemented at JSC Embamunaigas, JSC Ozenmunaigas, JV Kazgermunai LLP under the Digital Kazakhstan programme.

STRATEGIC DIRECTION

The company will focus on the implementation of the Digital Transformation Program with a focus on the implementation of new digital technologies, a data-oriented approach to management, as well as the formation of digital culture. As part of the implementation of the corporate strategy in 2020, the Company began to develop KMG Digitalisation Strategy.

DEVELOPING ESG PRACTICES

In September 2015, the leaders of 193 countries approved an ambitious comprehensive programme Transforming our World: the 2030 Agenda for Sustainable Development, which included Sustainable Development Goals. Combating climate change and transforming energy systems are key challenges to a sustainable future for the business community, society and the environment. The Paris Agreement sent a strong and global message that the transition to a low-carbon economy is inevitable. Kazakhstan's Intended Nationally Determined Contribution (INDC) to the Paris Agreement is to reduce the country's GHG emissions by 15% (unconditional goal) compared to the 1990 base year or, even more ambitiously, by 25% (conditional goal) by 2030.

STRATEGIC DIRECTION

In making decisions, KMG factors in the national and global trends for a transition to a greener economy and recognizes that long-term success in the industry requires strong ESG performance. As a signatory to the UN Global Compact, KMG reiterates its commitment to the principles of sustainable development and embraces Sustainable Development Goals while particularly focusing on climate change, prevention of adverse environmental impact, and corporate social responsibility.

VOLATILITY OF CRUDE OIL PRICES

In 2019, Brent crude futures traded averaged at USD 61.9 per bbl, down by 6.6% year-on-year. During the year, crude oil prices remained volatile (with 30-day volatility[1] at 28%), higher than in 2018 (20%), due to heightened geopolitical risks.

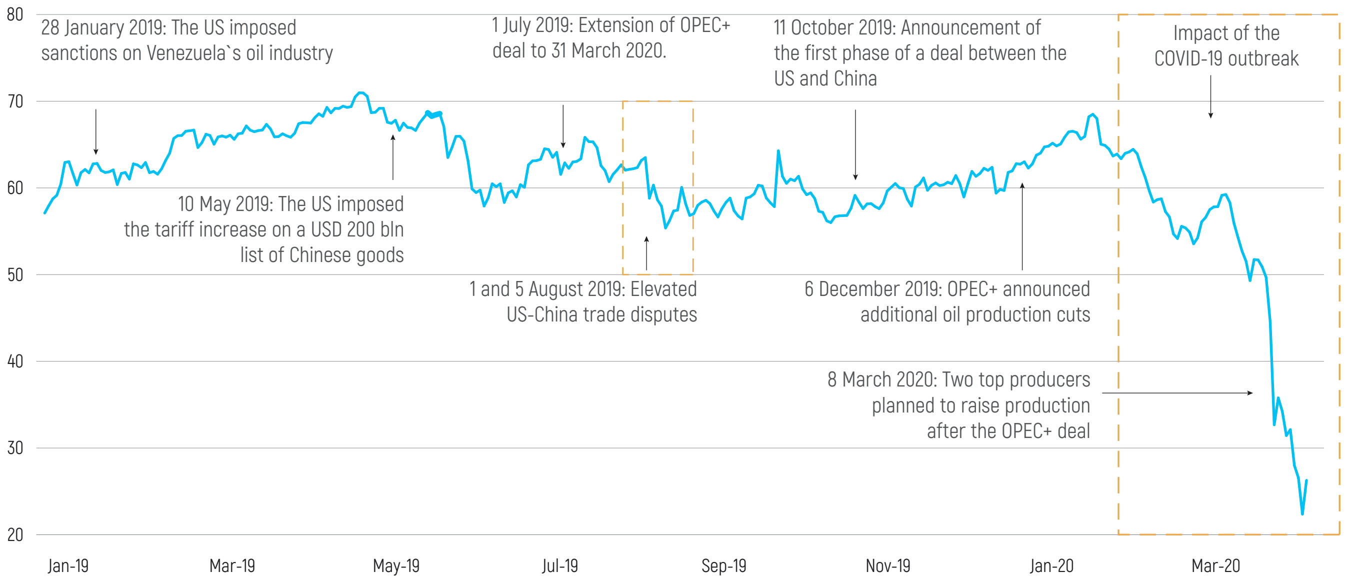
On 19 March 2020, Brent crude settled at USD 28.47 per bbl, having decreased by 56.0% year-to-date, amidst the coronavirus pandemic, and higher expected oil supplies. The COVID-19 outbreak is expected to slow economic growth and suppress oil demand in the short-term.

On 6 December 2019, the 7th OPEC and non-OPEC Ministerial Meeting decided to increase crude oil production cuts by a further 500 kbopd, bringing the total production cut to 1.7 mbopd, starting from 1 January 2020.

STRATEGIC DIRECTION

On the COVID-19 outbreak, KMG takes a proactive approach and implements a set of measures, aimed at curbing the potential spread of the virus among employees.

BRENT CRUDE OIL PRICES, $/BBL



Source: Bloomberg

[1] Annualised standard deviation of daily logarithmic price changes for the last 30 trading days.

INTERNAL DRIVERS AND THEIR IMPACT ON STRATEGY IMPLEMENTATION

KAZAKHSTAN'S OIL AND GAS INDUSTRY

Kazakhstan's wealth of hydrocarbon reserves make the oil and gas industry a key sector of the national economy. Kazakhstan has extensive hydrocarbon resources to support reserves growth. More than 60% of Kazakhstan's territory is occupied by oil and gas areas of various sizes.

The oil and gas industry accounts for approximately 21% of Kazakhstan's total GDP (in 2018). The crude oil and natural gas production sector attracted 50% of gross FDI inflows in 2019. The export of crude oil, natural gas, and petroleum products safeguards export revenues at a level of 64% of total exports in 2019[1].

As production expanded over the past decades, Kazakhstan has significantly consolidated its position in the global hydrocarbon market. In the medium and longer-term, Kazakhstan will continue to grow production.

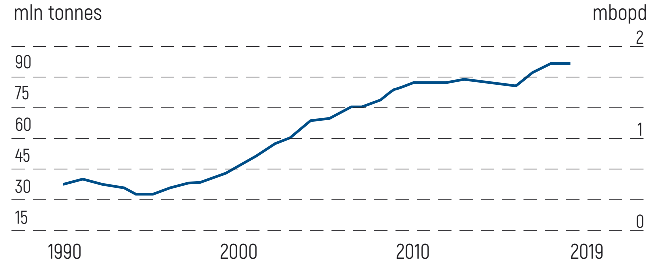
According to the Information and Analytical Centre of Oil and Gas, 90.6 mln tonnes of crude oil and gas condensate were produced in Kazakhstan in 2019, with a marginal change compared to 2018. Gas production was at 56.4 bln m3 in 2019, up by 1.7% year-on-year.

Kazakhstan has a modern and diversified oil and gas transportation, refining and processing infrastructure. Oil transportation is a strategic segment in KMG's asset portfolio to maintain access to markets.

KMG has diversified hydrocarbon transportation routes and built a transportation infrastructure to support gas exports to China.

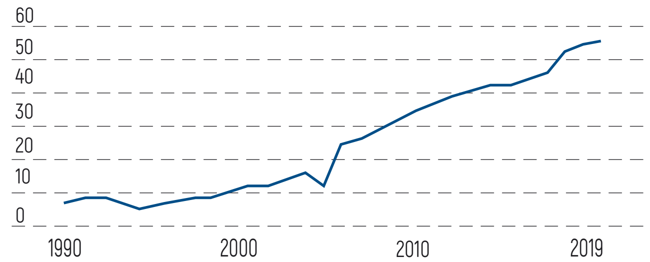
According to the Information and Analytical Centre of Oil and Gas of the Ministry of Energy, the refining volume at Kazakhstan refineries was 17.1 mln tonnes in 2019, a 4.4% increase year-on-year. The output of oil products increased by 15.5% year-on-year for petrol, 7.7% for diesel, and 63.2% for jet fuel. In the medium term, a surplus for oil products is expected in the domestic market, a positive driver for exports.

OIL AND CONDENSATE PRODUCTION



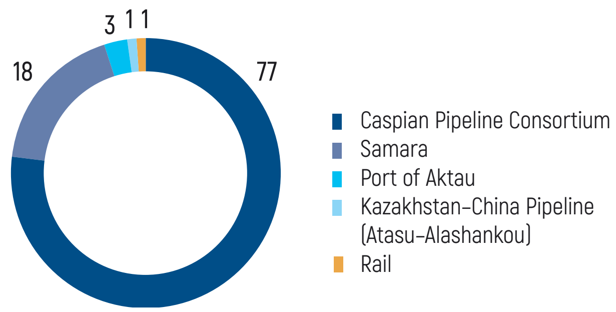
Source: Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan, the Information and Analytical Centre of Oil and Gas of the Ministry of Energy of the Republic of Kazakhstan

GAS PRODUCTION, BLN M^3



Source: Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan, the Information and Analytical Centre of Oil and Gas of the Ministry of Energy of the Republic of Kazakhstan

STRUCTURE OF OIL AND CONDENSATE EXPORT SUPPLIES, % (2019)



Source: The Information and Analytical Centre of Oil and Gas of the Ministry of Energy based on the data provided by transportation companies)

[1] HS Code 2709 - crude oil and crude petroleum products derived from bituminous rocks, HS Code 2711 - other petroleum gases and gaseous hydrocarbons, HS Code 2710 - oil and petroleum products derived from bituminous rocks, other than crude ones.

FAVOURABLE ECONOMIC CONDITIONS IN KAZAKHSTAN IN 2019

Economic conditions in Kazakhstan are favourable given the expected positive economic growth in the medium-term, stable fiscal and monetary policies, and the government's push for structural reforms. With a GDP of USD 179 bln in 2019, Kazakhstan is the largest economy in Central Asia, accounting for about 60% of the region's GDP.

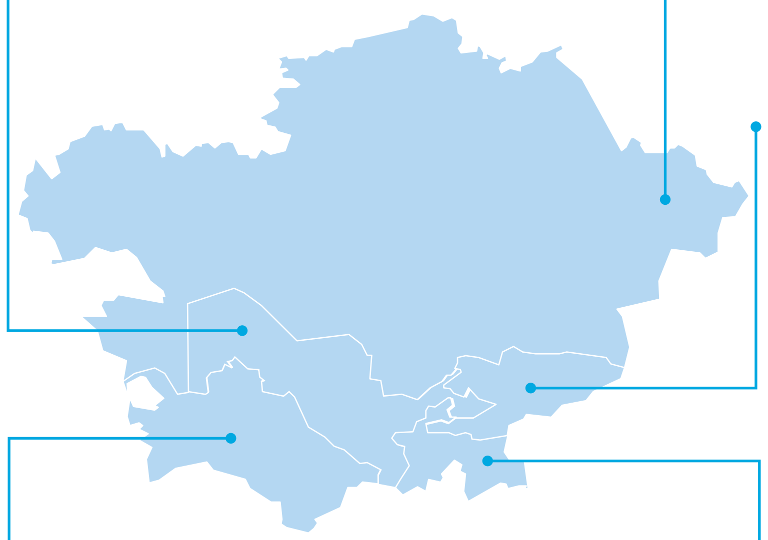
4.5%
GDP growth in 2019

The national economy is resilient, with Kazakhstan demonstrating a sustainable economic growth rate of 4.2% on average over the past 10 years. GDP growth in 2019 was at 4.5%, outpacing the growth rates in 2014–2018.

CENTRAL ASIA'S ECONOMIC INDICATORS

Uzbekistan	Indicators
GDP, USD bln (2018)	50.5
GDP growth, % (2018)	5.1
External trade, USD bln (2018)	28.2
Exports, USD bln (2018)	10.9
Imports, USD bln (2018)	17.3
Moody's|S&P|Fitch	B1|BB-|BB-

Kazakhstan	Indicators
GDP, USD bln (2019)	**179**
GDP growth, % (2019)	**4.5**
External trade, USD bln (2019)	**96.1**
Exports, USD bln (2019)	**57.7**
Imports, USD bln (2019)	**38.4**
Moody's|S&P|Fitch	**Baa3|BBB-|BBB**



Kyrgyzstan	Indicators
GDP, USD bln (2018)	8.1
GDP growth, % (2018)	3.5
External trade, USD bln (2018)	6.7
Exports, USD bln (2018)	1.8
Imports, USD bln (2018)	4.9
Moody's|S&P|Fitch	B2|-|-

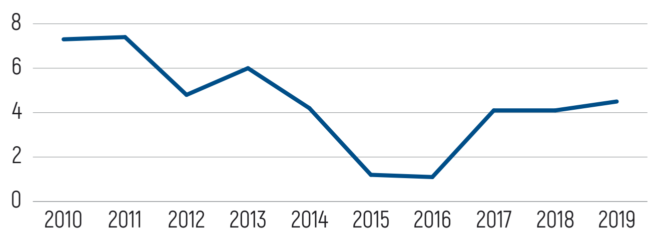
Turkmenistan	Indicators
GDP, USD bln (2018)	44.1
GDP growth, % (2018)	6.2
External trade, USD bln (2017)	18.0
Exports, USD bln (2017)	7.8
Imports, USD bln (2017)	10.2
Moody's|S&P|Fitch	-

Tajikistan	Indicators
GDP, USD bln (2018)	7.5
GDP growth, % (2018)	7.3
External trade, USD bln (2018)	4.3
Exports,USD bln (2018)	1.1
Imports, USD bln (2018)	3.2
Moody's|S&P|Fitch	B3|B-|-

Source: Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan (CIS Key Indicators), Bloomberg (ratings as at 16 March 2020), Intracen (Kazakhstan's foreign trade)

In 2015, the NBK introduced inflation targeting and reduced inflation from a double-digit rate of 17.7% in July 2016 to 5.3% in December 2018 and 5.4% in December 2019, in line with the NBK's inflation target of 4–6% for 2019–2021. In December 2019, inflation expectations were stable and close to underlying inflation.

GDP GROWTH, %



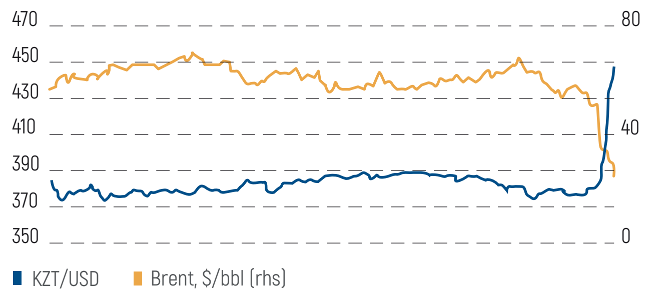
Source: Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan

On 10 March 2020, the NBK made an unplanned decision on the base rate to maintain price stability amidst heightened external risks. The NBK increased the base rate to 12% with widened interest rate corridor to +/- 1.5 pp from 9.25% (interest rate corridor: +/- 1 pp).

In line with the inflation targeting regime, floating exchange rates were introduced in 2015. The NBK reserved the right to smooth out significant exchange rate fluctuations through interventions.

At year-end 2019, Kazakhstan's tenge settled at 382.6 vs. US Dollar. In 2019, tenge traded on average at 382.9 vs. US Dollar, having weakened by 11.0% year-on-year. On 19 March 2020, tenge settled at 448.5 vs. US Dollar, implying a 17.2% weakening year-to-date, largely reflecting a drop in oil prices.

KZT/USD VS. BRENT CRUDE PRICES



Source: Bloomberg, the National Bank of Kazakhstan

Since 2004, Kazakhstan's sovereign credit ratings from leading rating agencies S&P, Moody's, and Fitch have remained at investment grade.

	Moody's	S&P	Fitch
Kazakhstan	Baa3 (positive)	BBB- (stable)	BBB (stable)

As of 16 March 2020

GOVERNMENT DEBT

The level of government debt is among the lowest in most emerging markets. According to Fitch rating's estimates, gross general government debt was at low of 18.2% of GDP at year-end 2019, compared to 'BBB' median of 41.1%.

NATIONAL FUND'S ASSETS

The National Fund's assets remain solid, accounting for 34.4% of GDP at year-end 2019. Going forward, this figure is expected to exceed 30% of GDP in accordance with the Concept for the Formation and Use of Funds of the National Fund of the Republic of Kazakhstan. The main purpose of the National Fund is to preserve financial resources through building savings for future generations of the country and reducing the dependence of the state budget on the dynamics of commodity markets.

34.4%
of the National Fund's assets to GDP

INVESTMENT AND BUSINESS CLIMATE

Over the past two years, Kazakhstan has jumped 11 places in the World Bank Doing Business 2020, now ranking 25th out of the 190 countries. Kazakhstan ranks 7th among 190 countries in "Protection of minority investors" indicator. The Government has successfully implemented reforms pursued under the Concept of State Regulation of Business Activity until 2020. In 2019, the Government continued to consider new legislative initiatives to foster an enabling business environment in the country. In 2005 – 2019, gross FDI inflow in Kazakhstan amounted to approximately USD 314 bln from 120 counties.

25th place
taken by Kazakhstan in the 2020 Doing Business ranking

STRATEGIC DIRECTION

The investment-grade sovereign credit ratings support KMG's credit ratings, contributing to KMG's strategic initiatives in maintaining access to international capital markets.

KAZAKHSTAN'S NEW ENVIRONMENTAL CODE

On 24 December 2019, the Government approved a draft of the new Environmental Code of the Republic of Kazakhstan. At the end of 2019, the draft Environmental Code, prepared with consideration to public opinion and OECD best practices, was submitted to the Majilis (Lower Chamber) of Kazakhstan's Parliament. The draft is currently under consideration and scheduled to enter into force on 1 January 2021. To implement the new Environmental Code, the Government of Kazakhstan has started developing the Best Available Techniques Not Entailing Excessive Costs (BATNEEC) guidelines with the involvement of the International Green Technologies and Investment Projects Centre (the "Centre"). In 2020, the Centre plans to conduct comprehensive technology audits of KMG refineries and upstream assets.

81 For more details see the Sustainability management section

STRATEGIC DIRECTION

KMG is a key stakeholder in the development of environmental legislation. KMG is an active member of relevant associations and ministerial-level working groups, taking an active role in the development and discussion of the new version of the Environmental Code of the Republic of Kazakhstan. In 2019, the Company approved its Environmental Policy as prioritised by the development strategy. KMG and its subsidiaries take a zero-tolerance approach to environmental harm caused by pollution. Rolled out in 2019, KMG Group's Emissions Management Policy is aimed at complete elimination of routine flaring and comprises eight key principles, six of which directly address climate change.

NEW EXPLORATION PROGRAMME

In the first half of 2020, a draft State Geological Exploration Programme for 2021–2025 is expected to be considered by the Government, outlining a range of measures to improve legislation, attract investment by offering tax incentives, and simplify the regulation of subsoil use.

The programme aims to step up exploration activities in promising underexplored areas of Kazakhstan. The state investment will be provided to encourage geological and geophysical studies in five promising basins: Aral, Syr Darya, Priirtysh, Shu-Sarysu, North-Turgai.

According to KAZENERGY Association's 2019 report, extensive exploration programmes in previous years have resulted in a huge wealth of geological and geophysical data, minimising the geological risk in selecting new prospects for subsoil use. Vast exploration opportunities in the promising underexplored areas of Kazakhstan support the investment case for the oil and gas industry.

KMG's Geology and Exploration team is strongly focused on analysis and modelling of petroleum systems within the main sedimentary basins of Kazakhstan, such as the Caspian, Mangyshlak, Ustyurt-Bozashin, and South-Turgai. This contributes to the investment appeal of hydrocarbon exploration in Kazakhstan.

STRATEGIC DIRECTION

KMG is committed to increasing its oil reserves and plans to ensure reserves growth through organic and inorganic growth. At the same time, KMG is focused on maximising the economics of its exploration and production activities.

STRATEGIC PRIORITIES

In 2019, KMG's Development Strategy was extended in terms of gas reserves increase and assurance of efficient gas use in the domestic market. These changes were directly related to the expected increase in natural gas consumption in Kazakhstan and the Company's intention to leverage the export and transit potential of natural gas.

MISSION

Ensuring maximum shareholder benefits from the development of the national oil and gas sector

VISION

A highly effective, vertical integrated Company – National Oil and Gas Leader that meets the highest safety and corporate governance standards

STATEGIC GOALS

1 VALUE CREATION FOR SHAREHOLDERS BY IMPROVING PRODUCTION EFFICIENCY AND INVESTMENT IN GROWTH

2 DIGITALIZATION AND PROCESS OPTIMIZATION

3 IMPLEMENTATION OF BEST PRACTICES IN SUSTAINABILITY AND CORPORATE GOVERNANCE

4 MAINTAINING FINANCIAL STABILITY

STRATEGIC RESULTS FOR KMG

- IMPROVED FREE CASH FLOW AND BETTER INVESTMENT RETURNS
- OPTIMISED BUSINESS PROCESS AND ADOPTION OF A NEW OPERATING MODEL
- ETHICS, COMPLIANCE, AND CORPORATE CULTURE
- EMBEDDING DIGITAL SOLUTIONS ACROSS THE VALUE CHAIN
- SUSTAINABLE DEVELOPMENT AND ENVIRONMENTAL RESPONSIBILITY

STRATEGIC RESULTS FOR SHAREHOLDERS

INCREASE IN COMPANY VALUE

INCREASE IN SHAREHOLDER DIVIDENDS

2018–2028 DEVELOPMENT STRATEGY

VALUE CREATION FOR SHAREHOLDERS

In this area, KMG will mainly focus on its core business, organic growth and improved operations across all key segments.

KMG plans to boost oil output and maintain production from existing assets while continuing to adopt advanced technology and implementing digitalisation projects across its fields. KMG also intends to expand its oil and gas resource base to ramp up international and domestic supplies of hydrocarbons and oil products.

To effectively leverage its oil and gas transportation potential and enhance its exports and transit businesses, the Company is committed to optimising the use of its oil and gas pipeline networks. The upgrade of the oil transportation network and new trunk gas pipelines have provided the Company with the necessary transportation capacities to accommodate the rising domestic production and international transit.

The Company has completed the upgrade of Kazakhstan refineries to boost throughput and increase the yield of light products. As a result, KMG has achieved an important strategic goal for Kazakhstan by fully meeting the domestic demand for oil products.

The Company carefully selects and prioritizes investment projects, considering only highly profitable projects for investments.

DIGITALISATION AND PROCESS OPTIMISATION

A strategic priority for KMG includes building a transparent value chain across all subsidiaries, and joint ventures, including through automating end-to-end IT solutions and aligning processes.

In May 2019, at the Meeting of Management Council of Samruk-Kazyna JSC, a decision on the transition from the Transformation Programme to the Digital Transformation Programme was made, which is a crucial competitive advantage in an innovation-driven world.

Inspired by the Fund's new vision, KMG has designed its approach to developing a project portfolio under the Digital Transformation Programme, which provides for phased digitalisation across all business lines.

The goals of the Digital Transformation Programme include:
1. Maintain efforts to achieve the Company's strategic goals
2. Gain tangible benefits
3. Refocus on core operations
4. Improve operational efficiency
5. Implementation of a data-driven approach to managing the Company (Data-Driven Company)
6. Unlock new opportunities through Industry 4.0.

Transition to digital technologies is implemented under a phased approach considering existing maturity and digital literacy levels as well as the availability of automation systems at facilities. These goals are achieved through initiatives and projects currently implemented under the Digital Transformation Programme such as Smart Field, Building a Digital General Plan and 3D Model for Kazakhstan Oil Refineries, Adopting a Data Management System, Adopting an Information Security System as part of the Cybershield, Ride Management (Vehicle GPS Monitoring), etc.

On 22 January 2020, a kick-off meeting was held, which discussed the development of the KazMunayGas Digitalisation Strategy. KMG is currently working on the vision for the Company's further digital development focusing on both the approach to selecting digital solutions and on building a new digital corporate culture through changing employee mindsets and behaviours at all levels from top managers at the Corporate Centre to contributors across subsidiaries.

IMPLEMENTATION OF BEST PRACTICES IN SUSTAINABILITY AND CORPORATE GOVERNANCE

KMG is committed to aligning operations with sustainability principles, and economic, environmental and social goals. The Company seeks to be in the top quartile across all ESG metrics and integrated ESG goals within the framework of strategic and medium-term KPIs for executives.

As a major national employer, the Company recognises and meets its important social commitments inspired by principles of partnership with its employees and trade unions.

KMG is committed to enhancing business through greater transparency of operations and adherence to high corporate governance standards. In 2018, the Company approved its new Code of Business Ethics outlining corporate values and defining key principles and rules of business conduct as well as the requirements of corporate ethics binding on all employees. The Company intends to continue monitoring the evolution of global standards to further improve its corporate governance framework while meeting the interests of all stakeholders.

MAINTAINING FINANCIAL STABILITY

The Company is committed to prudent capital allocation policy and focuses on maximization of shareholder return through the cycle. The Company seeks to adhere to conservative financial policy maintaining balanced debt profile and securing a strong liquidity position.

KPI SYSTEM

Our KPIs are based on key financial, economic and sector targets set out in the Company's consolidated Business Plan and division-level targets. The KPIs are cascaded on a top-down basis. Individual KPIs are based on strategic objectives set for a specific leader. KPIs and targets for members of KMG's Management Board are set by the Board of Directors.

KEY PERFORMANCE INDICATORS

KPI	Unit of measurement	2017	2018	2019
Net income[1]	KZT bln	443	696	1,197
ROACE[2]	%	6.9	8.1	11.5
Debt/EBITDA[3]	Ratio	4.24	2.50	2.1

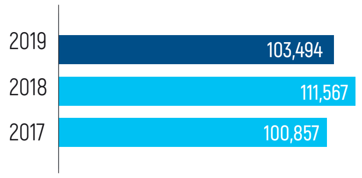
OPERATIONAL KPIS

OIL AND CONDENSATE PRODUCTION, THOUS. TONNES

GAS PRODUCTION, MLN M³

OIL TRANSPORTATION, THOUS. TONNES

GAS TRANSPORTATION, MLN M³



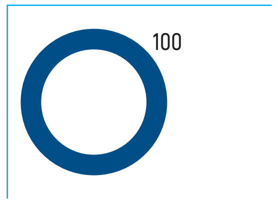
REFINING AND PROCESSING, THOUS. TONNES

Our compensation system for executives and managers focuses on results, motivation, and improving productivity and operational efficiency and includes short-term benefits for achieving KPIs.

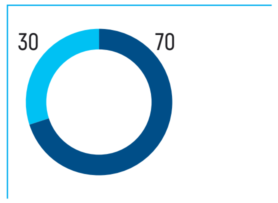
A specific formula is used to calculate each KPI (with adjustments subject to existing macro indicators). Corporate and functional KPIs are distributed across the final motivational KPI scorecards as follows:

EMPLOYEE STATUS

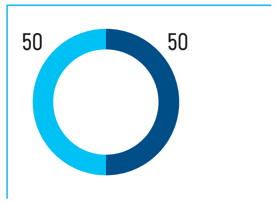
CHAIRMAN OF THE MANAGEMENT BOARD



EXECUTIVE (OTHER THAN THE CHAIRMAN OF THE MANAGEMENT BOARD)



MANAGER



■ Corporate KPIs
■ Functional KPIs

1. Net Income attributable to the parent company's interest.
2. ROACE = (profit for the year + compensation costs adjusted for tax payments)/average capital employed.
3. As per approved methodology of Samruk-Kazyna JSC.

SUMMARY OF PROJECT IMPLEMENTATION ALIGNED WITH STRATEGIC PRIORITIES

Investment projects are implemented to advance progress towards KMG's strategic goals, i.e. to achieve reserves growth, increase oil and condensate production, grow gas exports to China, and supply the domestic market with oil products and sales gas.

KMG is committed to smart and efficient capital allocation with a focus on priority projects aligned with our strategic goals and targets for cash flows, debt reduction, and higher returns on equity to drive shareholder value growth.

TRANSITION TO INVESTMENT AND PROJECT PORTFOLIO MANAGEMENT

Aimed at effectively achieving strategic goals under KMG's Development strategy the Company started a transition to portfolio-based investment management in 2019. One tool of the portfolio-based investment management is project ranking, prioritizing highly efficient strategically important projects.

Prioritized portfolio of projects based on their ratings enables effective allocation of the Company's set limited financial resources, leading to increased competition for investments in the business segments.

In 2019, the Company also launched an initiative to introduce a project management system. The system aims to improve the quality of planning and implementation of investment projects by applying the best practices of project management from the world's oil & gas companies.

In 2020, it is planned to introduce a unified project management standard for the Company, conduct full-scale training for participants of project management and launch an information system to control and monitor projects.

In general, the objectives of the reorganization of the investment process in 2019 and for the future are aimed at improving existing processes to increase the maturity of the Company in terms of investment management and project management.

INVESTMENT PORTFOLIO OVERVIEW

KMG's investment portfolio encompasses development projects related to various business segments in the medium and long term. As previously, KMG devotes significant resources to the implementation of oil exploration and production projects. Projects for the development of the oil and gas transportation infrastructure of Kazakhstan also continue to be actively implemented. Completed refinery modernization projects have enabled the production of K4 and K5 quality oil products and increased refining depth. In addition to the upstream, midstream and downstream projects, KMG is also interested in implementing social and environmental projects.

UPSTREAM

In the context of KMG's strategic initiative for Improving Operational Efficiency under the Strategic Goal "Value creation for shareholders by improving production efficiency and investment in growth", driving increases in reserves and cost-effective production are among the Company's top priorities.

Approximately 40% of KMG's investment portfolio relates to oil and gas exploration and production projects. These projects are funded both directly by KMG and in conjunction with strategic partners on a parity basis. For example, several offshore projects are implemented on the basis of carry financing (Abay, Isatay, Zhenis, I-P-2, Bekturly Vostochny), where capital investments at the exploration stage are borne only by KMG's strategic partner. In the event of hydrocarbons discovery, KMG and its partner finance production at subsequent stages of the project implementation.

KMG holds interests in mega projects Tengiz (20%), Karachaganak (10%) and Kashagan (8.44%).

Tengizchevroil is implementing two integrated projects – the Future Growth Project (FGP) and the Wellhead Pressure Management Project (WPMP). The implementation of the projects will boost oil production from Tengiz field by 12 mln tonnes per year.

Approximately 40% of KMG's investment portfolio relates to oil and gas exploration and production projects

At Kashagan field, as sustainable production rates are achieved, two projects are under consideration under Phase 1 to ramp up to plateau production capacity. A FID for the projects is expected in the first half of 2020.

The Karachaganak oil and condensate field is in Phase 2 development (Stage 2M), which includes several major Capex projects, aimed at increasing raw gas treatment and reinjection capacity to extend the duration of the liquid hydrocarbon production plateau at the achieved rates.

38 For more details see the Operating Review section

OIL AND GAS TRANSPORTATION

Oil and gas transportation projects are implemented to advance KMG's strategic initiative of Improving Operational Efficiency under the Strategic Goal "Value creation for shareholders by improving production efficiency and investment in growth".

OIL TRANSPORTATION

Oil transportation is a strategic segment of KMG's asset portfolio to maintain access to markets, and a diversified oil transportation system with high transit and export potential has been built.

In 2019, the Company was focused on implementing two major projects:

- The flow reversal project at the Kenkiyak–Atyrau oil pipeline (reversing the flow to carry oil from Atyrau to Kenkiyak and beyond), which started in 2018. The project is aimed at supporting oil supplies from West Kazakhstan to Kazakhstan oil refineries, and bolstering exports to China. The start of oil flow reversal is scheduled for 2020.
- A project to remove bottlenecks in the Caspian Pipeline Consortium's oil pipeline system, approved by shareholders in July 2019. The project aims to increase the capacity of the Kazakhstan section within the Tengiz–Astrakhan–Novorossiysk pipeline to 72.5 mln tonnes per year, with a view to expected higher oil production from Tengiz and Kashagan. The project is expected to be implemented in 2019-2023.

GAS TRANSPORTATION AND MARKETING

The Company has successfully completed the construction of the gas transportation infrastructure to support domestic and export gas sales, and the medium-term challenges include increasing utilisation rates for existing capacity and ensuring operating cost control.

56 For more details see the Oil Transportation section

Under the Development of the Amangeldinskaya Group of Deposits project, progress was made on the Barkhannaya-Sultankuduk exploration cluster, with the seismic programme scheduled for the next two years.

The construction of the Beineu–Bozoi–Shymkent gas pipeline continued. The project, whose timeframe spans 2011–2021, is to transport up to 15 bln m³ of gas per year from the western fields of Kazakhstan, supply gas to the southern regions of Kazakhstan, and diversify gas exports. The Beineu–Bozoi–Shymkent gas pipeline is the largest pipeline project in Kazakhstan's post-Soviet history and has an important role to play in improving the energy security of the nation.

OIL REFINING

Oil refining projects are implemented to advance KMG's strategic initiative of Improving Operational Efficiency under the Strategic Goal "Value creation for shareholders by improving production efficiency and investment in growth".

In 2019, the Company completed the remaining works of major investment projects, including a refinery modernisation programme in Kazakhstan. Following the completion of the extensive upgrade of Kazakhstan's leading refineries – Atyrau, Pavlodar, and Shymkent refineries – the throughput capacity and refining depths were increased, oil product quality was elevated to meet the K-4 and K-5 (equivalent to Euro-4 and Euro-5) standards, and oil products were exported for the first time.

Under the framework of the Kazakh-Romanian Fund KMG International N.V. 25 filling stations (Stage 1) are under construction in Romania aimed at developing a retail network for the sale of petroleum products.

65 For more details see the Downstream section

Pavlodar Refinery is making progress on its Yertis project, which will allow for the production of winter diesel fuels with a cloud point of –32°C or lower.

Reaffirming its commitment to best practices in health, safety, and environment management (HSE), in 2019 Atyrau Refinery started designing and constructing new treatment facilities for its site as part of the Tazalyk project. Modernization of treatment facilities is planned in two stages: upgrade and retrofit of the first mechanical wastewater treatment train in 2019–2021, and the retrofit of the biological wastewater treatment facility and construction of an advanced treatment facility in 2019–2023.

85 For more details see the Environmental responsibility and safety section

SERVICE PROJECTS

KMG's service projects are not capital heavy, offer quick returns, and are mainly focused on enhancing oilfield services provided to major oil and gas assets.

70 For more details see the Service projects section

TRANSFORMATION AND DIGITALISATION

In 2019, taking into account the growing role of digital technologies in the modern world, Samruk-Kazyna JSC announced the transition to digital transformation for all portfolio companies. The new approach to the implementation of the Digital Transformation Programme is based on principles, including simplicity, clarity, and the presence of real benefits.

Given the new vision of the Fund, KMG implemented measures to update the portfolio of the Digital Transformation Programme (hereinafter - DTP). The following key criteria are used to select the projects:

- Comprehensive change of people, business processes and technologies;
- The scale of change;
- Real economic effect/support strategic KPI.

On 4 September 2019, KMG's Board of Directors approved the Roadmap of the Digital Transformation Programme for 2019-2024. At year-end 2019, the KMG DTP portfolio included 14 projects and 14 measures within 8 initiatives:

1. Ensuring industrial safety;
2. High-performance culture;
3. Reengineering of production and corporate business processes;
4. The new Procurement model in the Fund's Group;
5. Increased operational efficiency through data analysis;
6. Implementation of Cybershield project in the Fund's Group;
7. Digital Business Solutions;
8. Improving the efficiency of IT.

In 2019, 3 projects and 2 measures under the Digital Transformation Programme were implemented. This includes the "Implementation of a new model for maintenance and repair management (MRM) project at Mangistaumunaigas JSC» in the upstream segment. Under the project, the Company automated MRM processes: an operational and strategic management tool was implemented through the planning of schedule for planned production repairs of equipment on an annual and monthly basis, as well as the prioritized implementation of critical work. KMG introduced a mechanism for generating operational and analytical reports based on data on planning and control of maintenance costs and costs to repair oilfield equipment.

In the downstream segment, KMG completed the project "Implementation of Production Planning Optimization at KMG Refineries" based on the software "Spiral". It resulted in high accuracy of planning, aligned an interaction between the structural divisions of plants and its head office during the business planning process, and ensured transparency of planning. The planning process is managed at the corporate centre level. Given the introduction of production planning optimization, KMG already recoded the improved yield of oil products. This is expected to contribute to cost reductions and better competitiveness of refineries.

Another project in the downstream segment is Transition of refineries in the Republic of Kazakhstan to a 3-year overhaul period (including maintenance and equipment repair management system). It created conditions to increase the volume of oil refining, reduce repair costs, reduce the risk of emergencies, as well as allow shutdowns of refineries for repairs not in every year, but every three years.

In 2019, three new projects were added to the Digital Transformation Portfolio: Implementation of the Lean 6 Sigma programme in the Oil and Gas Production business segment, Implementation of an Information Security Management System, and Travel Management. The applied systematic approach to the formation of the DTP Portfolio stimulates business units to initiate new projects that provide real benefits.

The development of KMG Digitalisation Strategy is planned for 2020. The document will determine priorities for the implementation of digital technologies in KMG Group reflecting its value chain. It also will identify opportunities and evaluate the potential effect of digitalization and indicate the focus within business segments and projects.

Under the development of the Digitalisation Strategy, an initial assessment of digital state at KMG will be carried out. With joint efforts with the business units, KMG transformation and digitalisation unit will start developing and detailing initiatives which will be integrated into the Roadmap and focused on digitalizing critical business processes.

Under the Strategy implementation, each KMG subsidiary will develop its digital technology implementation programme. At the corporate centre level, digitalisation will focus on the implementation of "end-to-end", "integration", and system-methodological projects.

In line with the new approaches, KMG plans to continue the implementation of two major initiatives of Digital Transformation - Smart Field, and Transformation of the main business functions of ERP (ERP).

The purpose of the Smart Field Programme is to build a system for managing the field development process and production control to maximize the economic efficiency of field and increase the life cycle of oil reservoir. At present, KMG develops the Development Concept for the implementation of the Smart Field Programme, which will determine the unified approaches for the selection, design and implementation of processes and technologies under the Smart Field project at KMG.

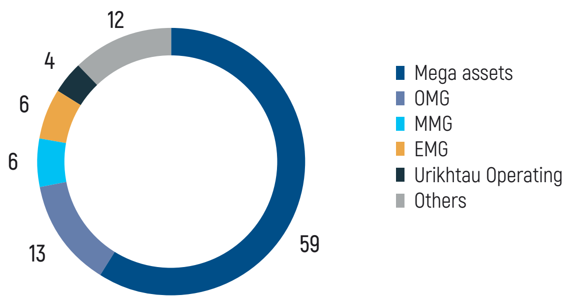
On the ERP side, in line with the new approach, ERP will transform to the Programme of projects, under which instead of a single installation for all subsidiaries and affiliates, the implementation of the ERP system based on the S4/HANA product will be carried out through standardization of business processes of divisions (master plans) and testing at pilot subsidiaries.

During 2019, KMG prepared a solid foundation for the implementation of Digital Transformation, increased the involvement of project sponsors, and ensured the continued efficient implementation of key transformational initiatives.

OPERATING REVIEW

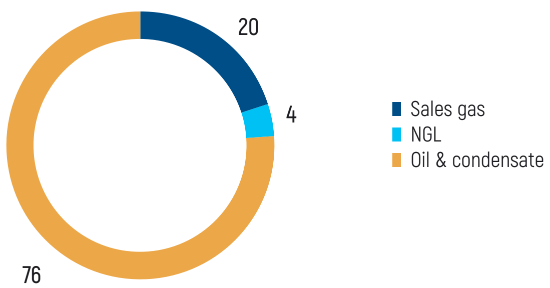
RESERVES

2P RESERVES BREAKDOWN BY ASSET (NET TO KMG), % (2019YE)



Reaffirming its commitment to transparency, KMG, for the first time ever, disclosed a summary of its reserves report prepared under the internationally used PRMS guidelines. According to the reserves audit by the international independent consulting firm DeGolyer & MacNaughton, KMG's proved plus probable hydrocarbon (2P) reserves were at 676 mln tonnes of oil equivalent (5,220 mmboe) as of 31 December 2019.

2P RESERVES BREAKDOWN BY HYDROCARBON TYPE (NET TO KMG), % (2019YE)



The proved reserves (1P) life of oil and condensate is 16 years (based on 2019 production level), far exceeding the average for the global oil majors (about 12 years).

23 years
2P reserve life ratio of oil and condensate at 2019 production level

NET RESERVES[1] UNDER PRMS (NET TO KMG), YE2019

Reserves	Oil and condensate, mln barrels	NGL, mln barrels[2]	Commercial gas, bcf	Hydrocarbon reserves, mmboe
Proved (1P)	2,825	168	5,204	3,860
Proved plus Probable (2P)	3,993	189	6,228	5,220
Proved plus Probable plus Possible (3P)	4,686	224	7,070	6,089

Reserves	Oil and condensate, mln tonnes	NGL, mln tonnes[2]	Commercial gas, bcm	Hydrocarbon reserves, mmtoe
Proved (1P)	371	14	147	499
Proved plus Probable (2P)	524	16	176	676
Proved plus Probable plus Possible (3P)	616	19	200	790

6,000 cf = 1 boe; 1 cm = 35.31466 cf; 1 ton ~ 7.62 barrels.

[1] Net Reserves are defined as that portion of the gross reserves attributable to (1) the interest held by KMG after deducting all interests held by others, as well as (2) interests that are not held by KMG, but which KMG controls.
[2] Natural gas liquids.

EXPLORATION

STRATEGIC OBJECTIVES IN ENSURING GROWTH IN RESERVES

Organic growth	Inorganic growth
• Carry out exploration at current contract areas using own funds and carry financing • Carry out further exploration at operating assets using the Company's own funds • Attract strategic partners for joint exploration and development of new fields under carry financing arrangements, specifically, with a focus on deep Paleozoic deposits and offshore fields	• Consider acquiring oil and gas assets in Kazakhstan (the Caspian Sea coastal area (~90% of Kazakhstan's total reserves) has a huge potential for notable discoveries)

KMG's portfolio consists primarily of mature fields, which prioritises exploration as part of the long-term strategy to maintain stable production levels. This requires a focus on execution and operational excellence, the search for resource replenishment solutions and unlocking new reserves and bringing them online both at new and mature fields, based on the results of further exploration activities.

Additions to oil reserves are expected to be driven through both organic and inorganic growth. Growth in KMG's reserves will rely on the implementation of exploration projects onshore and within the Kazakhstan sector of the Caspian Sea, and going forward, with further exploration in licenses operated by our subsidiaries. In 2019, KMG's portfolio comprised 16 exploration projects, of which 8 were offshore and 8 onshore.

KMG is conducting comprehensive studies of Kazakhstan's sedimentary basins to assess their oil and gas potential and build a portfolio of promising blocks for subsoil use. In 2019, we completed the models of the Ustyurt-Bozashin sedimentary basin's petroleum system and the Pre-Caspian sedimentary basin flanks (North, East and South), along with the tectonic-sedimentary model of the South Turgay sedimentary basin.

A portfolio of five new promising subsoil use projects was built, including 15 projects for inclusion in the National Acreage Management Programme and five projects for state geological surveys in accordance with Kazakhstan's Subsoil and Subsoil Use Code.

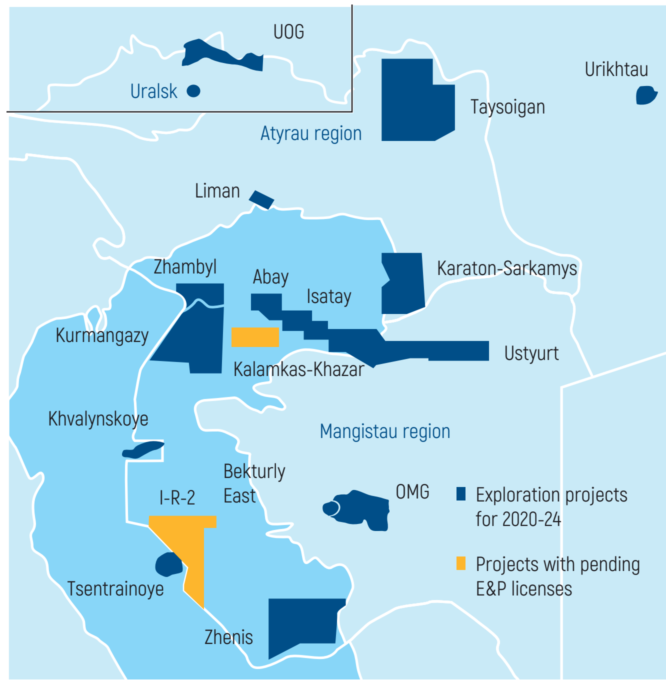
In addition, the Company carried out extensive seismic field surveys over promising areas within the Pre-Caspian, Mangyshlak and South Turgay sedimentary basins, and over offshore areas of the Caspian Sea. One of the year's highlights was the completion of seismic field surveys over the Taisoigan area, acquiring a total of 5,600 sq. km of data, the largest high-resolution seismic survey project in the modern history of our nation.

Exploration drilling programmes were also completed in the Urikhtau and Bekturly East areas, which resulted in the identification of the Jurassic, Triassic and Permian-Carboniferous oil and gas prospects. Test programmes have been scheduled for 2020.

Exploration costs totalled KZT 53 bln (excluding shares) in 2019.

Exploration	2017	2018	2019
2D seismic, linear km	-	1,000	240
3D seismic, sq. km.	4,299	1,253	6,928
Number of wells drilled	50	54	39

SIGNIFICANT EXPLORATION OPPORTUNITIES



EXPANSION OF PARTNERSHIP PROJECTS

During the year KMG continued to expand its cooperation in exploration with international oil and gas companies:

- On 11 February 2019, to facilitate participation in drilling projects within the Azerbaijan sector of the Caspian Sea, we gave the go-ahead for a KZT 21.6 bln (USD 57 mln) capex project to upgrade our jack-up drilling rig. To implement the project, KMG Drilling&Services and Caspian Drilling Company signed a trusteeship agreement to transfer the Satti jack-up drilling rig to Caspian Drilling Company for modification and further operation on subsoil use projects within the Azerbaijan sector of the Caspian Sea. The rig modification project is currently in progress, with the trustee currently in talks with BP Azerbaijan on the terms of a drilling contract to use the Satti rig at the Shallow Water Absheron Peninsula project.

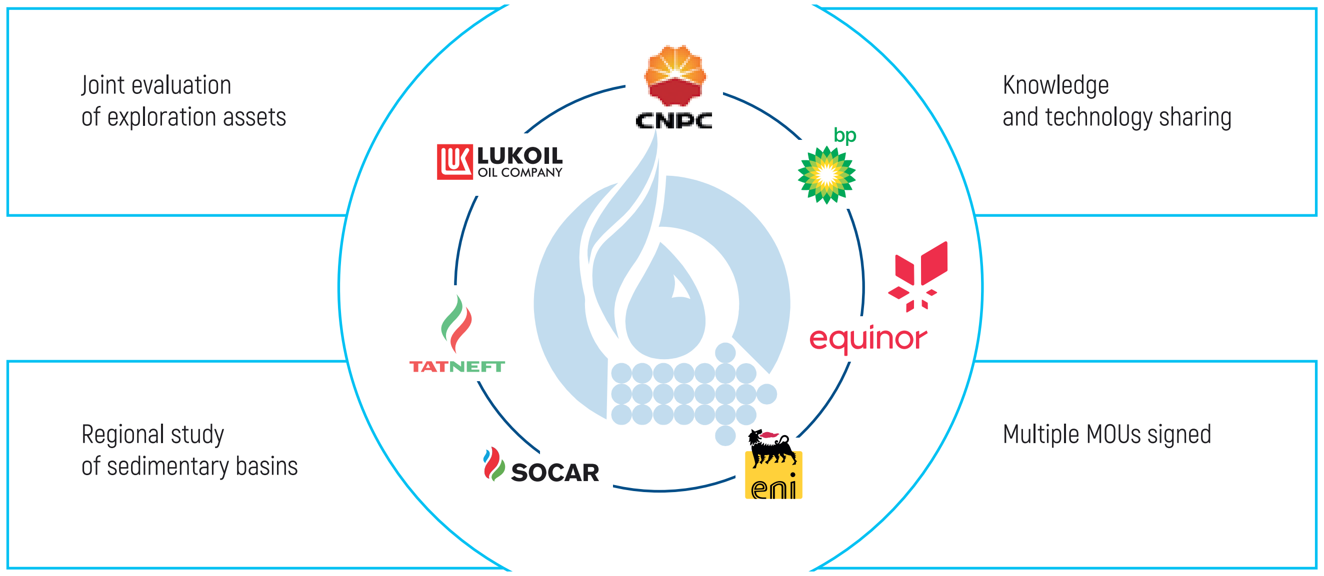
70 For more details see the Service projects section

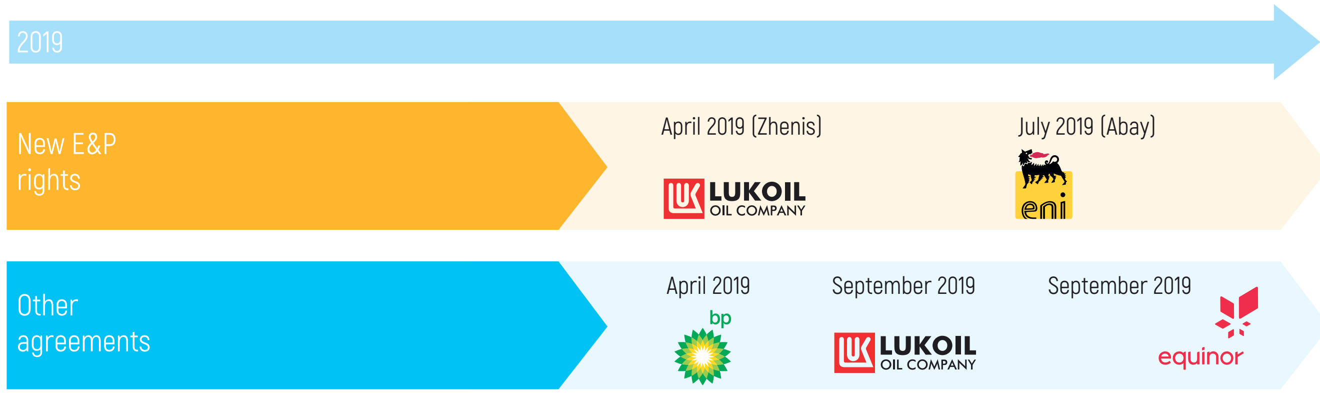
- On 17 May 2019, KMG and British Petroleum (BP) signed a memorandum of understanding to jointly review the available technical data and existing assets of KMG and third parties.
- On 20 September 2019, KMG and LUKOIL signed an agreement on the joint study of areas within the territory of the Republic of Kazakhstan.
- On 24 September 2019, KMG and Equinor signed a joint study agreement providing for geological and geophysical studies to assess the hydrocarbon potential of oil and gas areas in Kazakhstan.

Given the recent amendments to the national tax and subsoil use laws aimed at stimulating new exploration, in 2019 KMG focused on attracting strategic partners to new subsoil use projects.

- On 1 April 2019, the Ministry of Energy of the Republic of Kazakhstan, KMG and PJSC LUKOIL (LUKOIL) signed a contract for the exploration and production of hydrocarbons at the Zhenis block, located in the Kazakhstan sector of the Caspian Sea. According to a joint estimate by KMG and LUKOIL, the block's projected recoverable resources (C3) are 65.1 mln tonnes. The project operator is Zhenis Operating LLP (a 50/50 joint venture between KMG and LUKOIL).
- On 7 June 2019, KMG and LUKOIL signed the heads of agreement for the I-P-2 project covering the block of the same name located in the Kazakhstan sector of the Caspian Sea. According to a preliminary estimate by LUKOIL, the block's projected recoverable resources (C1) are 15.1 mln tonnes. Both companies plan to sign a contract with Kazakhstan's Energy Ministry for the exploration and production of hydrocarbons at the 1-P-2 block in 2020.
- On 26 July 2019, the Ministry of Energy of the Republic of Kazakhstan, KMG and Eni S.p.A. (Eni) signed a contract for hydrocarbon exploration at the Abay block, located in the Kazakhstan sector of the Caspian Sea. The project operator is Isatai Operating Company LLP (a 50/50 joint venture between KMG and Eni).

TECHNICAL COOPERATION WITH INTERNATIONAL PLAYERS





PRIORITY AREAS:

- Enhancing the innovation and technology base of production, including smart field projects at assets under development
- Removing onshore infrastructure constraints by addressing gas and water utilisation issues
- Wider adoption of polymer flooding
- Increasing oil recovery rates at producing assets
- Enhancing waterflood management
- Commissioning further exploration facilities at KMG-operated producing assets

PRODUCTION

Offsetting natural decline in production rates

KMG implements a range of measures across its operating assets to enhance operational efficiency and process discipline, release trapped reserves in order to maximise well productivity and improve the technology and economics of well interventions.

Oil and gas are produced at KMG's operating assets, as well as from mega projects where KMG has non-operating interests.

KMG participates in all major oil and condensate production projects in Kazakhstan: it has interests of 20%, 10% and 8.44% in Tengiz, Karachaganak and Kashagan, respectively.

For oil production mega projects, KMG has partnered with a number of global majors: Chevron Corp, Exxon Mobil Corp, Royal Dutch Shell PLC, Eni SpA, TOTAL SA, Inpex Corp, China National Petroleum Corp (CNPC), and PJSC LUKOIL.

OPERATING ASSETS	KMG interest
JSC Ozenmunaigas[1]	100%
JSC Embamunaigas	100%
JSC Mangistaumunaigaz	50%
JSC Karazhanbasmunai	50%
JV Kazgermunai LLP	50%
JSC PetroKazakhstan Inc.	33%
Kazakhturkmunay LLP	100%
Kazakhoil Aktobe LLP	50%
Amangeldy Gas LLP (condensate)	100%
MEGA PROJECTS (NON-OPERATED ASSETS)	KMG interest
Tengiz (Tengizchevroil LLP)	20%
Kashagan (North Caspian Operating Company N.V.)[2]	8.44%
Karachaganak (Karachaganak Petroleum Operating B.V.)	10%

[1] Also includes KazGPZ LLP (condensate).
[2] KMG has a 50% interest in KMG Kashagan B.V., which in turn holds a 16.88% interest in the Kashagan mega project.

485 kbopd
oil and condensate production level

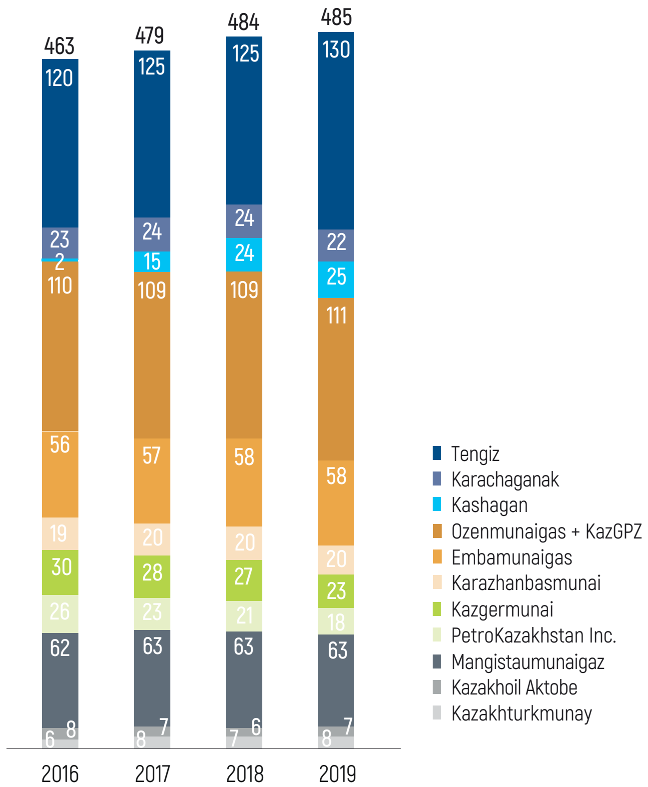
OIL PRODUCTION

In 2019, KMG's oil and condensate production remained stable at 23.6 mln tonnes, or 485 kbopd, almost flat year-on-year. We reaffirmed our status as the national oil and gas leader with our share of total oil and condensate production at 26% in 2019.

Our consistently high level of oil and condensate output is supported by increased production from mega projects and effective management of KMG-operated producing assets. KMG maintains a well-balanced asset portfolio with significant growth potential. The share of operating and mega projects in total oil and condensate production was 65.5% (15.5 mln tonnes) and 34.5% (8.1 mln tonnes), respectively.

[1] Assuming individual bbl/tonne conversion rates used for each asset.

OIL AND CONDENSATE PRODUCTION BY ASSET (NET TO KMG), KBOPD[1]



MEGA PROJECTS

World class projects developed in partnership with leading global integrateds.

TENGIZ

Highlights:

OIL PRODUCTION (TOTAL)

29,791
ths tonnes
(651 kbopd)

OIL PRODUCTION (NET TO KMG)

5,958
ths tonnes
(130 kbopd)

DEVELOPMENT PERSPECTIVE

The implementation of FGP-WPMP will boost oil production from Tengiz by **12** mln tonnes per year

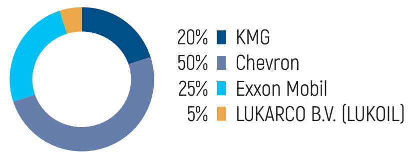
2P OIL RESERVES LIFE

Over **20** years

ASSOCIATED GAS PRODUCTION (TOTAL)[1]

16.3
bln m³

INTERESTS, %



OPERATORSHIP
- Tengizchevroil LLP

The premier asset of Kazakhstan's Oil & Gas industry. Tengiz ranks as the world's deepest producing super giant oil field and the largest single-trap producing reservoir in existence.

Tengizchevroil LLP (Tengizchevroil) operates a license that includes the unique, supergiant Tengiz field and the adjacent, smaller but still significant, Korolevskoye field. The Tengiz oil field was discovered in 1979, and it is the world's deepest supergiant oil field.

Currently, oil production and processing are carried out at modern, highly reliable production facilities: KTL (throughput: 14.2 mln tonnes of processed oil in 2019), Second-Generation Plant (SGP, throughput: 15.6 mln tonnes of processed oil in 2019), and Sour Gas Injection (SGI, 3.65 bln m³ in 2019). At the beginning of 2020, the well stock comprised 156 production wells and 8 gas injection wells.

The agreement for the Tengizchevroil LLP project was signed on 2 April 1993 between the Republic of Kazakhstan and Chevron Corp. A 40-year hydrocarbon exploration and production license was granted to Tengizchevroil in 1993.

TENGIZCHEVROIL'S PRODUCT SALES

	2017	2018	2019
Oil, thous. tonnes	28,753	28,800	30,155
Dry gas, mln m³	7,447	7,532	7,941
LPG, thous. tonnes	1,377	1,345	1,332
Sulfur, thous. tonnes	2,489	2,467	2,585

Tengizchevroil is focused on the exploration, production, and sales of hydrocarbons from the Tengiz and Korolevskoye fields in the Atyrau Region.

KMG share in Tengiz's oil production increased by 4.1% to 5,958 ths tonnes (130 kbopd) while gas production grew 4.2% to 3,258 mln m³ driven by stable operation and improved reliability of KTL, SGI/SGP facilities despite production stoppages for overhauls. From 1 August to 9 September 2019, Tengiz carried out a scheduled 40-day overhaul at KTL 1.

Outlook for Tengiz

Tengizchevroil is implementing two integrated projects – the Future Growth Project (FGP) and the Wellhead Pressure Management Project (WPMP). The two projects will make a significant contribution to the national economy: the FGP-WPMP has already created about 48 thous. jobs in Kazakhstan, with about 1,000 more permanent jobs to be added to support the operation of the FGP-WPMP. The implementation of the FGP-WPMP will boost oil production from the Tengiz field by 12 mln tonnes per year.

The updated FGP-WPMP budget, given a cost increase from USD 36.8 bln to USD 46.5 bln (including a contingency reserve of USD 1.3 bln), was pending for approval by TCO Partners. TCO partners approved a cost increase of USD 45.2 bln in total under the FGP-WPMP (without approving a USD 1.3 bln contingency reserve).

Future Growth Project (FGP)

The FGP includes the construction of a 12 mln tonnes per year oil preparation plant (Third-Generation Plant, 3GP), and Third Generation Gas Injection (3GI) with an annual capacity of 9.4 bln m³, and well sites, along with well drilling. Commissioning of the 3GI and 3GP facilities is scheduled for 2023.

Wellhead Pressure Management Project (WPMP)

As part of the WPMP project, a new gathering system, pressure boost facilities, infrastructure and ancillary facilities are being constructed to maintain the current oil production rates for the existing KTL and SGP. Commissioning is scheduled for the end of 2022.

Digital projects to transform operations

In 2019, Tengizchevroil embarked on a digital transformation, developing digital solutions to improve safety, better manage risk, improve operating process efficiency and increase revenue.

- A pilot programme to monitor safety compliance has improved employee safety in the field, operating and office environments at the Tengiz field. The programme involved approximately 350 wireless sensors, boosting personal safety levels through increased situational awareness.
- The project on the visualisation and analysis of concurrent activity has enabled consolidated views of core activities and activities under the FGP to drive parallel planning. Timely identification of potential conflicts enables teams to monitor risk prevention measures, evaluate vast numbers of future on-site activities and reduce production losses.
- The Minimum Viable Product (MVP) definition project enabled comprehensive integration of Tengizchevroil business situation assessment workflow, leading to faster decision making and maximising asset value. The MVP combines rig schedules, well start-up schedules, production forecasts and solution analysis for the quick economic evaluation of development scenarios.
- Real Data Optimisation Programme. Supported by the programme, the FGP and Core Operations teams have developed more than 1,300 observation and analysis screens for real-time data visualisation, with data feeds from over 3,000 sensors covering all facilities and the newly launched "Basic" substation.
- The Automated Process Control (APC) system uses various digital methods such as data mining and simulation to develop a specific set of process settings for existing sites in real time.

TENGIZCHEVROIL'S OPERATIONAL HIGHLIGHTS

	Oil production, thous. tonnes	Associated gas production, mln m³	Dry gas production, mln m³	Liquefied petroleum gas (LPG) production, thous. tonnes	Sulphur production, thous. tonnes	Gas injection, mln m³
2017	28,697	15,860	9,237	1,382	2,566	3,097
2018	28,622	15,625	9,186	1,343	2,574	3,186
2019	29,791	16,290	9,471	1,348	2,589	3,655

[1] Includes gas concumed in operations and gas reinjection.

KASHAGAN

Highlights:

OIL AND CONDENSATE PRODUCTION (TOTAL)

14.1 mln tonnes (307 kbopd)

OIL AND CONDENSATE PRODUCTION (NET TO KMG)

1,169 ths tonnes (25 kbopd)

2P OIL AND CONDENSATE RESERVES LIFE

Over **120** years

NATURAL GAS PRODUCTION (TOTAL)

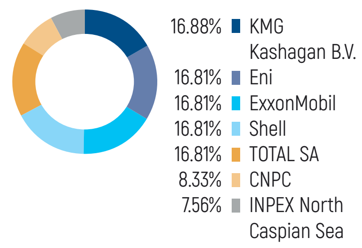
8.5 bln m³

DEVELOPMENT PERSPECTIVE

Subject to final investment decisions (FIDs) for investment projects, oil production from Kashagan has the potential to reach

450 kbopd over the medium-term

INTERESTS, %



OPERATORSHIP

- North Caspian Operating Company N.V.

The giant Kashagan field is the largest discovery in the last four decades and one of the most complex offshore deposits globally.

The North Caspian project is the first major offshore oil and gas project in Kazakhstan. It includes five fields: Kashagan, Kalamkas-Sea, Kairan, Aktoty, and Kashagan South-West fields. The areas of the Kalamkas-Sea and Kashagan South-West fields are in the process of being returned to the Republic of Kazakhstan.

The giant Kashagan field is the largest oil discovery in the last four decades. The estimated 2P oil and condensate reserves life is over 120 years at the 2019 production level.

The Kashagan field lies in an offshore location 80 km from Atyrau at water depths of 3 m to 4 m. The field reservoir lies at a depth of over 4 km and is characterised by high pressures (over 700 bar) and high hydrogen sulphide (H_2S) content. At the same time, sour gas reinjection at high pressures enables enhanced oil recovery.

Kashagan is one of the most challenging industry projects globally due to harsh environmental conditions at sea and significant design, logistics and safety challenges. Located in the subarctic climate, the North Caspian Sea is covered with ice for about five months a year, requiring innovative technical solutions. KMG, together with international partners, is successfully implementing the project, having achieved sustainable production rates with further growth potential.

The Kashagan field construction design comprises onshore and offshore facilities. Onshore facilities include the Bolashak Onshore Processing Facility while the offshore facilities comprise a range of artificial structures including an operational and processing complex on Island D, Island A, and early production islands EPC2, EPC3 and EPC4. A total of 40 wells were drilled on the Kashagan field, 6 of which are injection wells and 34 production wells.

The Production Sharing Agreement in respect of the North Caspian Sea (NCPSA) was signed by the Republic of Kazakhstan and an international consortium in November 1997. The operator is North Caspian Operating Company N.V. (NCOC), acting on behalf of the contractors.

Currently, KMG has a 50% interest in KMG Kashagan B.V., which in turn holds a 16.88% interest in the Kashagan mega project. The remaining 50% interest, or 8.44% in the project, is owned by Samruk-Kazyna JSC. According to the terms of the addendum to the Option Agreement between Cooperative KazMunayGas U.A.[1] and Samruk-Kazyna JSC, the option period for buying back a 8.44% interest in KMG Kashagan B.V. has been extended from 2018–2020 to 2020–2022.

NCOC's operational highlights

	Oil production, thous. tonnes	Associated gas production, mln m³	Sulphur production, thous. tonnes	Gas injection, mln m³
2017	8,286	4,799	1,151	321
2018	13,219	7,697	1,340	2,235
2019	14,127	8,453	1,323	3,148

In 2019, for the first time in Kashagan's history, an overhaul was successfully completed with a total shutdown of all production facilities. The repairs enabled increases in oil and gas production from onshore and offshore facilities, as well as improving the utilisation rate to 98.4%.

Oil production from the North Caspian project was 14.1 mln tonnes (307 kbopd) in 2019. Production from Kashagan peaked at around 400 kbopd in 2019, while the average daily production was 344 kbopd in Q4 2019. Associated gas production was 8.4 bln m³.

KMG's share of oil production from the Kashagan field increased by 6.9% to 1,169 thous. tonnes of oil (25 kbopd) while associated gas production grew by 10.4% to 700 mln m³.

Under the PSA terms, all oil produced from the Kashagan field is exported, including KMG's entitlement share of production. The key export destination is the port of Novorossiysk, to which the oil supplies are pumped via the CPC pipeline. KazTransGas JSC is the sole buyer of gas from all contractors at the Kashagan field, with whom a single gas purchase and sale contract has been signed.

Outlook for Kashagan

Once sustainable production rates are achieved, two projects are under consideration in Phase 1 to ramp up to plateau production capacity with the potential to grow oil and condensate production to 450 kbopd in the medium term.

- Bundle 1
- Raw gas supply to third party project

An FID for the projects is expected in the first half of 2020.

Bundle 1

To further ramp up oil production, KMG is considering increased raw gas reinjection and redistribution of gas to other islands through:

- upgrades to the interior parts of the two existing compressors on Island D to increase their capacity
- laying an ultra-high pressure pipeline to shift gas injection from Island D to Islands EPC2 and EPC3
- conversion of three wells on EPC islands to injection.

Commissioning of the project, subject to a positive FID, is scheduled for 2022.

Raw gas supply to third party project

North Caspian Operating Company N.V. and KazTransGas JSC are exploring raw gas supply to KazTransGas' planned gas processing plant with an annual throughput of 1 bln m³ of raw gas per year.

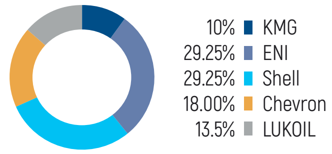
Social and environmental responsibility

Under the North Caspian Sea Production Sharing Agreement, North Caspian Operating Company N.V. allocates funds annually to infrastructure and social projects in the Mangistau and Atyrau Regions. The company allocated USD 75 mln for such projects in 2019, with 11 projects successfully completed – 7 in Atyrau Region and 4 in Mangistau Region.

[1] 100% subsidiary of KMG, with the direct ownership of 99.7440256% and indirect ownership via KMG Kumkol LLP of 0.2559744%.

KARACHAGANAK

Highlights:

PRODUCTION OF LIQUID HYDROCARBONS (STAB.[1]) (TOTAL)	LIQUID HYDROCARBON PRODUCTION (STAB.) (NET TO KMG)	DEVELOPMENT PERSPECTIVE	GAS PRODUCTION (TOTAL)	2P OIL AND CONDENSATE RESERVES LIFE	INTERESTS, %	OPERATOR
10.1 mln tonnes, (219 kbopd)	**1,015** mln tonnes (22 kbopd)	The implementation of investment projects to maintain the achieved liquid hydrocarbon production plateau levels	**18.6** bln m³	Over **20** years		• Royal Dutch Shell and Eni are the joint operators of the Karachaganak field (Karachaganak Petroleum Operating B.V.)

One of the world's largest gas and condensate fields

Karachaganak oil and condensate field is one of the largest oil and condensate fields in the world, located in the West Kazakhstan Region and covering an area of over 280 sq. km. The field was discovered in 1979, with pilot development started in 1984.

The Karachaganak project is developed under the Final Production Sharing Agreement (FPSA) signed on 18 November 1997 for a period of 40 years. Equity interests in the project are as follows: Royal Dutch Shell (29.25%), Eni (29.25%), Chevron (18%), LUKOIL (13.5%), and KMG (10%). Royal Dutch Shell and Eni are the joint operators of the Karachaganak project.

The Karachaganak project has three core process facilities, comprising a single system of interrelated and interdependent process units within the Karachaganak field's production process:

KPC – the Karachaganak Processing Complex, located in the northwestern part of the field and processing liquid hydrocarbons coming from wells as well as feedstock transported from Unit 2 with sour gas reinjection systems (Unit 2).

Core production processes:
- Stabilisation of crude oil (sulphur and mercaptan removal) for further export via the CPC pipeline system
- Treatment (dehydration) of sour gas for reinjection and export to the Orenburg Gas Processing Plant (OGPP)
- Production of treated fuel gas for own production needs of the field, for the production needs of Karachaganak Petroleum Operating B.V., and for the needs of the West Kazakhstan Region
- Wastewater treatment and disposal

Unit 2 – a gas treatment unit located in the southeastern part of the field, which separates and reinjects sour gas at high pressure and feeds liquid hydrocarbons to the KPC for stabilisation before shipment for export.

Core production processes:
- Treatment (dehydration) of sour gas for reinjection
- Reinjection of sour gas
- Transport of unstable condensate to the KPC
- Wastewater treatment and disposal

Unit 3 – a gas treatment unit located in the northeastern part of the field, which separates and partially stabilises liquid hydrocarbons and gas before shipment for export.

Core production processes:
- Treatment of gas for further export to Orenburg Processing Plant
- Condensate degassing prior to further stabilisation at the KPC
- Wastewater treatment and disposal

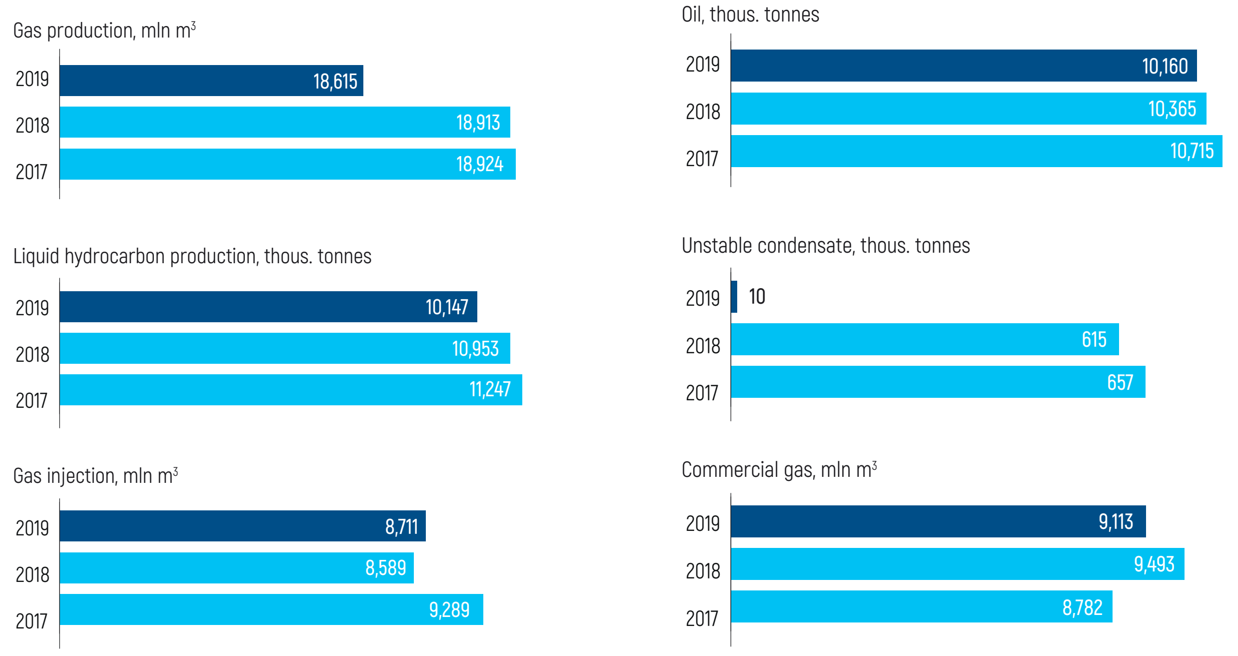
At the beginning of 2020, the operating well stock of the field included 156 producing wells and 18 injection wells.

Liquid hydrocarbon production from Karachaganak decreased by 7.3% to 1,015 ths tonnes (22 kbopd) in terms of KMG's share. Gas production was 1,861 mln m³, down 1.6% year-on-year. The decrease in production was due to the complete shutdown of production facilities at the KPC, as well as Unit 2 and Unit 3 from 16 September to 10 October 2019 for scheduled preventive maintenance, which was the largest in Karachaganak Petroleum Operating B.V.'s history.

Outlook for Karachaganak

The Karachaganak oil and condensate field is in Phase 2 commercial development (Stage 2M), which includes a number of major capex projects (Production Plateau Extension Projects and the Karachaganak Expansion Project) aimed at increasing raw gas treatment and reinjection capacity to extend the duration of the liquid hydrocarbon production plateau at the achieved rates.

KARACHAGANAK PETROLEUM OPERATING B.V.'S OPERATIONAL HIGHLIGHTS



Production Plateau Extension Projects (Stage 2M):

- **Installation of the additional 5th Trunk Line Project – the project will increase the annual volumeof gas injection to 10 bln m³ in order to maintain reservoir pressure.**
- **KPC Gas Debottlenecking Project (KGDBN) – the project envisages commissioning of new glycol gas-dehydration and low-temperature gas separation units with a total capacity of 4.0 bln m³ per year to increase the volume of gas treatment for reinjection and/or export to Orenburg Processing Plant.**
- **Installation of Unit 2 Fourth Injection Compressor Project (4IC) – laying a network of process pipelines to maintain reservoir pressure and the liquid hydrocarbon production plateau by increasing annual gas injection volumes from 10 bln m³ to 13 bln m³ per year.**

In 2019, the 5th Trunk Line project was commissioned. In May 2019, the Consortium Partners signed an agreement sanctioning the Fourth Injection Compressor Project (4IC).

The successful timely commissioning of the 5th Trunk Line project provides confidence that Karachaganak Petroleum Operating B.V. will be able to successfully meet the expectations and deliver other major CAPEX projects currently under construction: the KPC Gas Debottlenecking Project

[1] A conversion factor of 0.9 is applied to total oil and condensate production to estimate stable liquid hydrocarbons.

(KGDBN) and the Unit 2 Fourth Injection Compressor Project (4IC). Commissioning of these projects is scheduled for 2021.

Combined, the production plateau extension projects will maximise the benefits through:

- increased gas treatment capacity
- incremental liquid hydrocarbon production
- upgrades to existing liquid hydrocarbon treatment units
- reduced rates of pressure declines in the reservoir.

Digital projects to transform operations

As part of the Digital Kazakhstan innovative development state programme, Karachaganak Petroleum Operating B.V. has developed a roadmap for a digital transformation and technology innovation. The current workstreams are focused on the areas of production optimisation, well surveillance, smart plant and digital transformations for project delivery, minimization of paper-intensive processes and maximisation of the automated workflows, warehouse management, improvement of the monitoring and intervention activities.

Digitizing key field parameters will enable Karachaganak Petroleum Operating B.V. to make timely decisions maximising productivity through automated integrated data analysis tools.

Social and environmental responsibility

In 2019, eight social projects were implemented in the West Kazakhstan Region, of which five were civil construction projects (mainly the construction of fitness and recreation centres) and three were road construction and repair projects.

Next-generation multiphase pumps and the Megaflow separator technology are just a few examples of the technology-driven evolution of well treatment and testing at the Karachaganak field across all three phases (gas, oil, and water). This allowed the separated hydrocarbons to be sent directly to the plant without flaring. The deployment of advanced technology and continuous improvement has enabled Karachaganak Petroleum Operating B.V. to dramatically reduce its emissions, achieving a world-class gas utilisation rate of 99.94% for Karachaganak. In 2019, total gas flaring was just 0.056% (10.4 mln m³) of the total gas produced by Karachaganak Petroleum Operating B.V. (18,614.6 mln m³).

OIL PRODUCTION AT OPERATING ASSETS

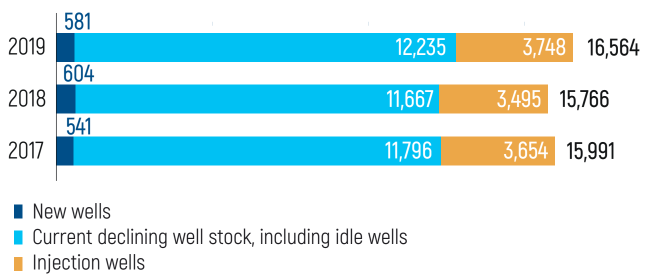
At operating assets developed by KMG independently or with partners, more than half of the fields are mature given the high reserve depletion rates and increased water cuts (over 80%). Commercial development of our mature fields started many decades ago. The first oil discovery in Kazakhstan was made in 1899 at the Karashungul field, currently operated by JSC Embamunaigas. This marked the start of oil production in the country. Thus, 2019 marked 120 years of Kazakhstan's national oil and gas industry. The first gas gusher was struck at the Uzen field in 1960, and oil gusher in 1961. The Karazhanbas gas and oil field came on stream in 1974, when the first oil gusher was struck.

Importantly, today about 80% of total oil production at the Company's operating assets comes from seven key fields: Uzen and Karamandybas (JSC Ozenmunaigas), Kalamkas and Zhetybai (JSC Mangistaumunaigaz), S. Nurzhanov and East Moldabek (JSC Embamunaigas), and Karazhanbas (JSC Karazhanbasmunai).

Improving production efficiency at mature fields is an important driver of the Company's future growth. To achieve this, our production facilities continuously monitor production processes to further optimise them, comply with the corporate energy-saving policy, and search for ways to increase oil recovery rates, e.g. by commissioning new wells, hydraulic fracturing, well workovers, reperforations, and polymer flooding.

In 2019, KMG's share of oil production from operating assets decreased slightly to 15,476 thous. tonnes (307 kbopd). This reflects a natural decline in production levels at the Kazgermunai and PetroKazakhstan Inc. fields by 17.7% year-on-year and 15.5% year-on-year, respectively, which is in line with the planned production decline.

NUMBER OF WELLS AT KMG-OPERATED ASSETS, UNITS



Produced oil profiles vary widely from region to region. The heaviest oil is produced at Karazhanbasmunai, with a conversion factor of 6.68 bbl per tonne. Crude oil produced at large non-operated projects is lighter, with its conversion factor close to 8 bbl per tonne.

A total of 16,564 wells were in operation in 2019, of which 12,235 were classified as the current declining well stock, which accounts for the bulk of oil and condensate production.

KMG'S UPSTREAM SEGMENT INDICATORS IN 2019

	Porosity	API gravity	Sulphur content, %	Number of fields	Average flow rate of new wells, tonnes per day	Average flow rate of the current declining well stock, tonnes per day	Oil conversion factor, bbl/tonne
JSC Ozenmunaigas (100%)	0.19	36.51	0.14	2	11.2	4.4	7.23
JSC Embamunaigas (100%)	0.27	32.03	0.62	33	11.1	3.8	7.30
KazGPZ (condensate) (100%)	0.14	57.05	-	4	-	0.8	-
JSC Karazhanbasmunai (50%)	0.30	19.81	1.55	1	2.9	2.2	6.68
JV Kazgermunai LLP (50%)	0.26	39.95	0.1	5	21.2	26.0	7.38
PetroKazakhstan Inc. (33%)	0.25–27	41.9–66.9	0.03–0.43	23	10.5–17.0	3.53–8.70	7.75
Amangeldy Gas LLP (condensate) (100%)	0.10–0.24	–	0	3	0.15	1.04	–
JSC Mangistaumunaigaz (50%)	0.14	30.77	0.2	15	12.7	6.0	7.23
Kazakhoil Aktobe LLP (50%)	0.10	36.12	1	2	–	17.1	7.50
Kazakhturkmunay LLP (100%)	0.14	36.12	3.17	6	–	32.9	7.21

GAS PRODUCTION

Natural and associated gas production increased by 3.9% to 8,455 mln m³ (55.8 mmboe) in 2019. Operating assets produced 2,636 mln m³ (31% of the total), and 5,819 mln m³ (69%) came from mega projects, with the Tengiz and Karachaganak mega projects accounting for the bulk of production.

Gas production values are the actual volume of gas produced, including gas reinjected for own needs. Gas reinjection is used to maintain reservoir pressure, which is essential for sustaining high oil production rates.

Commercial gas production in 2019 was 4,922 mln m³, of which 1,823 mln m³ were produced from operating assets and 3,099 mln m³ from mega projects. Year-on-year, commercial gas production increased by a cumulative 91 mln m³, or 1.9%.

Along with processing own feedstock, the KazGPZ plant produces commercial gas using feedstocks supplied by KMG's other operating assets that do not produce commercial gas themselves.

COMMERCIAL GAS PRODUCTION BY MEGA PROJECTS (NET TO KMG), MLN M³

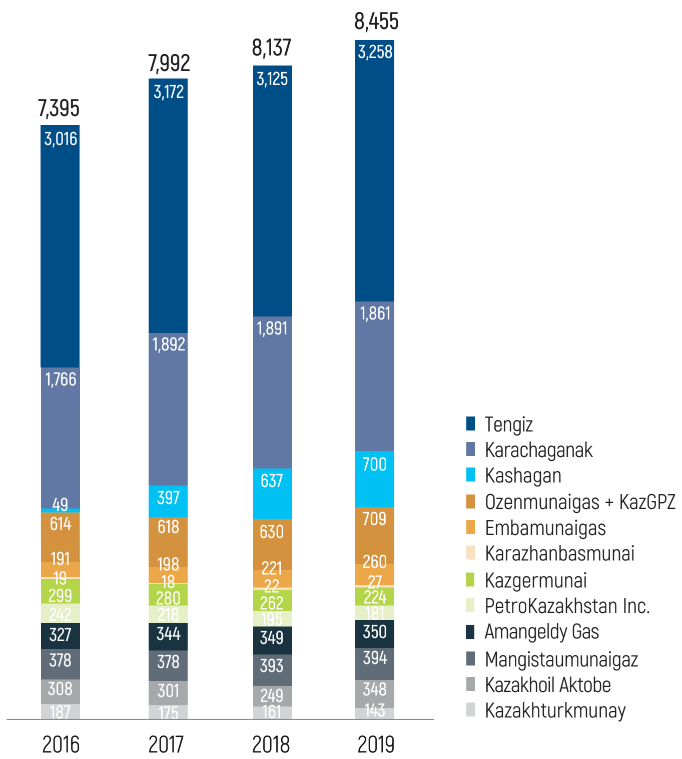
	2017	2018	2019
Tengiz (Tengizchevroil LLP)	1,847	1,837	1,894
Karachaganak (Karachaganak Petroleum Operating B.V.)	878	949	911
Kashagan (North Caspian Operating Company N.V.)	223	301	293
Total for mega projects	2,948	3,087	3,099

COMMERCIAL GAS PRODUCTION BY KMG-OPERATED ASSETS (NET TO KMG), MLN M³

	2017	2018	2019
Ozenmunaigas + KazGPZ[1]	540	558	680
Mangistaumunaigaz (PD Zhetybaimunaigaz)[1]	199	207	116
Kazgermunai	235	205	184
Amangeldy Gas	339	345	346
Kazakhoil Aktobe	180	173	157
Embamunaigas	30	154	135
Kazakhturkmunay	156	143	163
PetroKazakhstan Inc.	78	68	43
Karazhanbasmunai	0	0	0
Total for operating assets	1,757	1,853	1,823

[1] JSC Ozenmunaigas and PD Zhetybaimunaigaz JSC Mangistaumunaigaz supply raw gas to KazGPZ.

NATURAL GAS PRODUCTION BY ASSET, MLN M³



OIL TRANSPORTATION

KMG completed the construction of an oil transportation infrastructure to supply hydrocarbons to export markets. Medium-term priorities:
• Increase existing capacity utilisation by making KMG's oil transportation systems more attractive and competitive
• Control over operating costs.

78.07 mln tonnes
oil transportation volume

The two oil transportation modes at KMG are trunk pipelines and the marine fleet.

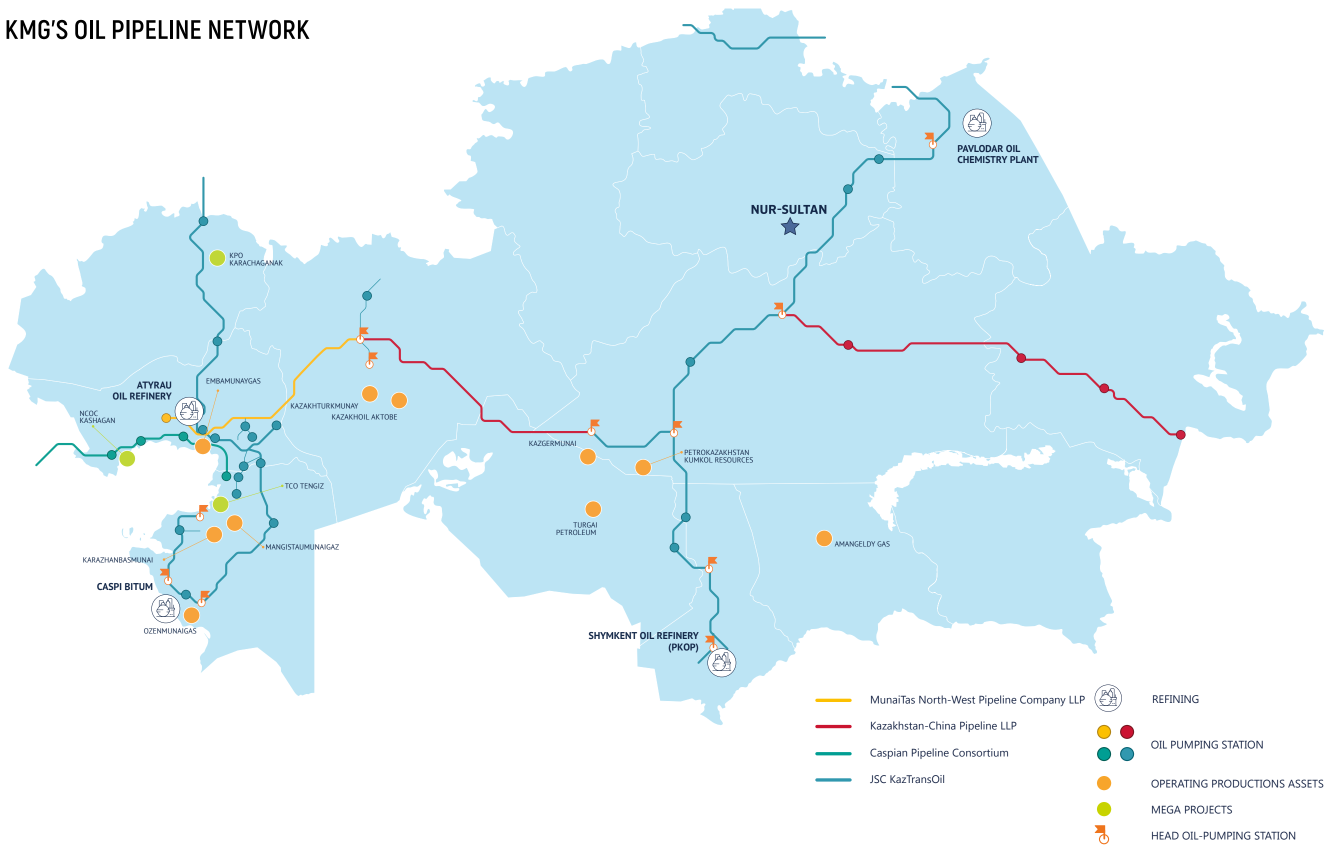
	Trunk pipeline transportation				Marine fleet transportation
Management company	KazTransOil (KTO)	Kazakhstan-China Pipeline (KCP)	MunaiTas (MT)	Caspian Pipeline Consortium (CPC)	Kazmortransflot (KMTF)
Interest	KMG: 90%[1]	KazTransOil: 50%	KazTransOil: 51%	KMG: 20.75%	KMG: 100%
Transportation volume (net to KMG) in 2019, thous. tonnes	44,463[2]	8,100	1,648	13,126	10,729
Key destinations	Export to Europe and China, domestic market	Export to China, domestic market	Export to China, domestic market	Export to Europe	Export to Europe
Key routes	Kazakhstan's refineries; Uzen — Atyrau—Samara; port of Aktau; oil transshipment to the CPC and Atasu —Alashankou pipelines	Atasu — Alashankou; Kenkiyak-Kumkol	Kenkiyak — Atyrau	Tengiz — Novorossiysk	Black Sea and Mediterranean Sea; Caspian Sea
Total length, km	5,378	1,759	449	1,510	n/a

PIPELINE INFRASTRUCTURE

Kazakhstan's pipeline infrastructure is owned by "KazTransOil" JSC, its two joint ventures ("Kazakhstan-China Pipeline" LLP and "MunaiTas" North-West Pipeline Company LLP) and the "Caspian Pipeline Consortium". The existing pipeline infrastructure in Kazakhstan has adequate potential to support increased oil transportation volumes from promising projects.

[1] 10% of shares of KTO are owned by minority shareholders who acquired them within the "People's IPO" program.
[2] Since KTO is fully operated by KMG, transportation volumes are being reported for 100%.

KMG'S OIL PIPELINE NETWORK



KMG'S OIL PIPELINE NETWORK

"KazTransOil" JSC (KTO) is the national operator of the trunk oil pipeline of the Republic of Kazakhstan. The company owns an extensive network of trunk oil pipelines with a total length of 5,378 km, to which virtually all oil fields in Kazakhstan are connected. The Company transports oil to Kazakhstan's four major refineries, pumps oil for export via the Atyrau — Samara pipeline, tranships oil to the CPC and Atasu — Alashankou export pipelines, ships oil to tankers in the port of Aktau and by rail. Oil transportation via trunk oil pipelines is supported by 36 oil pumping stations, 67 heaters, and a tank farm for oil storage with a total capacity of 1.4 mln m^3. "KazTransOil" JSC also provides operation and maintenance services for the trunk oil pipelines of "Kazakhstan-China Pipeline" LLP, "MunaiTas" North-West Pipeline Company LLP, "Karachaganak Petroleum Operating B.V.", "Caspian Pipeline Consortium-K" JSC, and "Turgai Petroleum" JSC, as well as for the trunk water line of Main Waterline LLP.

"Kazakhstan-China Pipeline" LLP is the owner of the Atasu — Alashankou (965 km) and Kenkiyak — Kumkol (794 km) oil pipelines. The company transports Kazakhstan's oil and transit Russian oil to China and to the domestic market.

"MunaiTas" North-West Pipeline Company LLP is the owner of the 449 km Kenkiyak — Atyrau oil trunk pipeline. In 2018, the company started implementing the Kenkiyak-Atyrau pipeline reverse project to support supplies of West Kazakhstan's oil to domestic refineries and to compensate production decline in Aktobe and Kyzylorda regions, as well as exports to China totalling up to 6 mln tonnes per year. The project cost is KZT 28.6 bln. The start of oil flow reversal is scheduled for the second half of 2020.

"Caspian Pipeline Consortium" (CPC) is international oil transportation project involving Russia, Kazakhstan and the world's leading industry players. It was established for the construction and operation of a 1,510 km trunk pipeline (452 km are within Kazakhstan). The CPC oil pipeline is a priority export route for Kazakhstan's oil supplies, connecting Kazakhstan's Tengiz oil field with the Yuzhnaya Ozereyevka oil terminal on the Black Sea (near the port of Novorossiysk). Oil transportation via the CPC pipeline is supported by 15 oil pumping stations, an oil storage tank farm with a total capacity of 1.3 mln m^3 and three single-point moorings.

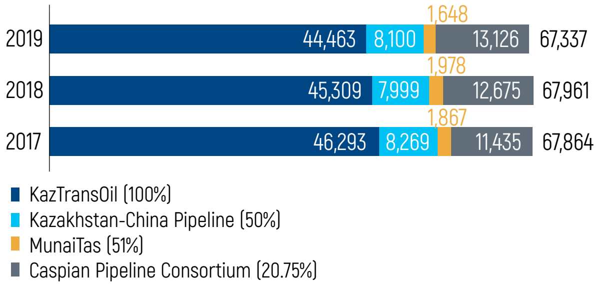
In view of the anticipated increases in oil production from Tengiz and Kashagan, in 2019 the shareholders of Caspian Pipeline Consortium resolved to launch a project removing of bottlenecks within the pipeline system, which is expected to increase the volume of Kazakhstan's oil transportation to 72.5 mln tonnes per year. The project timeframe is 2019–2023, and its cost is USD 600 mln. The project will be financed using the Caspian Pipeline Consortium's own funds.

9.1 thous. km
total length of trunk oil pipelines

TRUNK PIPELINE OIL TRANSPORTATION HIGHLIGHTS

The consolidated volume of oil transportation via trunk pipelines was 67,337 thous. tonnes in 2019, a slight decrease of 622 thous. tonnes from the previous year, mainly due to lower oil production in the Kyzylorda Region.

Volume of oil transportation (net to KMG), thous. tonnes[1]

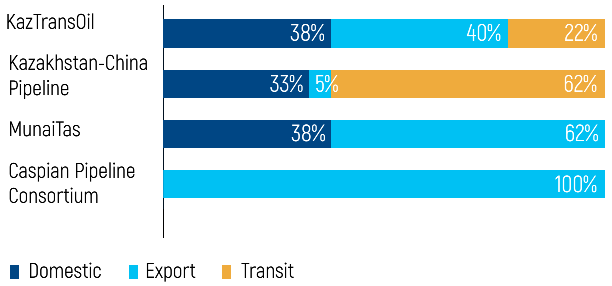


Tariff policy

The tariffs for crude oil transportation to Kazakhstan's domestic market are regulated by the government.

Following the adoption in 2015 of amendments to the Law of Republic of Kazakhstan on Natural Monopolies dated 27.12.2018 №204-VI, oil transportation services to support transit via the territory of the Republic of Kazakhstan and exports outside the Republic of Kazakhstan were removed from the list of natural monopolies.

STRUCTURE OF OIL TRANSPORTATION BY DIRECTIONS FOR 2019



Volume of oil transportation, thous. tonnes

Company	2017	2018	2019
KazTransOil (100%)	46,293	45,309	44,463
Kazakhstan-China Pipeline (100%)	16,538	15,997	16,200
MunaiTas (100%)	3,660	3,878	3,232
Caspian Pipeline Consortium (100%)	55,108	61,084	63,256

Tariffs for oil transportation

Company	2017	2018	2019
KazTransOil			
domestic market, KZT per tonne per 1,000 km	3,902	4,292	4,722
export, KZT per tonne per 1,000 km	5,817	6,399	6,399
transit to China, USD per tonne	3.11	3.11	4.23
Kazakhstan-China Pipeline			
domestic market, KZT per tonne per 1,000 km	5,916	6,507	7,158
export, KZT per tonne per 1,000 km	6,799	6,799	6,799
transit to China, USD per tonne	8.25	8.25	10.77
MunaiTas			
domestic market, KZT per tonne per 1,000 km	5,912	5,912	5,912
export, KZT per tonne per 1,000 km	5,912	5,912	5,912
Caspian Pipeline Consortium			
export, USD per tonne	38	38	38

[1] Consolidated volume of oil transported includes the transportation volume of each individual pipeline company, including the operating share of KMG (excluding KazTransOil). Part of the oil volumes can be transported by two or three pipeline companies, and these volumes are correspondingly counted more than once in the consolidated volume of oil transportation.

OIL TRANSPORTATION BY SEA

TRANSPORTATION ASSETS

NMSC Kazmortransflot LLP is the National Sea Carrier. Its assets include:

- merchant fleet – owned oil tankers: Astana, Almaty and Aktau, each with a deadweight of 12 thous. tonnes; Atyrau, Aktobe and Oral with a deadweight of 13 thous. tonnes; and Aframax oil tankers – Alatau and Altai, each with a deadweight of 115 thous. tonnes
- marine support fleet: 12 vessels – tugboats Esil, Tobol, Ural, Irytsh, 8 barge platforms of KMG series with a capacity of 3,600 tonnes each
- a fleet to support Tengizchevroil's Future Growth Project: 3 Caspian-class barges (MCV) – Barys, Berkut and Sunkar, and 3 tugboats – Talas, Emba and Irgiz. As of December 31, 2019, the Berkut and Sunkar vessels were devalued and contracts with TCO to be completed in 2020.

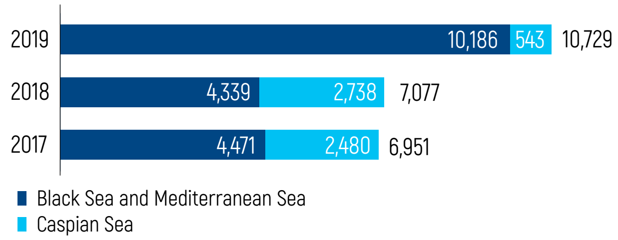
The main current routes for oil transportation by sea:

- Routes in the Caspian Sea waters
- Routes in the Black Sea and Mediterranean Sea waters.

PERFORMANCE HIGHLIGHTS

In 2019, the total volume of oil transportation by sea increased significantly by 52% year-on-year to 10,729 thous. tonnes. Oil transportation volumes in the Mediterranean and Black Seas increased 1.5 times, due to the supply and transportation agreement signed at the end of 2018 between Kazmortransflot, KMG, and KMG International.

TRANSPORTATION VOLUMES, THOUS. TONNES



In February 2019, the member states of the Eurasian Economic Union signed navigation agreements reducing the time for obtaining transit permits for Russia's waterways to 10 days.

In April 2019, a feeder service was launched along the Trans-Caspian International Transport Route, under the terms of the cargo transportation agreement between NC Kazakhstan Temir Zholy JSC, NC KazMunayGas JSC, KTZ Express Shipping LLP, and NMSC Kazmortransflot LLP.

In June 2019, NMSC Kazmortransflot LLP successfully transported the Satti jack-up drilling rig from ERSAI base at the port of Kuryk (Kazakhstan) to the port of Baku (Azerbaijan).

GAS TRANSPORTATION AND MARKETING

UPDATED STRATEGIC GAS INITIATIVES

Updated strategic gas initiatives In 2019, KMG refreshed its strategy for gas transportation and marketing, adding three more initiatives to its key initiative of gas exports to China.

To fully unlock its gas transportation potential and boost the share of exports and transit fees in KMG's revenues, the Company has focused on:

- **Gas exports to China**
  The expansion of the Beineu-Bozoi-Shymkent and Kazakhstan-China trunk gas pipeline capacity enables KMG to increase stable export supplies of commercial gas to China up to 10 bln m³ per year starting from 2019 and beyond.
- **Exports of gas products**
  KMG is considering the construction of facilities to produce high value-added gas products for domestic and export sales.
- **Ensuring efficient use of gas in the domestic market**
  KMG will continue engaging government authorities to ensure efficient gas consumption in the domestic market.
- **Enhancing transit potential**
  KMG will continue to focus on maximising profitability of transit flows from neighbouring countries leveraging its advantageous position between the expanding major markets of China and Russia.

KMG prioritises meeting the consumer needs reliably and efficiently and diversification of gas sales markets. The throughput capacity of the gas transportation infrastructure has been aligned with the potential growth of gas production in the country. With timely investments into the gas transportation system, KMG has been able to supply the country's regions with natural gas and grow the potential of export supply routes. KazTransGas JSC, KMG's wholly-owned subsidiary, is the operator of our gas transportation system.

GAS PIPELINE INFRASTRUCTURE

KazTransGas JSC is Kazakhstan's national gas and gas supply operator.

KazTransGas operates the centralised infrastructure for commercial gas transportation via trunk pipelines and gas distribution networks, supports international transit and marketing of gas on the domestic and foreign markets, as well as designs, finances, builds and operates gas pipelines and gas storage facilities.

KazTransGas operates the largest trunk gas pipeline network in Kazakhstan with a total length of 19,146 km and an annual capacity of 230 bln m³, as well as gas distribution networks with a length of over 49 thous. km.

KazTransGas operates three underground gas storage facilities (Bozoy, Akyrtobe, and Poltoratskoye) in Kazakhstan with a total working gas capacity of up to 4.6 bln m³. Gas transportation is supported by 40 compressor stations and 232 gas pumping units.

KazTransGas has subsidiaries in Kazakhstan in the following business segments:

- Trunk pipeline gas transportation
  - Intergas Central Asia JSC, KazTransGas' wholly-owned subsidiary
  - Asia Gas Pipeline LLP, KazTransGas' 50%-owned subsidiary
  - Beineu-Shymkent Gas Pipeline LLP, KazTransGas' 50%-owned subsidiary
- Transportation via gas distribution systems
  - KazTransGas Aimak JSC, KazTransGas' wholly-owned subsidiary
- Gas and condensate production
  - Amangeldy Gas LLP, KazTransGas' wholly-owned subsidiary (see the Production section for production data).

17.85 thous. km
total length of trunk gas pipelines

Company	Trunk gas pipeline	Length, km	Capacity, bln m³ per year
ICA	Soyuz, Orenburg-Novopskov	1,147	68.4
	Central Asia-Center	5,306	50.8
	Bukhara-Ural	2,382	31.5
	BGR-TBA[1], Gazli-Shymkent	2,462	10.2
	Akshabulak-Kyzylorda	123	0.4
	Saryarka[4]	1,061	2.2[2]
AGP	Kazakhstan-China	3,916	55
BSGP	Beineu-Bozoi-Shymkent	1,454	13[3]

1. Bukhara gas-bearing region - Tashkent-Bishkek-Almaty.
2. For the 1st stage of the gas pipeline, the design and actual capacity is 2.2 bln m³ per year.
3. Actual capacity - 13 bln m³ per year, design capacity - 15 bln m³ per year.
4. Saryarka trunk gas pipeline was leased to ICA, but is owned by AstanaGaz KMG JSC, shareholders of which are Samruk-Kazyna JSC (50%) and Baiterek Venture Fund JSC (50%).

INVESTMENT PROJECTS

Increasing the capacity of Beineu-Bozoy-Shymkent trunk gas pipeline up to 15 bln m³ per year

The construction of the Beineu-Bozoy-Shymkent trunk gas pipeline was started in 2011. In 2019, the following activities were carried out to increase capacity to 15 bln m³ per year:

- The Korkyt-Ata, Aral and Turkestan compressor stations were commissioned. The gas pipeline capacity at the Bozoy-Shymkent section was increased to 13 bln m³ per year
- Design and estimate documentation was developed and core equipment for the construction of the fourth compressor station "1A" on the Beineu-Bozoi section is being procured, scheduled for completion in 2020
- For the expansion of the existing compressor station Bozoi, and Akbulak and Beineu gas metering stations the feasibility study was carried out and design and estimate documentation was finalized and approved.

up to 15 bln m³ per year
Increase in the capacity of the Beineu-Bozoi-Shymkent trunk gas pipeline

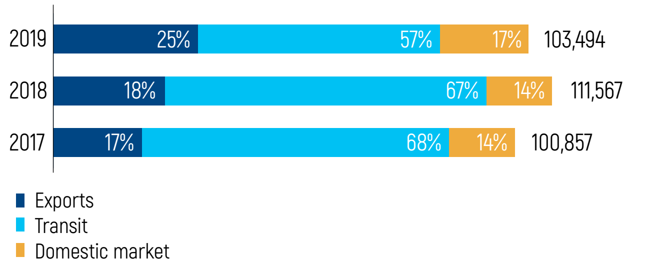
Reconstruction of the Bozoy underground gas storage facility

In order to smooth out seasonal unevenness in gas consumption and to ensure stable gas supplies to the domestic market and export, ICA is reconstructing the Bozoy underground gas storage facility. Within the project to improve the quality of the gas, to purify it from mechanical impurities and moisture, it was retrofitted with a modern gas drying unit. The work carried out will help to increase the reliability and safety of the gas storage, as well as to increase the daily productivity of gas extraction and injection to the projected 27 mln m³ per day. It is expected that the projected gas storage volume of 4 bln m³ will be achieved in 2020.

TRUNK PIPELINE GAS TRANSPORTATION

The volume of gas transportation via KMG's main pipelines declined in 2019 by 7.2% to 103,494 mln m³ mainly due to a decrease in gas transit following the reallocation of Russian gas flows by Gazprom and lower Central Asian gas transit volumes to China.

TOTAL GAS TRANSPORTATION VOLUMES (NET TO KMG), MLN M³



Intergas Central Asia JSC

Intergas Central Asia is a wholly-owned subsidiary of KazTransGas. In 2018, ICA received the status of the National Gas Pipeline Operator.

Today, ICA carries out internal transportation and transit of natural gas within the territory of Kazakhstan through gas pipelines with a total length of 19,146.51 km.

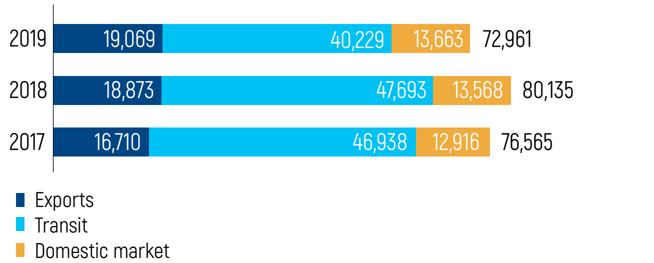
ICA operates 3 underground gas storages (UGS):

- Bozoyskoye UGS facility in the Aktobe region
- Poltoratskoe UGS in the South Kazakhstan region
- Akyrtobinskoye UGS in the Zhambyl region.

Intergas Central Asia's core businesses:

- gas transportation to the domestic market of the Republic of Kazakhstan
- transit transportation of gas from Turkmenistan and Uzbekistan to Russia via Kazakhstan
- transportation of gas for export
- transit transportation of gas from one part of Russia to another via Kazakhstan
- transit transportation of Uzbekistan's gas to supply Tashkent.

GAS TRANSPORTATION VOLUMES BY INTERGAS CENTRAL ASIA (NET TO KMG), MLN M³



Asia Gas Pipeline LLP

Asia Gas Pipeline is a 50/50 joint venture between KazTransGas JSC and Trans-Asia Gas Pipeline Company Ltd. (shareholder – CNODC, a subsidiary of CNPC). The joint venture was established to finance, construct and operate a section of the Kazakhstan-China gas pipeline designed to transport natural gas from the Kazakhstan-Uzbekistan border to the Khorgos gas metering station in China.

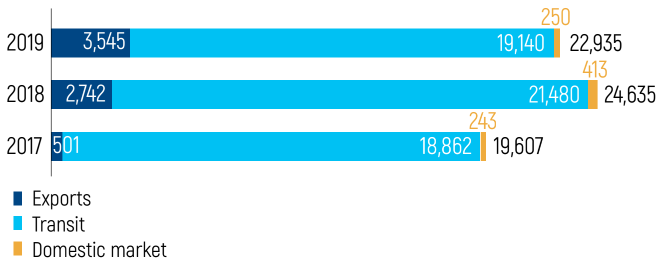
The purpose of the project is to facilitate the transit of Turkmen and Uzbek gas to China, exports of Kazakh gas to China, as well as uninterrupted gas supply to southern regions of Kazakhstan.

The length of the gas pipeline within Kazakhstan is 2,612 km for Strings A and B, and 1,304 km for String C. The total throughput capacity of the gas pipeline is 55 bln m^3 per year (30 bln m^3 Strings A and B, 25 bln m^3 String C).

In 2018, the project "Increasing the capacity of the Kazakhstan-China gas trunk pipeline" (String C) was completed. As a result, the productivity of the Kazakhstan-China trunk pipeline was increased to 55 bln m^3 per year.

The project "Increasing the productivity of strings A and B to 40 bln m^3 per year" is under the study. It is expected that the project will allow to increase the total productivity of the gas pipeline to 65 bln m^3 per year.

GAS TRANSPORTATION VOLUMES BY ASIA GAS PIPELINE (NET TO KMG), MLN M^3

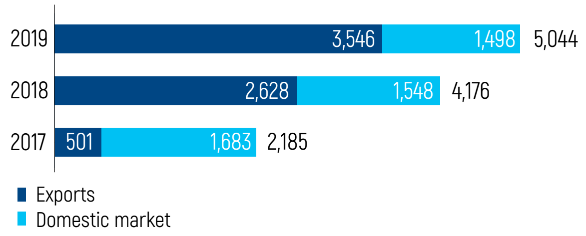


Beineu-Shymkent Gas Pipeline LLP

Beineu-Shymkent Gas Pipeline LLP is a 50/50 joint venture between KazTransGas JSC and Trans-Asia Gas Pipeline Company Ltd. (shareholder – CNODC, a subsidiary of CNPC). The project is of paramount strategic importance to the Republic of Kazakhstan, as it supplies the natural gas needs of Kazakhstan's southern regions, enables diversification of Kazakhstan's gas exports, ensures energy security of the country, and builds a unified gas transportation system.

The Beineu-Bozoy-Shymkent trunk gas pipeline is the second section of the Kazakhstan-China gas pipeline. The gas pipeline connects the western oil and natural gas fields with the southern regions of the country, as well as with the gas pipelines of the Bukhara gas-bearing region, the Tashkent-Bishkek-Almaty gas pipeline, the Gazli-Shymkent gas pipeline and string "C" of the Central Asia-China gas pipeline. The actual length of the Beineu-Shymkent gas pipeline is 1,454 km and capacity is 13 bln m^3 per year.

GAS TRANSPORTATION VOLUMES BY BEINEU-SHYMKENT GAS PIPELINE (NET TO KMG), MLN M^3



GAS DISTRIBUTION AND EXPANSION OF GAS INFRASTRUCTURE IN KAZAKHSTAN'S REGIONS

KAZTRANSGAS AIMAK JSC

KazTransGas Aimak is a wholly-owned subsidiary of KazTransGas. KazTransGas Aimak is the largest gas distributor in Kazakhstan, operating 50.6 thous. km of distribution and trunk gas pipelines in all ten regions and two cities of national significance connected to the gas grid.

The key objectives of KazTransGas Aimak:

- ensuring commercial gas supplies
- transportation of gas via distribution networks
- management of gas transportation assets in the regions.

GAS TRANSPORTATION VOLUMES BY KAZTRANSGAS AIMAK (NET TO KMG), MLN M^3

Gas distribution and gasification projects in the regions of Kazakhstan

Upgrade of the gas distribution network in Taraz

Since its launch in 2011, the project has replaced about 899 km of low-pressure steel gas pipelines (37 km in 2019) with polyethylene medium-pressure gas pipelines in the private sector for 42 thous. customers, resolving the problem of inadequate gas pressure for consumers. As a result, the throughput of the gas supply system has increased 1.5 times to 150.5 thous. m^3 per hour.

Upgrading, retrofitting and expanding the gas distribution networks supplying communities in Mangystau Region

Since its launch in 2015, the project has constructed or upgraded 1,347 km of gas pipelines (25 km in 2019), and installed 6 automated gas distribution stations, 34 gas control units, and 45 gas control modules. As a result, five settlements were connected to the gas grid, with 2,500 new customers getting access to gas.

Expanding gas infrastructure in Almaty, retrofitting and upgrading the city's gas distribution systems

The project will allow the connection of about 4.1 thous. new customers with an average annual gas consumption of 15.8 mln m^3. On January 1, 2020 265 km (170 km in 2019) of new gas pipelines were built, 76 km (34 km in 2019) of existing pipelines were reconstructed, 21 cabinet gas control points, 1 gas control block point were installed.

Construction of the Saryarka trunk gas pipeline

In October 2019, the construction of Phase 1 of the Saryarka trunk gas pipeline was completed , and in December of the same year the Commissioning Act was signed. In February 2020, the gas pipeline was leased out to Intergas Central Asia JSC, which will be responsible for gas transportation. Saryarka trunk gas pipeline is owned by AstanaGaz KMG JSC, shareholders of which are Samruk-Kazyna JSC (50%) and Baiterek Venture Fund JSC (50%). The throughput capacity of Phase 1 of the pipeline is up to 2.2 bln m^3 per year. The total length of the gas pipeline is 1,060.6 km. The gas pipeline will ensure stable gas supplies to the central regions and the capital of Kazakhstan, totalling about 2,710 thous. people. The Saryarka trunk gas pipeline will facilitate transition to an affordable, greener fuel, natural gas, significantly improving the overall environmental situation in the country.

NGV INFRASTRUCTURE

KazTransGaz Onimderi LLP

In 2019, KazTransGaz Onimderi together with KazTransGas continued to implement initiatives in Kazakhstan's regions under the 2019–2022 Action Plan to expand the use of natural gas as a motor fuel, approved by Resolution No. 797 of the Government of the Republic of Kazakhstan dated 29 November 2018 (the "Action Plan") and the Concept of Kazakhstan's transition to a green economy. These efforts focused on converting motor vehicles to a more environmentally friendly and efficient type of motor fuel instead of conventional fuels for vehicles such as petrol or diesel. The main consumers of compressed natural gas (CNG) will be city bus fleets, long-haul vehicles, private passenger fleets, trucks and cars of the regional branches of KazTransGas subsidiaries, as well as private vehicles.

DEVELOPMENT OF A PROJECT FOR THE USE OF NATURAL GAS AS A MOTOR FUEL

Land plots were allocated for the construction of CNG filling stations in Almaty and Shymkent, and in the Aktobe, Turkestan, Mangistau, Kyzylorda, Atyrau and Almaty Regions. CNG-fuelled city passenger buses hit the roads in Aktobe (78 buses), Almaty (400 buses), Shymkent (200 buses), and Kyzylorda (120 buses). Plans for 2020 also include purchasing 960 more CNG buses for Shymkent (590), Almaty (200), and Atyrau (170).

Under the memorandum of cooperation signed between Gazprom, CNPC and KMG to develop production and marketing infrastructure supporting the use of natural gas as a motor fuel along the Europe–Western China international transport corridor route, market research was continued on vehicle traffic intensity and the related LNG/CNG consumption volumes, along with the review and analysis of existing technologies, and estimation of the infrastructure capacity and capital requirements.

A memorandum of cooperation was signed with the national road operator NC KazAvtoZhol JSC to develop production and marketing infrastructure supporting the use of CNG as a motor fuel in the Republic of Kazakhstan. Five land plots have already been approved and fully permitted for use along the international transport corridor route (in Kazalinsk, Irgiz, Aralsk, Karabutak, and Kazygurt).

798 buses are running on KMG's gas and motor fuel.

DIGITALISATION

From 2017 to 2023, we are running a project to roll out an analytical geographic information system covering gas pipeline facilities which analyses digital spatial data on gas transportation system facilities, and presents their spatial position and information on their technical and operational parameters.

In 2019, Amangeldy Gas LLP rolled out the 1C: Maintenance Management IT solution. The solution provided visibility and transparency into the maintenance and repair process, as well as streamlined hierarchical storage of equipment data and offered access to the process to all stakeholders.

As the next step, the 1C: Maintenance Management solution was integrated with 1C: Accounting, resulting in linking inventory costs by equipment of both systems.

To prevent unauthorized air emissions, and protect the life and health of consumers, KazTransGaz Onimderi purchased four auto labs based on Toyota Hilux vehicles, equipped with PERGAM digital sensors to detect methane leaks.
As of the writing of this report, the labs have detected 235 leaks in residential premises and social facilities, with the total number of leaks detected running into 8,766.

GAS MARKETING

As the national gas and gas supply operator, KazTransGas exercises the government's preemptive right to purchase raw and/or commercial gas from subsoil users/suppliers.

In accordance with the law, subsoil users send a commercial offer to the national operator, indicating the volumes, price and delivery point for the proposed supply of raw and/or commercial gas. The national operator uses its own judgement to decide whether to exercise or waive the government's preemptive right.

Currently, the national operator exercises the government's preemptive right to acquire gas from the following companies with KMG interest:
- Embamunaigas JSC (100%)
- JV Kazgermunai LLP (50%)
- Kazakhoil Aktobe LLP (50%)
- Kazakhturkmunay LLP (100%)
- KazMunayTeniz LLP (100%)

The gas supplied by the above companies is marketed in the domestic market.

Companies with a KMG interest that are exempt from the government's preemptive right to acquire gas:
- Amangeldy Gas LLP (100%)
- KazGPZ LLP (100%)
- Tengizchevroil LLP (20%)
- Karachaganak Petroleum Operating B.V. (10%)
- North Caspian Operating Company N.V. (8.44%)

The above companies all sell gas domestically and for export.

Commercial gas sales volumes in 2019 were 22,834 mln m^3, with 8,806 mln m^3 of gas exported, of which 81% were sent to China under a signed sales and purchase agreement to export gas to China.

22.8 bln m^3
commercial gas sales

Gas resources, mln m^3

Indicator	2017	2018	2019
Gas purchase volumes	18,153	23,297	24,200
Kazakhstan subsoil users / suppliers	**13,376**	**17,209**	**16,435**
Companies with KMG participation	6,446	10,195	9,537
Third parties	6,930	7,014	6,898
Gas imports	**4,777**	**6,088**	**7,765**
Russia	3,038	3,216	5,054
Uzbekistan	1,739	2,872	2,710

Sales of commercial gas , mln m^3

Gas sales by KazTransGas	2017	2018	2019
Exports	**4,949**	**8,917**	**8,806**
Russia	2,073	2,350	1,000
Kyrgyzstan	249	275	264
China	1,003	5,484	7,091
Uzbekistan	1,624	807	452
Domestic market	**12,793**	**13,999**	**14,028**
Total gas sales	**17,742**	**22,915**	**22,834**

DOWNSTREAM

Following the completion of the modernisation programme, which has enabled the Company's oil refineries in Kazakhstan and Romania to achieve higher refining depths, the key objectives for these assets in line with the 2018–2028 Strategy include:
- for Kazakhstan refineries: to ensure adequate liquidity generation through cost optimisation to be able to timely meet liabilities as they fall due
- for Petromidia Refinery: to improve performance by streamlining production processes, including through digitisation and oil product slate optimisation to increase sales margins, and ensure a steady dividend flow to the KMG Corporate Centre.

OIL AND CONDENSATE MARKETING

In 2019, sales of own oil and condensate produced by KMG amounted to 23,509 thous. tonnes, including 16,379 thous. tonnes of oil exports, and 7,130 thous. tonnes of domestic oil supplies. Supplies to KMG refineries in Kazakhstan are fully included into domestic oil supplies: 2,994.82 thous. tonnes to Atyrau Refinery, 3,158.95 thous. tonnes to Pavlodar Refinery, 517.81 thous. tonnes to Shymkent Refinery, and 448.56 thous. tonnes to Caspi Bitum.

23.5 mln tonnes
own oil sales

Sales and condensate of KMG produced oil, thous. tonnes

Assets	2017			2018			2019		
	Exports	Domestic market	Total	Exports	Domestic market	Total	Exports	Domestic market	Total
Operating assets[1]	9,727	6,169	15,896	8,773	6,980	15,752	8,472	7,120	15,592
- including subsidiaries[2]	5,922	2,687	8,607	5,367	3,303	8,670	5,325	3,453	8,778
Mega projects[3]	7,525	3	7,529	7,971	12	7,983	7,907	10	7,917
TOTAL	17,252	6,173	23,424	16,744	6,991	23,735	16,379	7,130	23,509

1. Ozenmunaigas, Embamunaigas, Karazhanbasmunai, Kazgermunai, PetroKazakhstan, Kazakhturkmunay, Kazakhoil Aktobe, Mangistaumunaigaz.
2. Ozenmunaigas, Embamunaigas, Kazakhturkmunay.
3. KMG Kashagan B.V., KMG Karachaganak, Tengizchevroil LPP.

KMG REFINING ASSETS

Within KMG's asset mix, four refineries in Kazakhstan and two in Romania are responsible for processing liquid hydrocarbons (primarily oil).

KMG refineries

Indicator	Kazakhstan refineries				Romania refineries	
	Atyrau Refinery	Pavlodar Refinery	Shymkent Refinery	Caspi Bitum	Petromidia	Vega
Location	Atyrau	Pavlodar	Shymkent	Aktau	Navodari	Ploiesti
Commissioning date	1945	1978	1985	2013	1979	1905
Refining design capacity, mln tonnes	5.5	6.0	6.0	1.0	6.0[1]	0.5
Hydrocarbon refining volumes in 2019, mln tonnes	5.4	5.3	5.4	0.89	6.33[2]	0.44
Refinery utilisation rate in 2019	98	88	90	89	97.5[3]	132
KMG interest	99.53	100	49.72	50	54.63	54.63
Nelson Index	13.9	10.5	8.2	–	10.5	–
Light product yield in 2019	59	69	76	–	86.01	–
Refinery co-owners	–	–	CNPC	CITIC	Romanian Government	Romanian Government

Atyrau Refinery was built in 1945, with Pavlodar Refinery coming online in the 1970s. Shymkent Refinery was commissioned in the mid-1980s, while Caspi Bitum was launched in 2013 to support the development of a modern refining sector in Kazakhstan.

In 2007, KMG purchased Rompetrol Group, which incorporates the Petromidia Refinery (the largest refinery in Romania) and the Vega Refinery (the only extraction naphtha producer in Central and Eastern Europe). The company has since been renamed KMG International.

In 2019, the following projects were implemented under the strategy:

- The utilisation of new capacities resulting from the modernisation of three oil refineries (Atyrau Refinery, Pavlodar Refinery, and Shymkent Refinery) allowed KMG to fully meet domestic demand for oil products. The potential oil refining output of the refineries increased to 18.5 mln tonnes per year, and the refining depth grew by 10% to reach 90%. Kazakhstan's domestic consumers were fully self-sufficient in fuels and lubricants (K4, K5). 37 thous. tonnes of petrol were exported
- Pavlodar Refinery is making progress on its Yertis project, which will allow for the production of winter diesel fuels with a cloud point of –32°C or lower
- The output of petrochemicals (benzene and paraxylene) at the Atyrau Refinery LLP increased to 145 tonnes (+ 445%)
- A record output of bitumen was achieved at JV Caspi Bitum LLP, with 369 thous. tonnes of bitumen produced, fully covering domestic market needs.

23.76 mln tonnes
total hydrocarbon refining

1. Design capacity includes refining 5 mln tonnes of oil and 1 mln tonnes of other hydrocarbons per year.
2. Total refining volume of 6.33 mln tonnes includes 5.43 mln tonnes of crude oil and 0.9 mln tonnes of other and alternative feedstocks.
3. Petromidia Refinery's utilisation rate is 97.5% as per Solomon Associates methodology.

TARIFF POLICY

Kazakhstan refineries only offer oil refining services using the set tariffs and do not purchase oil for refining or sell refined oil products. Oil suppliers sell finished oil products independently. The refineries focus exclusively on production issues, streamlining refining activities and reducing costs.

Oil refining tariffs at Kazakhstan refineries factor in actual production-related operating expenses and an investment component (capital expenditures to maintain current production rates, modernisation loans).

According to the Law On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan Concerning Entrepreneurship in Kazakhstan dated 29 October 2015, from 1 January 2017 the Government no longer regulates refining prices, which has significantly simplified the process for agreeing oil refining tariff changes, which are currently coordinated by the Ministry of Energy of the Republic of Kazakhstan.

- The tariff for refining 1 tonne of oil at Shymkent Refinery was revised twice: from 1 July from 22,500 KZT (net of VAT) to 24,750 KZT (net of VAT), and from 1 October to 28,059 KZT (net of VAT).
- On 3 December 2019, Deputy Energy Minister of the Republic of Kazakhstan A. M. Magauov approved the tariff for oil refining at Pavlodar Refinery LLP at 20,904 KZT (net of VAT) from 1 January 2020.

Weighted average tariffs to refine 1 tonne of tolling feedstock and relevant costs, KZT

Weighted average tariffs of refineries, KZT per tonne	2017	2018	2019
Atyrau Refinery	23,370	33,810	37,436
Pavlodar Refinery	15,429	17,250	19,805
Shymkent Refinery	12,809	19,579	24,485
Caspi Bitum	16,667	18,008	18,010

The tariff includes an amount which covers operating expenses, capital expenditure and investment expenditure. Investment expenditure is used to repay loans (principal and interest) raised to finance capital-intensive refinery modernisation projects.

REFINING VOLUMES AT KAZAKHSTAN REFINERIES

In 2019, hydrocarbon refining volumes at Kazakhstan refineries (net to KMG) amounted to 13,822 thous. tonnes, or 288 thous. barrels per day. In 2019, refining volumes increased by 438 thous. tonnes, or 3.3% year-on-year, mainly due to a refining volume increase by 335 thous. tonnes, or 14,1%, at Shymkent Refinery resulting from a capacity increase following its modernisation.

13,822 thous. tonnes
liquid hydrocarbon refining volume

Hydrocarbon refining volumes (net to KMG), thous. tonnes

Refinery	2017	2018	2019
Atyrau Refinery	4,724	5,268	5,388
Pavlodar Refinery	4,747	5,340	5,290
Shymkent Refinery (50%)	2,343	2,366	2,701
Caspi Bitum (50%)	359	409	443
Total (net to KMG)	**12,173**	**13,384**	**13,822**

OIL PRODUCT OUTPUT IN KAZAKHSTAN

In 2019, the oil product output (net to KMG) increased by 361 thous. tonnes, or 3.0% year-on-year, to 12,513 thous. tonnes of finished products due to a refining volume increase at Shymkent Refinery resulting from a refining capacity increase following its modernisation. In 2019, light product yield was 64% compared to 61% in 2018. In 2019, KMG fully covered domestic market demand for light products.

Increased light product yields were a key driver of change across Kazakhstan's three largest refineries, boosting the value of hydrocarbon product slates. These changes resulted from the modernisation programme at Kazakhstan refineries.

Oil product output (net to KMG), thous. tonnes

Oil products	2017	2018	2019
Atyrau Refinery	4,481 (100%)	4,742 (100%)	4,852 (100%)
Light[1]	2,020 (45%)	2,691 (57%)	2,850 (59%)
Dark[2]	2,236 (50%)	1,589 (34%)	1,580 (33%)
Petrochemicals[3]	8 (0.2%)	32 (0.7%)	145 (3%)
Other	217 (4.8%)	430 (9%)	277 (6%)
Pavlodar Refinery	4,262 (100%)	4,855 (100%)	4,746 (100%)
Light	2,695 (63%)	3,243 (67%)	3,271 (69%)
Dark	973 (23%)	1,007 (21%)	898 (19%)
Other	594 (14%)	605 (12%)	576 (12%)
Shymkent Refinery (50%)	2,195 (100%)	2,151 (100%)	2,476 (100%)
Light	1,258 (57%)	1,422 (66%)	1,881 (76%)
Dark	887 (40%)	644 (30%)	447 (18%)
Other	49 (2%)	85 (4%)	148 (6%)
Caspi Bitum (50%)	353 (100%)	405 (100%)	438 (100%)
Total (net to KMG)	11,291	12,152	12,513

1. Including petrol, diesel fuel, and jet fuel.
2. Including fuel oil, vacuum gas oil, and bitumen.
3. Including benzene and paraxylene.

PRODUCTION AND MARKETING OF OIL PRODUCTS DERIVED FROM KMG'S OWN OIL

KMG's operating assets Ozenmunaigas, Embamunaigas and Kazakhturkmunay supply Atyrau and Pavlodar Refineries, and the resulting oil products are subsequently sold wholesale domestically and for export.

In 2019, Ozenmunaigas, Embamunaigas and Kazakhturkmunay supplied 3,453 thous. tonnes of oil for refining, including 2,322 thous. tonnes to the Atyrau Refinery and 1,131 thous. tonnes to the Pavlodar Refinery. The two refineries' combined output for the year was 3,114 thous. tonnes of oil products, including 1,892 thous. tonnes of light products, 878 thous. tonnes of dark products, 63 thous. tonnes of petrochemicals, and 281 thous. tonnes of other oil products.

Refinery output of oil products derived from KMG's own oil in 2019, thous. tonnes

Oil products	Atyrau Refinery	Pavlodar Refinery	Total	Average oil product wholesale prices over 12M 2019, KZT per tonne
Light	1,207	685	1,892	160,851
Dark	686	192	878	105,131
Petrochemicals	63	0	63	224,851
Other	119	162	281	38,341
Total	2,074	1,039	3,114	137,001

KMG sells oil products wholesale after the oil purchased from Ozenmunaigas, Embamunaigas and Kazakhturkmunay is refined at the Atyrau and Pavlodar Refineries. In 2019, KMG sold 3,136 thous. tonnes of oil products, primarily petrols, diesel fuel and fuel oil (80%).

The bulk of oil products was sold domestically (2,333 thous. out of 3,136 thous. tonnes), and the remainder was exported (804 thous. out of 3,136 thous. tonnes). The ratio of domestic to export oil product supplies was largely flat year-on-year.

In the domestic market, 1,331 thous. tonnes of gasoline and diesel fuel were shipped to the retail chain of filling stations of KMG Onimderi LLP and Petro Retail LLP, 205 thous. tonnes of diesel fuel for agricultural producers, 51 thous. tonnes of fuel oil for heating social and production facilities and institutions, 120 thous. tonnes of gasoline, diesel fuel and jet fuel and 41 thous. tonnes of fuel oil were delivered to KMG Aero LLP to meet the needs of the Single Operator for the supply of light petroleum products and fuel oil for law enforcement agencies, airports and commercial aviation, 585 thous. tonnes of oil products to third parties.

REFINING IN ROMANIA

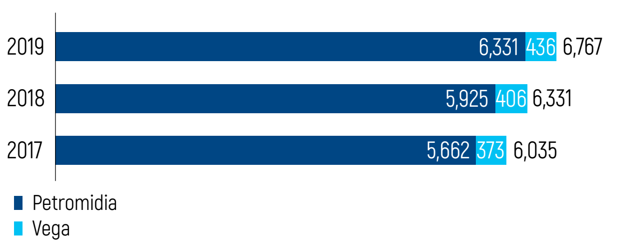
In 2007, KMG acquired Rompetrol Group, which incorporates Petromidia Refinery (the largest oil refinery in Romania) and Vega Refinery (the only extraction naphtha producer in Central and Eastern Europe). The company has since been renamed KMG International.

The core business of KMG International is hydrocarbon refining, as well as wholesale and retail sales of oil products. The KMG International-owned Petromidia Refinery is responsible for primary hydrocarbon refining, with the Vega Refinery focusing on secondary refining. The Petromidia and Vega Refineries operate according to the model where refineries purchase hydrocarbons for their own account, refine them and then sell them either wholesale or retail through an owned retail network of filling stations.

KMG International also owns a major petrochemical complex producing polypropylene and low- and high-density polyethylene (LDPE and HDPE). In addition, KMG Trading AG, the trading subsidiary of KMG International, is focused on trading in crude oil and oil products produced by KMG International refineries or by third parties.

In 2019, our refineries in Romania processed 6,767 thous. tonnes of hydrocarbons and other feedstocks, or 17.3 thous. tonnes per day. Hydrocarbon refining volumes increased by 436 thous. tonnes, or 6.9% year-on-year, largely due

HYDROCARBON REFINING VOLUMES (NET TO KMG), THOUS. TONNES



OIL PRODUCTS PRODUCTION

In 2019, oil product output increased by 429 thous. tonnes, or 6.9% year-on-year, to 6,614 thous. tonnes due to improved feedstock blending at the Petromidia Refinery and higher demand in the market.

OIL PRODUCTS PRODUCTION (NET TO KMG), THOUS. TONNES

Petromidia's refining margin, calculated as the difference between the Urals prices and prices for refined oil products (petrol, diesel fuel, naphtha, liquefied petroleum gas, jet fuel, fuel oil, propylene, sulphur, and oil coke), was USD 4.2 per barrel in 2019, which is USD 2 per barrel lower year-on-year (reflecting the global oil prices).

Petromidia refining margin

	2017	2018	2019
Petromidia refining margin, USD per tonne	48.8	47.4	31.7
Petromidia refining margin, USD per barrel[1]	6.4	6.2	4.2

In 2019, crude oil volumes for resale marketed through KMG International's trading operations totalled 10.9 mln tonnes.

CRUDE OIL FOR RESALE, THOUS. TONNES

KMG INTERNATIONAL'S RETAIL NETWORK

At the end of 2019, KMG International's retail network consisted of 271 gas stations and 693 points of sales across Romania, and 244 gas stations and points of sales elsewhere.

- Romania: 271 gas stations and 693 points of sales (DOEX, RBI and Cuves). The share of the retail market is 16%
- Neighboring countries: 244 gas stations and points of sales. Bulgaria – 56 (retail market share 3%), Georgia – 101 (market share 19.5%), Moldova – 87 DOCO gas stations (market share 24%).

Retail sales (retail and trading) of oil products produced by KMG International increased by 5.5% year-on-year to 3,450 thous. tonnes driven by an increase in the sales of diesel fuel (+ 13%), petrol (+ 11%), and jet fuel (+ 19%).

[1] To convert tonnes to bbl a conversion rate of 7.6 was used.

SERVICE PROJECTS

To deliver their optimisation programmes, KMG's oil service companies consider their leading role in maintaining social stability in operating regions. This inevitably leads to extra costs, resulting from the need to retain employees regardless of current operational needs and meet all obligations under the collective bargaining agreement: benefits, medical insurance premiums, and upskilling costs. The number of employees decreases through natural turnover.

SERVICE INFRASTRUCTURE

KMG's oil service operations are supported by 14 key companies.

- Drilling and developing oil and gas wells. Providing out well services and workovers
- Transporting freight and passengers, providing field transportation and maintenance
- Providing maintenance, repair, set-up and testing services for electrical installations and cathode protection; commissioning and routine servicing of electrical equipment
- Operating offshore and onshore drilling rigs, oil and gas production engineering, drilling services
- Natural gas processing
- Servicing measuring equipment, automation systems and telemechanics, providing telecoms, radio, and cable or satellite TV services at oil fields; checking and repairing measuring equipment; and servicing security alarms. Servicing transport GPS monitoring systems
- Building steel and fiberglass pipelines for oil transportation, building gas pipelines and constructing oil and injection wells. Reconstructing oil pipelines, water pipelines and roads
- Producing and transporting drinking water, ensuring sea water transport
- Catering, maintaining social facilities, etc.

DEVELOPMENT PROJECTS

KMG is contributing to the social and economic development of Zhanaozen in the Mangystau Region, by building a new gas processing plant in the area.

JSC KazMunayGas and Linde Aktiengesellschaft (Linde AG), a German multinational chemical company, signed a Memorandum of Understanding to cooperate in production, technology transfer, training and sharing experience in natural and associated gas utilisation and processing in Kazakhstan. Based on the Memorandum, the two parties are discussing potential cooperation to build a gas processing plant in Zhanaozen. Work is being undertaken to develop a pre-feasibility study, and agree the project parameters, as well as the terms of joint operation.

Munaitelecom LLP started to produce, sell and install low-voltage control cabinets and ultrasonic flowmeters for high-pressure liquids. It also arranged on-the-job training for KMG Group using VR technologies. Work is underway to integrate companies in the Mangystau Region into a single network for secure data sharing. The company received industrial certification for this business.

Oil Services Company LLP has piloted a lean production project, with the aim of increasing the company's financial stability and creating a positive and highly productive work environment. The company is rolling out tablets and Wellreport software to create a single database of wells, automate daily reports and collect and store data on drilling crew activities, well workovers and services. In addition, the company is revamping and upgrading hoist units and drilling rigs to ensure uninterrupted and safe well drilling and servicing.

Oil Construction Company LLP has registered in ALASH, a unified vendor database to manage interactions between suppliers and operators in Kazakhstan (Karachaganak Petroleum Operating B.V., North Caspian Operating Company N.V.). This will expand the geography of its services. The company also implemented a project management framework and plans to introduce cost-control, working to expand its business in constructing new tanks.

To ensure reliable power supply and safe operation of oil field facility electrical installations, Mangistauenergomunai LLP introduced a dispatch control system and an automated system of electric power technical record-keeping at the Kalamkas and Zhetybai fields while ensuring uninterrupted operation of a gas turbine electric power plant at the Kalamkas field equipped with unique innovative technology. The company also produces asynchronous electric motors up to 10 kW and conducts energy audits and then provides energy services.

KMG Drilling&Services and the Caspian Drilling Company signed a trusteeship agreement to transfer the Satti jack-up drilling rig to the Caspian Drilling Company for modification and further operation on subsoil use projects within the Azerbaijan sector of the Caspian Sea. Modification is in progress, with the start of operation expected before the end of 2020.

The modified jack-up drilling rig will have increased lifting capacity, additional equipment and more spacious living quarters to allow safe and high-performance well drilling to depths of over 6,000 m. This will also improve the competitiveness of the rig in the drilling services market of the Caspian Sea and allow us to participate in many offshore projects in Azerbaijan, Turkmenistan, and Kazakhstan.

Support Service Vehicles and Well Servicing Division LLP signed a new three-year contract with TOTAL to provide well services at the Dunga field with the option to extend for up to two years.

TenizService LLP fully completed the construction and installation operations and commissioned the final stage facilities of the Cargo Transportation Route Project intended to receive, tranship and transport cargo for the Future Growth Project at the Tengiz field. During 2018–2019, 322 outsized cargoes with a total weight of about 182 thous. tonnes were transshipped.

CFO FINANCIAL REVIEW

Dauren Karabayev
Deputy Chairman of the Management Board –
CFO of KMG

KMG CREDIT RATINGS

In 2018-2019 KMG's financial performance improvement was translated into higher ratings of the Company's stand-alone credit profile (SACP), from Fitch, Moody's and S&P:

- In November 2018, S&P Global Ratings upgraded its rating on KMG from BB-/kzA to BB/kzA+ with stable outlook and upgraded KMG's stand-alone credit profile to b+;
- On 28 March 2019, international rating agency Fitch confirmed its rating at the level "BBB-/Forecast stable", while increasing the individual rating (stand-alone credit profile) from b to bb-;
- On 22 August 2019 rating agency Moody's affirmed KMG's long-term rating at Baa3 with the outlook changed from "stable" to "positive", whereas the standalone rating of KMG has been upgraded from Ba3 to Ba2;
- On 27 March 2020, Fitch affirmed its rating at the level "BBB-" with a Stable Outlook;
- On 27 March 2020, S&P affirmed its "BB" rating and revised its outlook on KMG to "negative" on the back of lower oil prices.

Moody's	S&P	Fitch
Baa3	BB	BBB-
positive	negative	stable

CONSOLIDATED FINANCIAL RESULTS ACCORDING TO IFRS[1]

	UoM	2019	2018	%
Brent Dated, average	$/bbl	64.21	71.31	-10.0%
Exchange rate, average	KZT/USD	382.87	345.04	11.0%
Revenue	KZT bln	6,859	6,989	-1.9%
	USD mln	17,915	20,255	-11.6%
Share in profit of JVs and associates, net	KZT bln	828	697	18.7%
	USD mln	2,163	2,021	7.0%
Net profit	KZT bln	1,158	694	67.0%
	USD mln	3,026	2,010	50.5%
EBITDA[2]	KZT bln	1,963	1,707	15.0%
	USD mln	5,126	4,947	3.6%
FCF[3]	KZT bln	592	416	42.4%
	USD mln	1,537	1,206	27.5%
Net debt	KZT bln	2,361	2,175	8.6%
	USD mln	6,171	5,661	9.0%

158 For more details see the Financial Statements section

Despite the ongoing market and geopolitical instability, 2019 was a sustainable and resilient year for KMG.
In 2019, we significantly improved our financial indicators, exceeded a certain production plan and fulfilled a number of strategic tasks set by the Shareholder and the Government of the Republic of Kazakhstan.

As part of the development strategy, during the last years KMG balanced out its debt portfolio as a result of refinancing of short-term bonds into long-term ones, KMG aligned the covenants in the documentation for the issuance of Eurobonds and systematically reduced the debt level. KMG also refinanced some loans from US dollars to tenge to minimize the currency risk. In 2019, KMG took all necessary measures to fulfill contractual obligations under TCO crude prepayment.

1. For reader convenience, amounts in USD were converted at the average exchange rate for the applicable period (average exchange rates for 2019 and 2018 were 382.87 and 345.04 KZT/USD, respectively; period-end exchange rates as at 31 December 2019 and 31 December 2018 were 382.59 and 384.20 KZT/USD, respectively).
2. Starting from 2019, the Company revised calculation approach of Earnings before interest, taxes, depreciation and amortization (EBITDA), excluding the finance income from the methodology. In the reports for 2019, and for further periods, the Company calculates EBITDA as "Revenue + Share in profit of JVs and associates, net – Cost of purchased oil, gas petroleum products and refining costs – G&A expenses – Transportation and selling expenses – Taxes other than income tax. Financial metrics for prior periods were recalculated respectively.
3. Starting from 2019, the Company revised calculation approach of the Free cash flow (FCF), including proceeds from Caspian Pipeline Consortium (CPC) under the "Kazakhstan Note". The Company calculates FCF as "CFO - TCO prepayments, net – Capex (cash basis) + Proceeds from CPC under the "Kazakhstan Note". FCF metrics for prior periods were recalculated respectively.

STATEMENT OF PROFIT OR LOSS

KZT mln	2019	2018	Change	%
Revenue and other income				
Revenue	6,858,856	6,988,964	(130,108)	-1.9%
Share in profit of joint ventures and associates, net	827,979	697,326	130,653	18.7%
Finance income	240,880	161,027	79,853	49.6%
Gain on sale of subsidiaries	17,481	18,359	(878)	-4.8%
Other operating income	24,936	23,035	1,901	8.3%
Total revenue and other income	7,970,132	7,888,711	81,421	1.0%
Total revenue and other income, USD mln	20,817	22,863	(2,046)	-8.9%
Costs and expenses				
Cost of purchased oil, gas, petroleum products and other materials	(3,913,744)	(4,312,958)	399,214	-9.3%
Production expenses	(721,693)	(604,475)	(117,218)	19.4%
Taxes other than income tax	(454,295)	(477,732)	23,437	-4.9%
Depreciation, depletion and amortization	(337,424)	(285,186)	(52,238)	18.3%
Transportation and selling expenses	(420,402)	(370,777)	(49,625)	13.4%
General and administrative expenses	(213,967)	(213,485)	(482)	0.2%
Impairment of property, plant and equipment, intangible assets, exploration and evaluation assets	(207,819)	(165,522)	(42,297)	25.6%
Other expenses	(7,203)	(23,283)	16,080	-69.1%
Finance costs	(317,433)	(427,655)	110,222	-25.8%
Net foreign exchange gain/(loss)	8,479	(38,320)	46,799	-122.1%
Total costs and expenses	(6,585,501)	(6,919,393)	333,892	-4.8%
Total costs and expenses, USD mln	(17,201)	(20,054)	2,853	-14.2%
Profit before income tax	**1,384,631**	**969,318**	**415,313**	**42.8%**
Income tax expenses	(226,180)	(279,260)	53,080	-19.0%
Profit for the year from continuing operations	**1,158,451**	**690,058**	**468,393**	**67.9%**
Discontinued operations				
Profit/(loss) after income tax for the year from discontinued operations	6	3,453	(3,447)	-99.8%
Net profit for the year	1,158,457	693,511	464,946	67.0%
Net profit for the year, USD mln	3,026	2,010	1,016	50.5%

REVENUE AND OTHER INCOME

During 2019, our revenue decreased by 1.9% year-on-year to KZT 6,859 bln (USD 17,915 mln). The downtrend was mainly attributable to the decrease in average Brent prices by 10.0% and the decrease in KMG International's (KMG I) crude oil sales volumes, which was partially offset by increased gas exports to China and tenge depreciation against US Dollar by 11.0%. The crude oil sales of KMG I decreased by 13.2% year-on-year to KZT 1,567 bln (USD 4,092 mln). Gas export increased by 22.9% and amounted to KZT 674 bln (USD 1,761 mln).

The earnings from shares in the net profit of joint ventures and associates of KMG increased by 18.7% year-on-year to KZT 828 bln (USD 2,163 mln). The increase is mainly the result of a full recovery of accumulated unrecognized shares in the loss of Asia Gas Pipeline LLP[1] to the amount of KZT 168 bln (USD 439 mln).

Finance income for 2019 increased by 49.6% year-on-year to KZT 241 bln (USD 629 mln). The increase was mainly driven by derecognition of loans from partners of the Pearls project for the total amount of KZT 111 bln (around USD 290 mln) due to the partners' decision to voluntarily relinquish the contract area under the Pearls PSA.

COSTS AND EXPENSES

The cost of purchased oil, gas, petroleum products and refining costs amounted to KZT 3,914 bln (USD 10,222 mln), reflecting a decrease of 9.3% year-on-year due to lower cost of purchased crude oil and the lower global oil prices partially offset by increase in gas purchase volumes and tenge depreciation against US Dollar. Crude oil purchases decreased by 6.1% year-on-year to KZT 2,448 bln (USD 6,395 mln). KTG's cost of purchased gas increased by 53.3% year-on-year and amounted to KZT 473 bln (USD 1,235 mln).

Production expenses amounted to KZT 722 bln (USD 1,885 mln), reflecting an increase of 19.4% year-on-year due to increase of salary expenses, repair and maintenance and the lease expenses. Salary expenses for production employees for 2019 were up by 15.9% year-on-year and amounted to KZT 338 bln (USD 883 mln) due to the salary indexation by around 7% for the employees at KMG-operated assets and KTG. Repair and maintenance costs for 2019 amounted to KZT 129 bln (USD 338 mln), reflecting an increase of 31.5% year-on-year explained by the workover of the wells at oilfields of the Ozenmunaigas JSC and Embamunaigas JSC, scheduled overhauls at Karachaganak mega projects and the service maintenance of processing equipment at the Atyrau refinery (ANPZ). Increase of the lease expenses can be explained by attraction of third-party ship-owners for providing oil transportation services in accordance with the agreement on oil transportation between Kazmortransflot (KMTF), KMG and KMG I.

Transportation and selling expenses for 2019 were up by 13.4% year-on-year to KZT 420 bln (USD 1,098 mln) mostly due to an increase of gas export volumes to China.

General and administrative expenses were almost stable year-on-year and amounted to KZT 214 bln (USD 559 mln). In 2019, KMG recognized a provision in the amount of KZT 34 bln (USD 90 mln) related to litigation issues between KMG Drilling & Services and the Consortium of companies Ersai Caspian Contractor LLP and Caspian Offshore and Marine Construction LLP on the issues arising from the contract for the purchase of integrated works on construction of a jack-up floating drilling rig.

Finance costs were down by 25.8% year-on-year and amounted to KZT 317 bln (USD 829 mln) due to recognized interest for the early redemption of Eurobonds in 2018.

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[1] AGP is a joint company of KazTransGas JSC (100% KMG subsidiary) and Trans-Asia Gas Pipeline Company Limited (shareholder – CNODC, CNPC subsidiary).

PROFIT

Net profit increased by 67.0% year-on-year and equaled KZT 1,158 bln (USD 3,026 mln). The growth is explained by full recovery of accumulated unrecognized shares in the loss of AGP, increased gas exports to China, a finance income increase and a decrease of finance costs for 2019.

EBITDA structure

	UoM	2019	2018	%
Exploration and production	KZT bln	963	1,000	-4%
	USD mln	2,515	2,900	-13%
	% of EBITDA[1]	49%	59%	-10pp
Oil transportation	KZT bln	219	184	19%
	USD mln	572	533	7%
	% of EBITDA	11%	11%	0pp
Gas trading and transportation (KTG)	KZT bln	458	299	53%
	USD mln	1,196	866	38%
	% of EBITDA	23%	17%	6pp
Refining	KZT bln	189	181	4%
	USD mln	494	525	-6%
	% of EBITDA	10%	11%	-1pp
KMG International	KZT bln	81	71	14%
	USD mln	213	206	3%
	% of EBITDA	4%	4%	0pp
Trading	KZT bln	-2	3	-167%
	USD mln	-7	7	-200%
	% of EBITDA	0%	0%	0pp
Corporate center (trading)	KZT bln	78	31	152%
	USD mln	206	90	129%
	% of EBITDA	4%	2%	2pp
Corporate center (adm.)	KZT bln	-36	-24	50%
	USD mln	-95	-70	36%
	% of EBITDA	-2%	-2%	0pp
Other[2]	KZT bln	13	-38	-134%
	USD mln	32	-119	-127%
	% of EBITDA	0%	-2%	2pp
EBITDA	KZT bln	1,963	1,707	15%
	USD mln	5,126	4,947	4%

1. EBITDA in Tenge.
2. Include eliminations, which are represents exclusion of intra-group turnovers. Inter-segment transactions were made on terms agreed to between the segments that may not necessarily be at market rates, except for certain regulated services, which are provided based on the tariffs available to related and third parties.

We analyzed segmented information according to IFRS. Segment performance is evaluated based on revenues and net profit.

Group's operating segments have their own structure and management according to the type of the produced goods and services provided. Moreover, all segments are strategic directions of the business, which offer different types of the goods and services in different markets.

The Company's activity consist of four main operating segments: exploration and production of oil and gas, oil transportation, gas trading and transportation, refining, KMG International, Sales of crude oil and refined products to third parties, Corporate center of NC KMG and other (oilfield service companies and other insignificant companies). KMG presents Corporate center's activities separately, since NC KMG performs not only the functions of the parent company, but also carries out operational activities (processing of crude oil at Atyrau and Pavlodar refineries and further sale of oil products to both domestic and export markets).

Key factors affecting segmented EBITDA in 2019:

- Upstream operations reflected decrease of USD 385 mln mainly due to lower earnings from JVs and associates on the back of lower global oil prices;
- Oil Transportation segment was relatively stable over the year;
- EBITDA from "Gas transportation and marketing" segment soared by USD 330 mln mainly as a result of full recovery of accumulated unrecognized shares in the loss of Asian Gas Pipeline (AGP);
- Refining segment EBITDA decreased slightly due to tenge depreciation against USD;
- EBITDA from Corporate office's trading operations up USD 116 mln as a result of transfer of KMG EP's oil processing activities (from OMG and EMG) from KMG EP to NC KMG following KMG EP's delisting in 2018. KMG EP transferred its activities on processing crude oil at Atyrau and Pavlodar refineries and further sale of oil products to both domestic and export markets. In addition, KMG Onimderi ceased its operations during 2Q of 2019, therefore the wholesale and retail sales now are combined by NC KMG.

up 15%
EBITDA

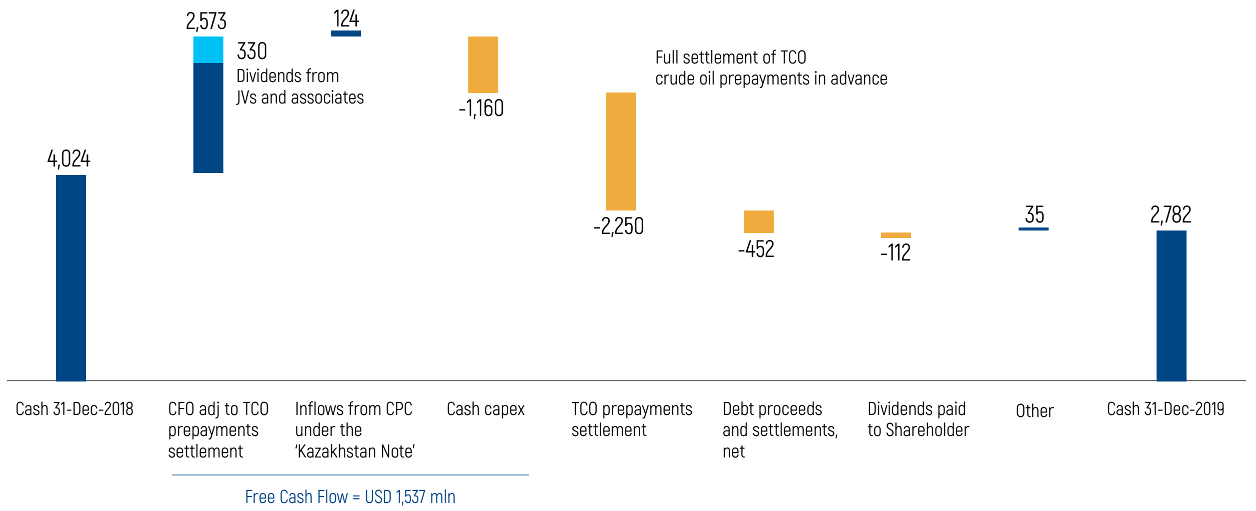
CASH FLOWS

The following table below provides our consolidated cash flows for 2018 and 2019:

KZT mln	2019	2018	Change	%
Net cash flow from operating activities	123,801	629,161	(505,360)	-80.3%
Adjusted cash flows from operating activities	**988,251**	**801,113**	**187,138**	**23.4%**
Net cash flows (used in)/ from investing activities	(319,562)	991,081	(1,310,643)	-132.2%
Net cash flows (used in)/from financing activities	(270,371)	(1,520,368)	1,249,997	-82.2%
Effects of exchange rate changes	(14,985)	179,467	(194,452)	-108.3%
Change in allowance for expected credit losses	(279)	(98)	(181)	184.7%
Net change in cash and cash equivalents	(481,396)	279,243	(760,639)	-272.4%
Net change in cash and cash equivalents, USD mln	(1,257)	809	(2,067)	-255.4%

up 42.4%
FCF

CASH MOVEMENT, USD MLN



CAPITAL EXPENDITURES

Company's Capital expenditures decreased by 19.5% year-on-year to KZT 505 bln (USD 1,320 mln). Capital expenditures represents investments in projects, maintaining current production levels and other expenses.

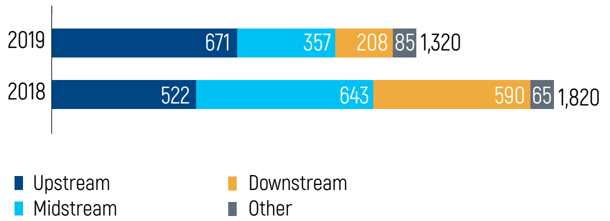
Complex modernisation of refineries has been completed, bringing fuels production of Euro-4 and Euro-5 standards and we are already exporting oil products to Europe and Central Asia. Main investments by segments are: Production - 51%, Transportation - 27%, Refining - 16%, Other – 6%.

DIVIDENDS RECEIVED

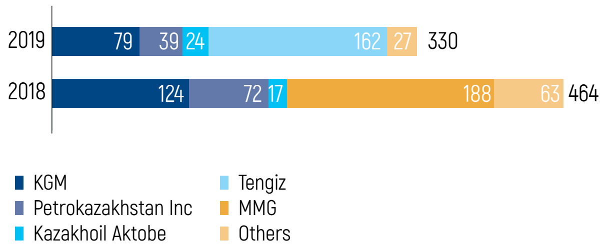
The Company is a Parent Company of the Group and receives dividends from their subsidiaries, JVs and associated companies. We received dividends in the amount of USD 330 mln and USD 464 mln in 2019 and 2018, respectively. The decrease was mainly attributable to – received dividends from TCO and KazRosGas in 2018.

In 2019, we paid dividends in the amount of KZT 43 bln to the Fund, the National Bank of RK and other non-controlling interests

CAPEX ON ACCRUED BASIS, USD MLN



DIVIDENDS RECEIVED FROM JVS AND ASSOCIATED COMPANIES, USD MLN



STATEMENT OF FINANCIAL POSITION

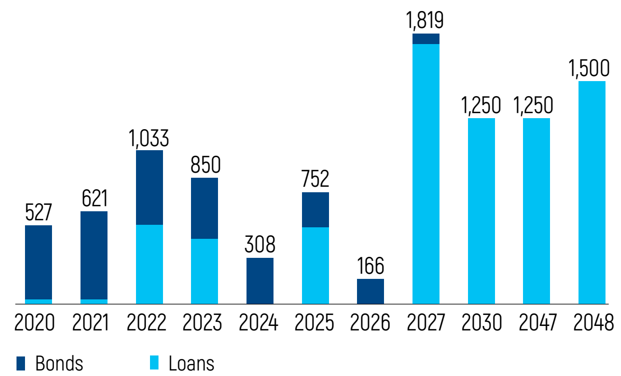
KZT mln	2019	2018	Change	%
Assets				
Property, plant and equipment	4,484,271	4,515,170	(30,899)	-0.7%
Investments in joint ventures and associates	5,590,384	4,895,444	694,940	14.2%
Long-term bank deposits	52,526	52,297	229	0.4%
Other non-current assets	1,314,823	1,285,418	29,405	2.3%
Short- term bank deposits	359,504	386,459	(26,955)	-7.0%
Cash and cash equivalents	1,064,452	1,539,453	(475,001)	-30.9%
Other current assets	1,208,351	1,279,279	(70,928)	-5.5%
	14,074,311	13,953,520	120,791	0.9%
Assets classified as held for sale	7,604	61,760	(54,156)	-87.7%
TOTAL ASSETS	14,081,915	14,015,280	66,635	0.5%
TOTAL ASSETS, USD mln	36,807	36,479	328	0.9%
Equity and liabilities				
TOTAL EQUITY	8,196,656	7,143,069	1,053,587	14.7%
TOTAL EQUITY, USD mln	21,424	18,592	2,832	15.2%
Non-current borrowings	3,584,076	3,822,648	(238,572)	-6.2%
Other non-current liabilities	862,741	1,241,408	(378,667)	-30.5%
Current borrowings	253,428	330,590	(77,162)	-23.3%
Other current liabilities	1,185,014	1,472,526	(287,512)	-19.5%
	5,885,259	**6,867,172**	**(981,913)**	**-14.3%**
Liabilities directly associated with the assets classified as held for sale	-	5,039	(5,039)	-100.0%
TOTAL LIABILITIES	**5,885,259**	**6,872,211**	**(986,952)**	**-14.4%**
TOTAL LIABILITIES, USD mln	**15,383**	**17,887**	**(2,504)**	**-14.0%**
TOTAL EQUITY AND LIABILITIES	14,081,915	14,015,280	66,635	0.5%
TOTAL EQUITY AND LIABILITIES, USD mln	36,807	36,479	328	0.9%

STRATEGIC OBJECTIVE: STRENGTHEN FINANCIAL STABILITY

KMG's gross debt is represented by Bonds and Loans. The debt portfolio is mainly formed in US dollars - the currency of major incomes. Accordingly, the "organic" hedging of currency risk is achieved without the need of using derivative financial instruments. As part of the development strategy, the Company took a number of measures to strengthen financial stability:

- smoothed the debt maturity profile of KMG's debt by refinancing of short-term bonds into long-term ones;
- aligned the covenants in the documentation for the issuance of Eurobonds;
- systematically reduced the debt level, including the advance settlement of obligations pursuant to TCO Oil Sale Transaction;
- to minimize the currency risk, KMG refinanced some loans from US dollars to tenge.

DEBT MATURITY PROFILE (NOMINAL), USD MLN



MEASURES TAKEN AS PART OF DEBT MANAGEMENT

In 2018, the Company successfully placed 7-year, 12-year and 30.5-year issues of Eurobonds as part of managing its portfolio of obligations. The purpose of the new Eurobond issue is to refinance upcoming liabilities and manage the debt structure. Thanks to refinancing of Eurobonds in the amount of USD 3.25 bln in 2018, it was possible to achieve a more balanced schedule of repayment of obligations and changes in a number of restrictive conditions on the part of lenders, the so-called covenants.

Total debt as of December 31, 2019 decreased by KZT 316 bln (USD 780 mln) or 7.6% compared with the figure as of December 31, 2018 and amounted to KZT 3,838 bln (USD 10,030 mln). The decrease in total debt is due to:

- writing off a loan from partners of the Pearl project in the total amount of KZT 111 bln (USD 290 mln);
- a decrease in debt at the Atyrau Refinery in the amount of KZT 62 bln (about USD 163 mln);
- In March 2019, KMG received the consent of the holders of Eurobonds due for redemption in 2022, 2023, 2027, 2047. (Eurobonds issued before 2018) to align the covenant package with the terms of the 2018 Eurobond issue and early redemption of Eurobonds in the amount of USD 30.1 mln (KZT 11.6 bln) due to be paid in 2044;
- repayment of DBK bonds in the amount of KZT 40.5 bln (about USD 113 mln) and a decrease in borrowings of KMG I in the amount of KZT 32 bln (USD 83 mln).

- 7.6%
reduction in total debt

Also in July 2019, Atyrau Refinery transferred the loan currency to DBK in the amount equivalent to USD 152 mln, from "USD" to "KZT" order to manage currency risk. Additionally, in December 2019, the Atyrau Refinery entered into a loan agreement with DBK for the amount equivalent to USD 200 mln. The funds in the amount of USD 87 mln were spent on financing the oil and processing plant modernization and it is also planned to use the funds to partially refinance the foreign currency debt of the plant at Exim Bank of China in January 2020 in the amount of USD 110 mln.

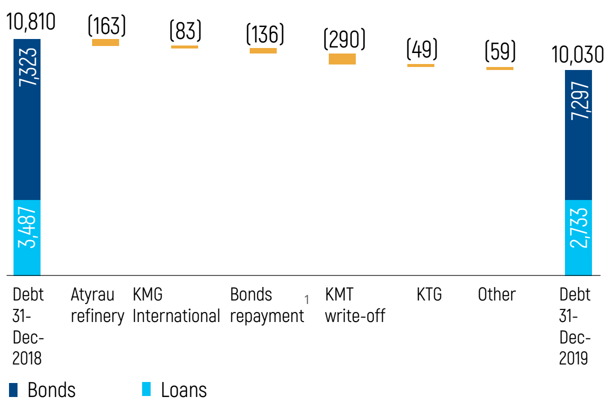
On November 30, 2019, the Company ahead of schedule fulfilled its contractual obligation to return the advance payment as part of the TCO[2] oil and liquefied petroleum gas advance transaction from the international trading company Vitol and the syndicate of international banks. In general, in 2019 KMG its debt mainly due to the accelerated settlement of TCO preypayment facilities in the amount of USD 2,250 mln, inlcuding USD 1,250 mln ahead of the schedule.

The cash and cash equivalents balance as of 31 December 2019 including cash in deposits decreased by 25.4% to KZT 1,476 bln (USD 3,859 mln), mainly due to the cash utilization for the acceleration of a prepayments settlement pursuant to the TCO Advanced Oil Sale trnsaction (USD 1,250 mln settlement ahead of the schedule).

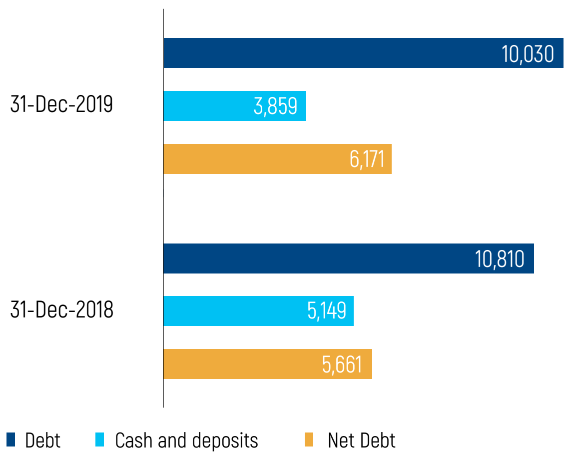
As a result of the above, KMG's net debt as of 31 December 2019 amounted to KZT 2,361 bln (USD 6,171 mln) reflecting an increase of 8.6% compared to KZT 2,175 bln (USD 5,661 mln) as of 31 December 2018.

USD 2.25 bln
accelerated settlement of TCO preypayment facilities in 2019

DEBT MOVEMENT, USD MLN



DEBT AND LEVERAGE, USD MLN



[1] For reader convenience, amounts in USD were converted at the average exchange rate for the applicable period (average exchange rate for 2019 was 382.87 KZT/USD).
[2] In 2016, KMG entered into a long-term TCO crude oil and liquefied petroleum gas (LPG) supply agreement, which included the prepayment. The total minimum delivery volume approximates 38 mln tonnes of crude oil and 1 mln tonne of LPG in the period from the date of the contract to June and August 2021, respectively.

SUSTAINABILITY MANAGEMENT

We embrace sustainability and work towards embedding it throughout our entire value chain. KMG is also striving to meet the highest safety and corporate governance standards. Our Development Strategy until 2028 relies on continuous improvement of the system of governance that promotes better corporate social responsibility, health, safety and environmental protection; enhances regional economic impact and anti-corruption efforts; better relations with stakeholders; and improves corporate governance, corporate culture, corporate ethics, and compliance ratings.

KMG's corporate social responsibility policy fosters development across our operating regions. We promote meritocracy, fairness, and integrity while providing every employee with a workplace conducive to new achievements and assessing their respective contributions to KMG's overall success based on merit. We also foster a culture of understanding, engagement, and support among our employees at all levels.

MANAGEMENT SYSTEM

To ensure transparency of its activities for stakeholders, KMG publishes annual Sustainability Reports. KMG's sustainability reporting is guided by the Global Reporting Initiative's (GRI) Standards.

KMG's Sustainability Report is available on the Company's website

ACTIVITIES TO IMPLEMENT THE UN SUSTAINABLE DEVELOPMENT GOALS (SDGs)

In 2015, Kazakhstan ratified the UN Sustainable Development Goals (SDGs) and incorporated them into the Kazakhstan–2025 and the Kazakhstan–2050 strategies. Since the Government of Kazakhstan is responsible for setting priorities for and the implementation of the respective SDGs, national SDG implementation plans have been adopted. Achieving these targets will require large-scale cooperation and joint efforts with businesses and the civil society.

KMG joined the UN Global Compact (UNGC) in 2006 and has been an active member since then, reiterating its commitment to the UNGC's ten principles for sustainable development and the United Nations' 17 SDGs.

The Company's annual Sustainability Report also serves as our Communication on Progress for the UN Global Compact and is available on the UNGC website at: www.unglobalcompact.org/what-is-gc/participants/6810.

KMG contributes to all the UN SDGs, but some are more relevant than others in terms of risks and business impact. Here we highlight several of the SDGs:

Goal 3. Ensure healthy lives and promote well-being for all at all ages,

Goal 6. Ensure availability and sustainable management of water and sanitation for all,

Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all,

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all,

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation,

Goal 12. Ensure sustainable consumption and production patterns,

Goal 13. Take urgent action to combat climate change and its impacts,

Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

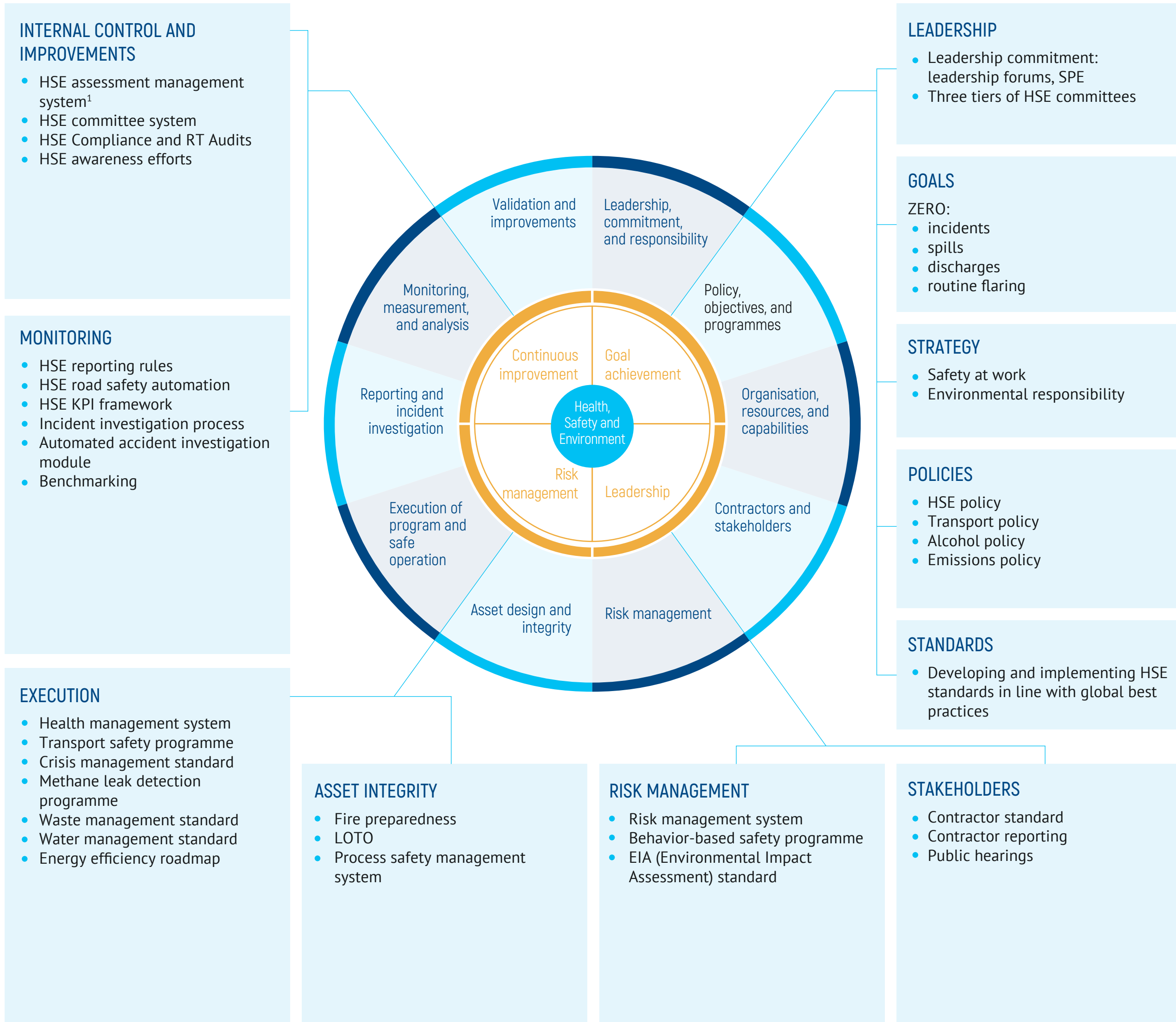
HEALTH, SAFETY AND ENVIRONMENT MANAGEMENT SYSTEM (HSE MS)

KMG's health, safety and environment management system is designed to global best practices and the guidelines of the International Association of Oil & Gas Producers (IOGP), ISO 14000, and ISO 45001. The System covers ten areas and relies on four pillars: leadership, goal achievement, risk management and continuous improvement.

Since 2006, all our subsidiaries operate a quality, environmental, and occupational health and safety management system compliant with ISO 9001, ISO 14001, and OHSAS 18001. KMG's significant energy users are certified to ISO 50001. The effectiveness of our management systems is verified by independent auditors on a regular basis.

To improve their occupational safety management, KMG Group subsidiaries have plans to certify their occupational health and safety management systems to ISO 45001:2018 (replacing OHSAS 18001:2007) by 2021.

HSE MS STRUCTURE AND IMPLEMENTATION OF INDUSTRY BEST PRACTICES



* HSE - Health, Safety and Environment

The Company has in place a 3-tier HSE management system:

- At the level of KMG's Board of Directors
- Health, Safety and Environment Committee at KMG's Management Board level
- HSE committees at subsidiaries

In 2019, the Health, Safety and Environment Committee was launched at the Fund.

Safety, health and environmental protection reports are presented monthly at the meetings of KMG's Board of Directors, and detailed, informative reports are presented at the meetings of the Health, Safety, Environment and Sustainable Development Committee of the Board of Directors.

In 2019, the Company updated its risk register, adding risks related to climate change and water shortages. The KMG Corporate Centre conducts regular reviews of environmental protection metrics, comparing them with the historical performance and global industry benchmarks (IOGP, IPIECA), along with audits of production facilities. Regular inspections of production facilities for compliance with legal requirements are also conducted at the corporate level, informing preventive measures to improve performance.

MANAGEMENT MOTIVATION SYSTEM

To increase motivation and accountability for HSE compliance, the Company included the Corporate Governance Score into the list of its corporate-level KPIs for 2019, and developed the following list of environmental and social responsibility KPIs for top managers:

Environmental and social responsibility KPIs

Environmental responsibility	HSE Managing Director – Reduced Rate of Associated Petroleum Gas Flaring. HSE Co-Managing Director – Reduced Energy Consumption. HSE Managing Director and HSE Co-Managing Director – Achieving Zero Historical Oil Waste.
Social responsibility	Managing Director for Human Resources – Social Responsibility. Managing Director for Safety – Safety Management at Contracting Organisations. Contracting Organisations' Reporting Transparency.

The Company also approved using KMG's ESG rating as a corporate KPI for 2020.

over 50%
share of contractors

CONTRACTOR MANAGEMENT

The Company's strong capabilities in selection and management of contractors give us a critical competitive advantage. Contractors account for over 50% of our blue-collar workers, and improvements to their safety eventually affect KMG's overall productivity. The Company seeks to improve its selection criteria for potential contractors in order to ensure high-quality execution and full transparency on the entire service cycle.

KMG Group Corporate Standard on Engaging Contractors on HSE is a structural element of the Management System comprising requirements for agreements with contractors, including the HSE Agreement on compliance with, and penalties for violation of, HSE requirements, as well as HSE-based pre-mobilisation preparedness audit of contractors' machinery, equipment, and staff. The Company also holds regular forums and meetings with potential service providers to discuss future joint partnerships and HSE requirements of KMG.

On 2 October 2019, Aktau hosted our Forum on Technologies for Management and Recycling of KMG's Historical Waste. A total of over 30 companies providing similar services took part in the Forum. The Forum brought together Kazakhstan's operators providing oil waste recycling/management services to raise their awareness on the requirements for quality, scope, and timelines for providing similar services with respect to KMG's historical waste and help them evaluate their capabilities for adopting new technology.

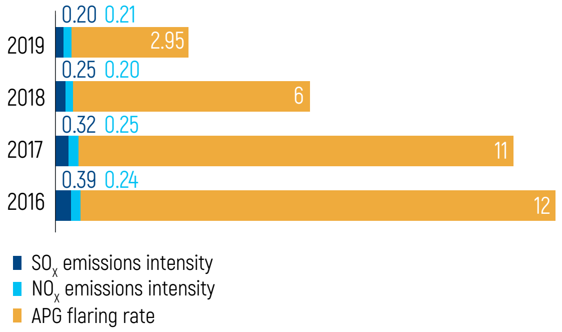
The Forum also discussed KMG's category procurement management strategy, Waste Management (Historical Waste), which will serve as the platform for procuring services to address historical pollution and remediate oil contaminated soils.

ENVIRONMENTAL RESPONSIBILITY AND SAFETY

2019 HIGHLIGHTS

1. SO_x emissions intensity – 0.20[1] (IOGP – 0.2[2])
2. NO_x emissions intensity – 0.21 (IOGP – 0.37)
3. Associated petroleum gas (APG) flaring rate – 2.95 (IOGP – 10.5[3])
4. APG utilisation rate: 97%
5. Historical waste and oil contaminated soils treatment: 325 thous. tonnes (target: 325 thous. tonnes)
6. Reduction in energy consumption (against a 2016 baseline) – 0.7%
7. CDP score: C

ENVIRONMENTAL PERFORMANCE INDICATORS, TONNES PER 1,000 TONNES OF PRODUCED HYDROCARBONS



APG UTILISATION RATE, %

The Company's goals in HSE management are directly related to its Development Strategy. KMG's Development Strategy until 2028 covers strategic initiatives to promote greater environmental responsibility. The Company's environmental priorities include management of greenhouse gas emissions, water resources and production waste, flaring reduction, land reclamation, and energy efficiency improvement.

In 2019, the Company approved its Environmental Policy as prioritised by the Development Strategy. KMG and its subsidiaries take a zero tolerance approach to environmental harm caused by pollution. For the first time, the Environmental Policy covers such environmental aspects as climate, biodiversity, compulsory additional evaluation of risks related to operations in ecologically valuable areas, compulsory reclamation of polluted lands, and ensuring pipeline integrity.

In 2015, KMG supported the World Bank's GGFR initiative to eliminate routine APG flaring by 2030. KMG's Emissions Management Policy was approved in 2019 as part of this initiative. The Policy is aimed at complete elimination of routine flaring and is comprised of eight key principles, six of which directly address climate change.

KMG Group also implements the Road Map to Improve Occupational and Environmental Safety at KMG until 2020 which includes its main strategic environmental and sustainability initiatives. Every year the Company builds new recycling facilities, retrofits existing plants, and invests in new pipelines and infrastructure, e.g. construction of central gas processing facilities, the Saryarka trunk gas pipeline, etc.

[1] Previously published figures contained in the Company's press releases were calculated based on preliminary data.
[2] Available data on the International Association of Oil & Gas Producers (IOGP) performance indicators for 2017 (https://www.iogp.org/).
[3] Available data on the International Association of Oil & Gas Producers (IOGP) performance indicators for 2018 (https://www.iogp.org/).

PRIORITY ENVIRONMENTAL PROJECTS

1. Elimination of historical pollution, as well as sources of negative environmental impact (idle wells, wastewater reservoirs, landfills and other production facilities)
2. Reduction in emissions through improved technology solutions, e.g. replacing fuel oil with fuel gas/natural gas used as fuel in process furnaces, using next-generation additives, tree planting and land improvement at production facilities, replacing equipment, expanding gas processing capacity, installation of gas processing units, etc.
3. Reduction in discharges: the Tazalyq Project – wastewater treatment facilities upgrade at Atyrau Refinery and reclamation of the Tukhlaya Balka evaporation fields
4. Cooling tower overhaul to increase the volume of fresh process water by 3 thous. m³; treatment efficiency improvement at treatment facilities.

EMPLOYEE TRAINING IN ENVIRONMENTAL MANAGEMENT

The steadily improving performance suggests that the need for HSE training at KMG Group remains strong. Given the specifics of Kazakhstan's oil and gas sector, as well as statutory requirements to mandatory staff education, training and upskilling, occupational health and safety, and industrial and fire safety are priority training areas.

In 2019, KMG spent a total of KZT 1,179,877 thous. to train 130,615 employees. Under the "70/20/10 – on-the-job training/internal training/external training" model rolled out across KMG Group, occupational health and safety and industrial and fire safety trainings are conducted at KMG's existing six training facilities/centres.

Ozenmunaigas JSC (Zhanaozen), KazTransOil JSC (Aktau), Intergas Central Asia JSC (Atyrau, Shymkent), Pavlodar Oil Chemistry Refinery LLP (Pavlodar) and Oil Services Company LLP (Aktau) have their own training facilities/centres.

In addition to the tenured faculty, line managers and highly qualified specialists from among KMG long-serving operating personnel are engaged by training centres to deliver trainings and upskilling courses for KMG employees.

Long-serving employees are also engaged in the mentor and internal trainer programmes run by KMG, along with master classes, trainings and various contests held to recognise best performers, enhance internal communications and motivate employees to excel in their jobs.

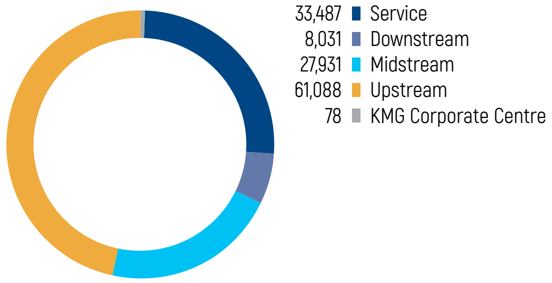
As part of the NAMA Facility climate change mitigation project, KazTransGas Onimderi LLP (KTGO) intends to further increase the proportion of gas-powered motor vehicles and specialised machinery in its fleet within the initiative to convert it from traditional fuels (petrol and diesel fuel) to CNG (fleet upgrade). Following the fleet upgrade between 2020 and 2024, the share of gas-powered vehicles (at least Euro-3 standard) is expected to reach 35%. Improving the fuel mix and vehicle standard by upgrading (purchasing) 16 new LPG-powered vehicles and 46 new CNG-powered vehicles will significantly reduce transport emissions at KTGO. While in 2018 transport emissions totaled 17,962 tonnes, in 2024 following the implementation of the planned measures requiring about KZT 600 mln over five years, these emissions may be reduced to 17,144 tonnes per year or by 4.6%.

- 4.6%
target level of reduction in emissions of harmful substances by 2024

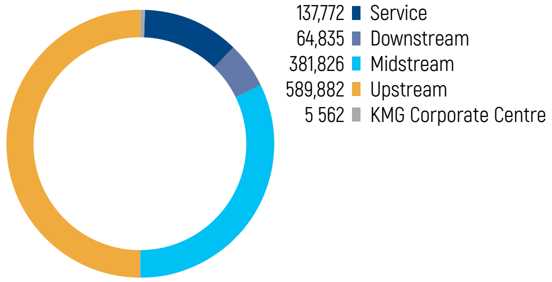
Employee training expenses

	2017	2018	2019
Employees trained	61,140	114,971	130,615
Amount in KZT thous.	624,811	1,097,877	1,179,877

NUMBER OF HSE TRAINED EMPLOYEES BY BUSINESS SEGMENTS IN 2019



EXPENSES SPENT ON HSE TRAININGS BY BUSINESS SEGMENTS IN 2019, KZT THOUS.



ENERGY SAVING AND ENERGY EFFICIENCY PROGRAMMES

KMG considers ongoing efforts to enhance energy efficiency a high priority in environmental protection and operational efficiency improvements. The KMG Corporate Centre collects and analyses energy consumption and energy efficiency-related data, monitors the dynamics, identifies opportunities for improvement, and conducts year-on-year and peer benchmarking.

KMG's energy saving and energy efficiency efforts are based on the methodology set out in ISO 50001 Energy management systems, an internationally recognised best-practice framework for systemic energy management.

Since 2017, KMG has had in place a roadmap for KMG subsidiaries, including jointly controlled entities and joint ventures, to save energy and improve energy efficiency in 2017–2020. Objectives set out in KMG's energy saving roadmap:

1. Increasing senior management's accountability, introducing energy efficiency KPIs for managers responsible for energy saving and energy efficiency
2. Promoting efficient use of energy
3. Reducing energy payments by enhancing energy efficiency and energy saving efforts
4. Ensuring energy efficiency in procurement of power equipment manufacturing, retrofit and overhaul services
5. Raising private investments to improve energy efficiency, including by entering into energy service contracts
6. Improving energy efficiency compliance controls
7. Ensuring compliance with statutory energy saving and energy efficiency requirements

ENERGY CONSUMPTION

In 2019, total energy consumption amounted to 182.8 mln GJ, up 9% year-on-year, including 12.7 mln GJ in electricity, 4.7 mln GJ in heat, 1.7 mln GJ in motor fuel, and 163.7 mln GJ in boiler and heating oil. KMG's total energy consumption is divided between three business segments – Upstream, Midstream and Downstream.

The year-on-year energy consumption increase was mainly due to a higher natural and associated gas consumption for the Group's own operational needs. In 2019, KMG Group's self-generated energy amounted to 642.8 mln kWh in electricity and 3,850.6 thous. Gcal in heat.

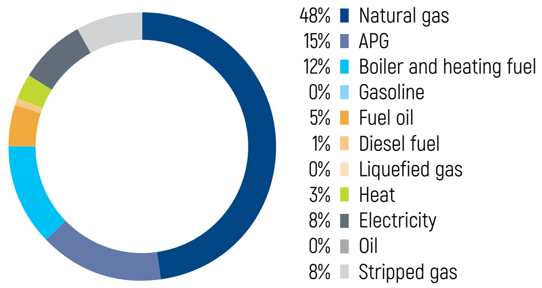
self-generated energy amounted to 642.8 mln kWh in electricity and 3,850.6 thous. Gcal in heat

In 2019, KMG Group's specific fuel and energy consumption in the upstream sector averaged at 2.4 GJ per one tonne of hydrocarbons produced, still 60% above the International Association of Oil & Gas Producers (IOGP) average for 2017, i.e. 1.5 GJ per one tonne of hydrocarbons produced. In oil production, specific energy consumption increase was primarily due to a higher water cut at mature fields, which means a higher density of the fluid produced and, accordingly, a higher energy consumption for artificial lift.

KMG Group's key strategic energy saving and energy efficiency initiatives include process equipment upgrades, deployment of energy saving technologies, optimisation of heat generation and consumption, and development of the Group's own generation assets including APG-fired generation.

In 2019, 69 energy saving and energy efficiency initiatives were implemented. Target annual fuel and energy savings amounted to 0.8 mln GJ, which in physical terms corresponds to 11.3 mln kWh of electricity, 91.3 thous. Gcal of heat and 8,508 thous. m³ of natural gas.

ENERGY CONSUMPTION IN 2019 BY RESOURCE TYPE, %



CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

KMG's long-term Development Strategy prioritises the following climate-related initiatives:

- Greenhouse gas (GHG) emissions management
- Reduction of regular APG flaring
- Improvement of per unit output GHG emissions intensity and overall energy efficiency

In 2019, KMG Group's Emissions Management Policy was approved, its core principles being:

- strict compliance with the regulations and KMG's obligations and commitments
- compliance with the set emission limits and pollutant emission limits, and observing GHG emission quotas
- clarity on roles and responsibilities, improving competencies, training and awareness raising
- regular recording, taking stock and monitoring of emissions
- phasing out regular flaring of raw gas in hydrocarbon production
- implementing initiatives to reduce KMG's GHG emissions and carbon footprint
- managing carbon assets
- continuously improving emissions management activities.

As we seek to boost oil and natural gas production to meet the growing global energy demand, we prioritise initiatives minimising the negative environmental impact of our operations, ensuring compliance with environmental laws, efficient use of natural resources, and continuous improvements to our environmental activities.

We are focused on ensuring the transparency of our environmental reporting, and for the second year running KMG has topped the Environmental Responsibility Rating of Oil and Gas Companies in Kazakhstan compiled by the World Wide Fund for Nature (WWF) Russia and CREON Group, supported by the Ministry of Energy of the Republic of Kazakhstan.

On 29 July 2019, KMG issued its first verified 2018 Greenhouse Gas Emissions Report[1] under the CDP (Carbon Disclosure Project[2]) climate change programme, disclosing data on direct and indirect GHG emissions across all KMG's assets, including its subsidiaries in Romania and Georgia.

CDP

The data include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). According to the report data, in 2018, direct carbon dioxide emissions across KMG amounted to 9.3 mln tonnes (2017: 8.4 mln tonnes). The year-on-year increase in emissions was due to higher gas transportation volumes and new emission sources. The greenhouse gas emissions data were verified by an independent accredited organisation's report. Data for 2019 will be disclosed in KMG's CDP report to be published in Q3 2020.

"We are pleased to have published KMG's first-ever CDP climate change programme report. As the entire world seeks solutions to the climate change problem, KMG is committed to managing the climate risk by reducing emissions, launching an energy efficiency CAPEX programme, tracking its progress and sharing best practices with other global players. This CDP report will enable more effective measurements and management of our environmental impact."

said KMG HSE Managing Director

Vincent Spinelli.

The first KMG forum on greenhouse gas emissions management (Climate Session) took place in Nur-Sultan on 26 November 2019. The forum gathered together around 100 industry delegates and served as a platform for a meaningful dialogue between professionals and sharing of experiences and knowledge. Lively discussions at the Forum centred around GHG emissions management at KMG, anticipated amendments to GHG laws, emissions trading scheme, KMG's reporting under the CDP climate change programme and other important topics.

For more details on our air protection programme see our Sustainability Report.

1. For more details see KMG's published reports which are publicly available at: KMG Group's GHG emissions report 2018, KMG's CDP Climate Change Questionnaire.
2. CDP is an independent non-profit organisation. Since 2002, it has been collecting carbon emission and climate change related data on behalf of investors. Thousands of companies across the world's major economies report their carbon emissions inventories and use CDP to disclose their environmental information. CDP climate ratings assigned to companies based on their disclosures assessment are published by leading financial news agencies (Thomson Reuters, Google Finance) along with the reporting companies' financial metrics and are considered by investors in asset valuations and related risk assessments.

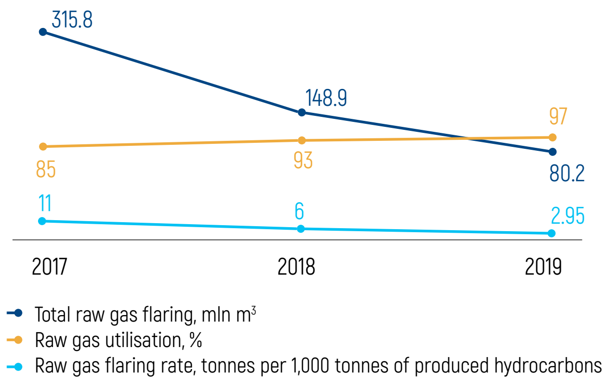
INCREASING APG UTILISATION RATES

In reducing our GHG footprint, we focus on increasing APG utilisation while minimising flaring. In 2019, APG utilisation rate was 97%, with flaring at 2.95 tonnes per 1,000 tonnes of produced hydrocarbons (11 tonnes in 2017, and 6 tonnes in 2018), which is down almost 51% year-on-year and also lower than the IOGP level by 10.5%.

We aim to minimise our raw gas flaring. In 2015, KMG supported the World Bank's Zero Routine Flaring by 2030 initiative. Flaring reports under the Initiative are submitted on an annual basis.

For more details see our Sustainability Report.

RAW GAS FLARING



WASTE MANAGEMENT

We keep record of waste generated across our contracted areas, including all waste produced by our contractors. We also monitor our contractors for compliance with the requirements for safe transportation, disposal and recycling of waste. Compliance with waste management laws is a top priority for the Company. To this end, the Company develops and implements waste management programmes and allocates significant financial resources to address waste generation and land contamination issues across its operations.

In line with the environmental laws of the Republic of Kazakhstan, hazardous waste that cannot be neutralised, recycled or disposed of at our facilities is transported to special landfill sites.

Historical pollution and oil-contaminated soils are currently a primary focus for KMG's remediation efforts, including research carried out to take stock of historical pollution sites, and plans developed to address all types of historical pollution considering the profile of specific field, region, and climate. The

Memorandum of Cooperation in Environmental Protection was signed between the Ministry of Ecology, Geology, and Natural Resources of the Republic of Kazakhstan and KMG on 6 August 2019 to support disposal/recycling of waste at unorganised sludge dumps (Ozenmunaigas JSC) and remediation of oil contaminated soils within the areas contracted by Mangistaumunaigaz JSC, Ozenmunaigas JSC and Karazhanbasmunai JSC.

For more details see our Sustainability Report.

WATER PROTECTION

KMG's core business is concentrated in Central Asia, a region where water is a precious and scarce resource. We recognise our responsibility to society and the environment and are making every effort to ensure efficient use of water resources.

On 1 July 2019, KMG made an official commitment to contribute to water conservation efforts in Kazakhstan. At an HSE forum held for CEOs of KMG Group companies, Alik Aidarbayev, Chairman of KMG's Management Board, signed a personal Statement of Commitment to efficient water management (KMG's eight water-related principles). His initiative was backed up by the CEOs of KMG subsidiaries, who signed similar statements of commitment on behalf of their respective companies. These signed statements have been made available on the official websites of KMG Group companies.

THE EIGHT WATER-RELATED PRINCIPLES

1. We see water as an essential and extremely valuable resource for human life and health, for society, and for our operations, and we fully recognise the importance of a lean and responsible approach to our national water resources.
2. We seek not only to comply with the relevant laws of the Republic of Kazakhstan but also to meet international standards and best practices, and listen to all stakeholders across our operating regions.
3. We embed fresh water conservation and efficient use into managerial decision-making and operations.
4. We fully understand and carefully examine our primary water sources, whether accessed directly or through intermediaries.
5. We do not use drinking water for industrial purposes.
6. We seek to introduce a 100% metering of our water withdrawal and disposal.
7. We seek to minimise our fresh water withdrawal by introducing water reuse and water saving technologies, by reducing the amount of wastewater, and by improving our water treatment standards to maximise water reuse.
8. We build up our capabilities through our membership of industry associations and by joining international water initiatives to understand best practices and continuously improve our water management system.

Under these commitments, KMG subsidiaries develop five-year plans for efficient use of water, adopt water-saving technology, and increase water reuse.

We improve our water efficiency by introducing water reuse systems. Our main water risks are concentrated in our upstream business. All our production assets are located in Kazakhstan's regions experiencing water scarcity, whereas the annual demand for fresh water is rising both in the industrial sector and in municipalities. Within KMG Group, Karazhanbasmunai JSC is the biggest fresh water user, withdrawing water for steam injection technology. The Karazhanbas field desalination plant project will enable KMG to reduce fresh water consumption and place us in the top quartile of IOGP members by fresh water withdrawn from environment. In September 2019, CEL commenced construction works at the site, scheduled for completion in 2021.

In 2019, Atyrau Refinery launched the Tazalyq project to design and construct new water treatment facilities at the refinery. Water treatment facilities will be upgraded in two stages:

1. upgrade and retrofit of the mechanical wastewater treatment facility (2019 -2021)

2. retrofit of the biological wastewater treatment facility and construction of an advanced treatment facility (2019 - 2023).

The upgrade will also include building new underground wastewater treatment facilities equipped with the best technology. The project will allow the refinery to phase out evaporation fields and prevent further negative impact on Atyrau's groundwater, flora, fauna, and air. The sites of the Tukhlaya Balka evaporation fields will be reclaimed. The project will also significantly reduce fresh water withdrawal from the Ural River, as the refinery will use a multi-stage wastewater treatment system that allows the facility to multiply the volume of its water reuse. The project is expected to be completed in the late 2023 and is currently at the pre-construction design and survey stage. A memorandum of understanding was signed between the Atyrau Region Akimat and Atyrau Refinery for the water treatment complex in the left-bank part of Atyrau to accept standard treated wastewater from Atyrau Refinery after the completion of its water treatment project (2023).

For more details on KMG Group's water management system and water-related projects see our Sustainability Report.

OCCUPATIONAL HEALTH AND SAFETY

KMG Group's Occupational Health and Safety Policy is driven by our senior management setting the tone at the top in occupational health and industrial safety and engaging every employee in building a safety culture. The leadership of KMG and its subsidiaries takes a zero tolerance approach to losses and damage caused by accidents (including traffic accidents), emergencies, as well as by the use of alcohol, narcotic drugs, psychotropic substances or their analogues. KMG is committed to ensure compliance with both national laws and relevant international and national standards.

As part of the efforts to implement the Roadmap to Improve Occupational and Environmental Safety in KMG Group approved by the resolution of the Management Board on 27 September 2016 (Minutes No. 39), the Company is phasing in KMG's corporate health programmes aimed primarily at reducing the occupational disease rates among employees and fatalities not related to injuries. The 2019 Roadmap included 31 projects.

In 2019, the Company piloted the Near Miss Reporting/Qorgau Map project to identify and correct unsafe behaviours. The Near Miss Reporting programme will identify unsafe working conditions and cover employees at all levels, enabling them to communicate their concerns, issues, and proposals.

The Company has in place a Crisis Management System to ensure rapid responses to potential crises, prevent their escalation, and mitigate the consequences and potential damage. The system is a three-tier framework which insures incident response escalation from the facility and subsidiary level to the strategic management level at the Corporate Centre. In 2019, the Company ran its first crisis management exercise for the crisis management team, and also continued internal crisis management trainings at its subsidiaries.

Our review of the Company's Ground Vehicle Safety Management System identified three areas for improvement: driver training and upskilling, vehicle GPS tracking, and trip management system. To enhance transport safety and methodology framework and set unified requirements in line with KMG's Transport Safety Policy, on 23 October 2019, KMG's Modernisation and Transformation Council approved the launch of the Trip Management project within KMG's Digital Transformation Programme.

The project aims to improve road safety through instilling a safe driving culture based on global best practice, advanced digital solutions, and process automation. Project timeline: 2020–2022. The project will also unify the trip safety management requirements for all ground transport operations, implement a centralised tracking of key metrics and enable improved fleet utilization through analytical reports and corporate-level indicators.

The health and safety of our employees are the Company's top priority, and we remain committed to zero injuries, i.e. 100% safety. We have made significant progress on health and safety over the past five years. Our employees are engaged on safer working conditions and adoption of the highest standards to better protect themselves, their colleagues, and others. But there is still room for improvement. Despite all our efforts, we deeply regret to report two fatalities during the second half of 2019 – in a road traffic accident and in a fire.

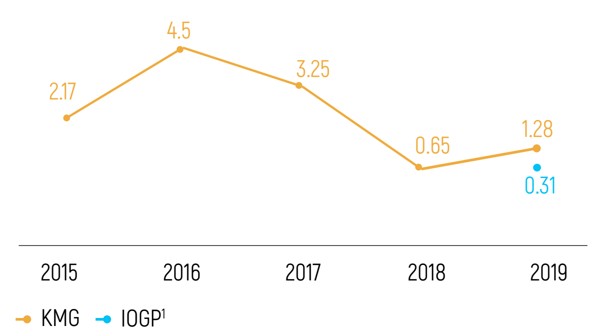
INJURY

- Employee injury rate is 0.31 (0.25 is our target to rank in the IOGP's top quartile by 2020)
- "Golden Rules" - breaches of "Golden Rules" are down by 23% year-on-year: 36 cases (2018: 47 cases)
- Hand and finger injuries are down by 57% year-on-year: 9 cases (2018: 21)
- The KMG Corporate Centre's audit plan has been fully implemented (15 out of 15 subsidiaries, associates and production facilities)
- 10 corporate HSE regulations were approved

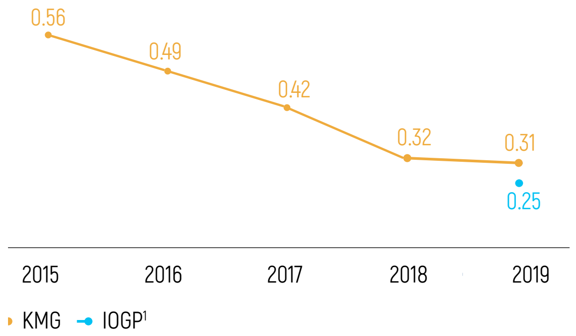
Injury rates, number of cases

Key metrics	2018	2019	Change	%
Work-related fatalities	1	2	1	100
Non-work related fatalities	21	13	-8	-38
Lost-time accidents	48	46	-2	-4
Major lost-time accidents	9	8	-1	-11
All road accidents	66	44	-22	-33
Major and catastrophic road accidents	11	13	2	18
Driving-related injuries	9	10	1	11
Breaches of Golden Rules	47	36	-9	-23
Fires	12	10	-2	-17

5 YEARS FAR, PER 100 MLN MAN-HOURS



5 YEARS, PER 1 MLN MAN-HOURS



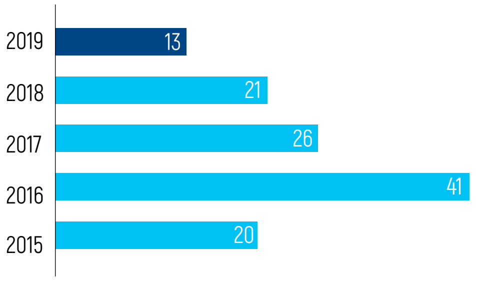
[1] Available data on the International Association of Oil & Gas Producers (IOGP) performance indicators for 2018 (https://www.iogp.org/).

OCCUPATIONAL HEALTH

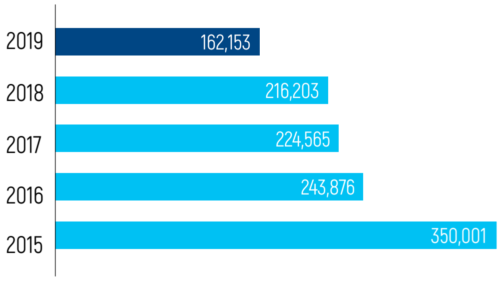
KMG, its subsidiaries align their occupational health and safety management with Kazakhstan's laws and international health and safety standards.

In 2019, employees of subsidiaries lost 162,153 work days to illness, which is 54,050 days or 24.9% less year-on-year. The number of non-injury related fatalities among employees of subsidiaries reduced by eight incidents or 38% year-on-year.

NUMBER OF FATALITY CASES NOT RELATED TO INJURIES



NUMBER OF THE WORK DAYS LOST DUE TO ILLNESS



KMG Group regularly runs a range of measures to improve working conditions and prevent professional diseases at production facilities. KMG also developed and is consistently implementing KMG Group's Corporate Health and Safety Standard aimed to facilitate:

- setting unified requirements for process set-up to maintain and improve employee health
- identification and mitigation of risks/hazards through improvements to working conditions, ergonomics, and workplace hygiene
- use of preventive controls based on assessment of employee health risks to minimise them as practically possible
- promoting and encouraging healthy lifestyles among employees at and out of workplace.

KMG continued its Heart Attack and Stroke Prevention corporate health campaign aimed at prevention and reduction of employee fatalities related to cardiovascular diseases. Additionally, we are tracking and monitoring the implementation of the 10 Steps to Better Health initiative and KMG Group's Regulations on Emergency Medical Response setting requirements for employee access to emergency treatment procedures, medical centres equipment and the emergency medical response action plans.

During the year, we also continued to train specialists and other employees in first-aid and conducted demonstration medical emergency response drills at a number of KMG subsidiaries.

To improve occupational health management and performance, we implemented the following measures:

- Developed and approved KMG's standard covering the Occupational Health Management System in healthcare, emergency medical response, pre-shift physical examination and risk assessment
- Demonstration medical emergency response drills at subsidiaries
- Cross-audits involving subsidiaries' and associates' experts
- First-aid trainings for the HSE function paramedics
- Occupational health trainings for the HSE function specialists
- Monitoring of KMG's Occupational Health Management System performance and improvement measures.

To enhance safety culture, the Company has developed a range of measures to reduce work-related injury rates:

- In 2019, we continued behavioural safety observations for task execution (68,263 observations) and driving (23,495 observations)
- Corporate regulations are continuously updated and implemented to keep them abreast best global practices and ensure a consistent, holistic approach to health and safety across KMG Group
- Three tiers of HSE committees are in place
- Comprehensive audits were run at subsidiaries with the highest injury rates and corrective actions were taken to reduce the mitigate the risks of work-related injuries
- Off-site presentations were held for both employees to provide training in new safety programmes and top managers to improve safety engagement
- The KMG's drivers are continuously trained in safe driving. 12 internal trainers delivered training to about 1,366 drivers (7.2 thous. in total)
- The 5th Competition of the Chairman of KMG's Management Board for the best innovative idea in HSE was held (employees of 20 subsidiaries submitted 103 applications)
- As part of Kazakhstan Energy Week 2019, the first SPE symposium was held, focusing on health, safety, environment and social responsibility in the Caspian Region (370 participants)
- The 5th Annual General Directors' Forum on occupational health and safety was held to discuss Working Towards a Zero Injury Rate. Similar forums are held at subsidiaries, e.g. KazTransOil JSC held a forum for line managers (over 150 attendees) in Nur-Sultan
- A number of ongoing programmes to raise awareness of HSE issues among employees on the ground were developed and rolled out, including the following activities:
  - Preparation and circulation of quarterly letters from the Chairman of the Management Board to foster safety culture among employees
  - Heart Attack and Stroke Prevention brochures were distributed across KMG Group
  - HSE promotional products were supplied to subsidiaries
  - "100% safety" animated wallpaper was installed at company desktops and other devices at subsidiaries
  - Meetings between KMG and the Fund portfolio companies to share HSE experiences.

68,263
behavioral observations on work safety

23,495
behavioral observations on driving safety

PERSONNEL DEVELOPMENT

KMG's corporate social responsibility policy fosters development across our operating regions. KMG complies with the legal and regulatory requirements applicable in the Republic of Kazakhstan, as well as with international laws and treaties regulating oil companies. We promote meritocracy, fairness, and integrity while providing every employee with a workplace conducive to new achievements and assessing their respective contributions to KMG's overall success based on merit. We also foster a culture of understanding, engagement, and support of strategic, operational and production goals among our employees at all levels. Every year, KMG's production companies invest significant amounts in local social and economic growth and infrastructure development across our operating regions in line with memoranda signed with local Akimats under subsoil use contracts.

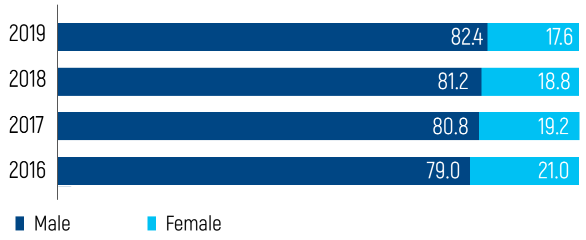
The actual headcount for KMG Group (including subsidiaries, and 50% and more owned jointly controlled entities) was 70,938 at end-2019.

The percentage of locally hired top managers of subsidiaries, and 50% and more owned jointly controlled entities located in Kazakhstan is 86%.

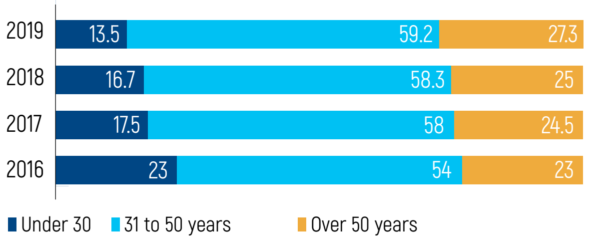
The percentage of employees who are managers at all levels is 11.3% of the total headcount. 16.5% of managers are female and 83.5% are male.

The actual headcount for KMG Group was 70,938 at end-2019.

EMPLOYEE HEADCOUNT BY GENDER, %



EMPLOYEE HEADCOUNT BY AGE GROUP, %



PRIORITY AREAS OF OUR SOCIAL POLICY

STUDENT ENGAGEMENT
Every year KMG offers practical training opportunities and pre-graduation internships to Kazakhstan university students.

In 2019, we hired three graduates of the Zhas Orken programme.

About 20 participants in our Digital Summer programme were offered summer intern positions across KMG Group, with four interns offered further employment with KMG in 2019.

EMPLOYEE ONBOARDING AND TRAINING
Since 2019, KMG Group's training concept has been focused on operational staff development, including both managers, engineering and technical personnel, and blue-collar workers. The KMG Corporate Centre together with KMG Engineering LLP developed and approved development programmes for operational staff jobs, such as Reservoir Engineer (in 2019 the programme covered 25 employees at production companies such as Ozenmunaigas JSC, Karazhanbasmunai JSC, Mangistaumunaigaz JSC, KMG Engineering LLP, Kazakhoil Aktobe LLP, and Kazakhturkmunay LLP).

Another focus in our employee upskilling and training programmes is our refinery modernisation effort, which requires relevant staff to improve their skills. In 2019, modular training was provided to Pavlodar Refinery employees on IBM Maxima and process management. We also ran bootcamps at Petromidia Refinery, Romania, to provide training in maintenance management to employees of Pavlodar Refinery, Atyrau Refinery, and Caspi Bitum.

Mandatory training programmes and upskilling courses remain our key training priority, with KMG Group spending a total of KZT 6.5 bln to train over 140 thous. employees in 2019. The number of trainees is calculated based on completed trainings (e.g. one employee completing two trainings counts as two trainees). Average academic hours of training per year per employee is 17.6 hours.

over 140 thous. people
were trained in compulsory programmes and upskilling courses

COLLECTIVE BARGAINING AGREEMENTS
KMG Group uses its own model of collective bargaining agreement setting out uniform policies covering compensation, social support, working conditions, work and rest hours, etc.

Relevant collective bargaining agreements are signed between the employer and employees at each company.

Collective bargaining agreements were signed at 36 production facilities. A total of 58,710 employees across KMG Group companies have been covered by collective bargaining agreements.

58.7 thous. people
covered by the collective bargaining agreement

TRADE UNIONS
Employees of KMG Group companies may choose to set up a trade union at their own discretion.

KMG Group's uniform internal communications framework requires the management team to hold consultations with the Group companies' trade unions.

KMG Group has 40 trade unions, including shopfloor and local trade unions, which defend the interests of 55,657 employees.

40
trade unions

SOCIAL SUPPORT
KMG Group companies' collective bargaining agreements and Rules for Rendering Social Support guarantee a uniform minimum benefits package and outline an additional benefits package recommended subject to the respective company's financial position and negotiations between the employer and employees/trade unions.

Collective bargaining agreements at KMG facilities offer 35 types of social support for employees, their families, and unemployed retirees.

MOTIVATION PROGRAMMES
A uniform compensation system has been introduced across KMG's E&P business segment companies to ensure consistency of compensation policies across all units and drive employee ownership of results. This system sets out a number of compensation payments, allowances, and additional entitlements payable subject to qualifying conditions, including a region-specific ratio, which is a percentage added to one's salary to cover extra expenses and to compensate for tougher working environment in harsh-climate regions.

In 2019, KMG employees took part for the first time in an international skills competition hosted by TATNEFT. The purpose of the event was to share experiences, provide professional training, and strengthen ties between companies.

During the four days of the event, 182 employees from 26 KMG Group entities competed in different skill sets.

PROMOTION OF HEALTHY LIFESTYLES
KMG annually holds a corporate sports competition across various disciplines.

A corporate sports competition was held in Shymkent in 2019. The qualification rounds involved over 3 thous. amateur athletes from 48 KMG subsidiaries. 350 employees from 26 KMG subsidiaries reached the finals.

over 3 thous.
participants of KMG's corporate sports competition

CHARITY AND SPONSORSHIP
All sponsorship and charitable programmes on behalf of Samruk-Kazyna JSC are run by Samruk-Kazyna Trust Social Development Foundation, assisted by public authorities, the Government of Kazakhstan, and experts in public and social policies.

In 2019, social investments under subsoil use contracts across KMG Group totalled KZT 7.6 bln.

During the year, KMG also allocated KZT 22.8 bln to develop infrastructure at Turkistan as instructed by the Government of the Republic of Kazakhstan (construction of a 7,000-seat stadium, a congress hall, and a 1,000-seat amphitheatre).

KZT 7.6 bln
social investments under subsoil use contracts

TOTAL NUMBER OF EMPLOYEES TRAINED BY YEAR, THOUS. PEOPLE

EMPLOYEE DEVELOPMENT COSTS, KZT BLN

EXPENSES FOR EMPLOYEE SOCIAL SUPPORT, KZT BLN

Average academic hours of training per year per employee is 17.6 hours.

The number of trainees is calculated based on completed trainings (e.g. one employee completing two trainings counts as two trainees).

Over 2019, KMG Group companies spent around KZT 22 bln on social support for their employees (2018: KZT 22 bln), including social support for unemployed retirees. An important share of the benefits package offered across KMG Group includes voluntary health insurance for employees and their families, maternity and childcare benefits, children's education, help to large families, organisation of summer recreation for children, and additional compensations for employee leaves.

Costs by support area

Costs	Share, %
voluntary health insurance of employees and their families against the risk of illness	22
maternity and childcare benefits, children's education, help to large families	18
organisation of summer recreation for children and additional compensation for employee leaves	17
social support for unemployed retirees	7
financial support for treatment/surgical procedures above the health insurance limit	2
financial support for purchasing school accessories by the start of the school year (1 September)	3
benefits paid to employees with disabled spouses or children with lifelong disabilities for the Day of Persons with Disabilities	2
Other types of social support[1]	29

KMG Group has no gender pay and bonus gap. The pay level at KMG Group entities is linked to position rather than an individual employee, i.e. men and women holding the same position will receive the same pay and other bonuses under our corporate compensation policies. Our executives receive annual bonuses for achieving their annual KPIs, with quarterly bonuses paid to administrative staff for meeting their quarterly targets.

[1] Other types of social support (financial assistance to the veterans of the Soviet-Afghan War for marriage, to employees who participated in the Chernobyl disaster response or were exposed to the Semipalatinsk Test Site, in connection with the death of an employee/close relatives, for the organisation of funerals; pregnancy and childbirth benefits; benefits paid to the family of an employee who died in an accident; assistance to employees in dire need; compensation of housing rent expenses to employees; free attendance of sports facilities; benefits paid to employees celebrating a jubilee; compensation of expenses for childcare institutions; benefits due to award winners; benefits paid for achieving a retirement age; increased sick pay; onboarding compensation; compensation of expenses for medicines; New Year presents for children).

8 DECENT WORK AND ECONOMIC GROWTH

SOCIAL STABILITY INDEX (SSI)

The Social Partnership Centre at Samruk-Kazyna JSC (Centre) annually compiles a Social Stability Index (SSI) for KMG Group companies. In 2019, the Centre conducted an SSI survey involving 25 KMG subsidiaries (6,906 respondents). The sample reflects the headcount structure at KMG and its subsidiaries at the social/demographic, organisational/territorial, and hierarchical levels.

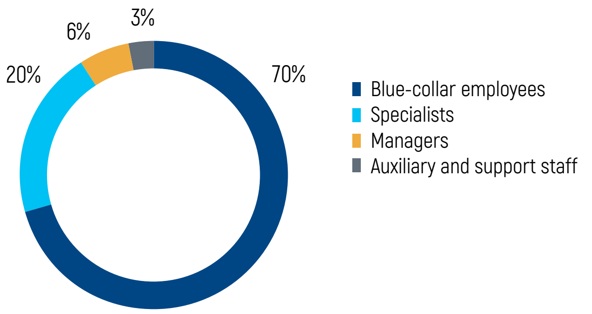
The study suggests that KMG's SSI improved from 61% in 2014 to 72% in 2019 ("above average" score), reflecting, according to the methodology, the Company's increased focus on social development. Based on reports for each facility, an Action Plan is prepared to eliminate or minimise the areas of concern identified by the study.

The study covered 14% of the total headcount.

Following the study, the most alarming areas of concern requiring prevention measures were presented for every subsidiary and associate. Based on reports for each facility, an Action Plan for 2019–2020 was prepared to eliminate or minimise the areas of concern identified by the study.

The Action Plans provided for measures to increase employee satisfaction and their confidence in management actions, build a feedback-loop system, improve working conditions, and arrange for housing and catering, as well as measures to ensure decent working conditions, supply high-quality uniforms and personal protective equipment, improve catering arrangements, provide training and professional development opportunities, a more effective feedback mechanism, a motivation and incentive system, etc. The planned activities were completed in 2019.

RESPONDENTS, %



72%
social stability index

KazTransGas operates the largest trunk gas pipeline network in Kazakhstan with a total length of 19,146 km and an annual capacity of 230 bcm, as well as gas distribution networks with a length of over 49 thousand km.

COMMERCIAL GAS SALES VOLUMES IN 2019 WERE 22.8 BCM, WITH 8.8 BCM OF GAS EXPORTED, OF WHICH 81% WERE SENT TO CHINA

#1 IN GAS TRANSPORTATION IN KAZAKHSTAN

The Company occupies 79% of the Republic of Kazakhstan's gas transportation market

NEXT:
CORPORATE GOVERNANCE

RESPONSIBILITY STATEMENT

In line with the KMG Corporate Governance Code, the Board of Directors, and the Management Board are responsible for preparing a reliable annual report and financial statements of the Company.

The Board of Directors and each member of the Board of Directors confirm that they recognise their responsibility for preparing and approving the annual report and financial statements, and that to the best of their knowledge the annual report and financial statements, taken as a whole, are fair, balanced, and understandable and provide the information necessary for shareholders to assess the Company's performance, business model, and strategy.

Each member of the Board of Directors confirms that to the best of their knowledge:

- the financial statements, prepared in accordance with IFRS, give a true and fair view of the assets, liabilities, financial position, and profit or loss of the Company and the undertakings included in the consolidation taken as a whole
- the Management Board's report includes a fair review of the development and performance of the business and the financial position of the Company and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties they face.

In line with the KMG Corporate Governance Code, the Board of Directors has determined that Christopher Walton, Philip Dayer, Stephen Whyte, and Luís Maria Viana Palha da Silva are independent in character and judgement. The Board of Directors has also determined that there are no relationships or circumstances which are likely to affect, or could appear to affect, the directors' judgement.

CORPORATE GOVERNANCE FRAMEWORK

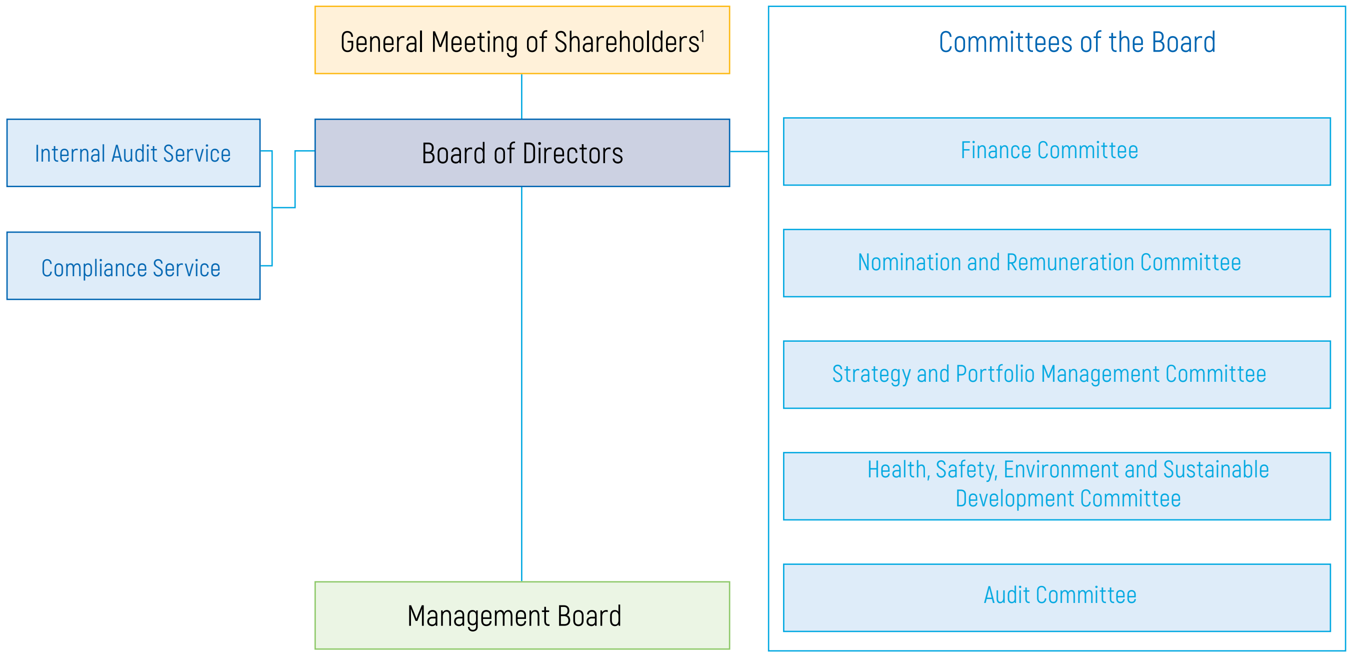
KMG's corporate governance framework represents the totality of processes ensuring management and oversight of KMG's activities and a system of relations between the shareholders (Samruk-Kazyna JSC and the National Bank of Kazakhstan), Board of Directors, Management Board, and stakeholders.

The roles of KMG's governing bodies are clearly delineated and set out in the KMG Charter.

KMG's corporate governance framework is based on respect for the rights and legitimate interests of KMG's shareholders and key stakeholders: the state, KMG's strategic partners and counterparties (suppliers and customers), investors, and employees, as well as municipalities, local communities, and residents in KMG's operating regions.

KMG's corporate governance framework is continuously improved to reflect the evolving requirements and standards of national and international corporate governance practices.

KMG's Corporate Governance Structure



[1] Represented by the Management Board of Samruk-Kazyna JSC.

CORPORATE GOVERNANCE DEVELOPMENT REPORT

At KMG, employees at all levels of the organisation recognise that good corporate governance and transparency are the key drivers of investment appeal and operational efficiency, boosting confidence among potential investors, counterparties, and other stakeholders, mitigating the risk of inefficient use of corporate resources, and increasing the national wealth and KMG's market value.

The KMG Corporate Governance Code[1] adopted in 2015 (the "Code") is the core document underpinning KMG's corporate governance framework and our efforts to improve it.

The Corporate Secretary annually reviews KMG's compliance with the Code's provisions and principles using the "comply or explain" approach. At present, most of the Code's provisions have been complied with. Isolated instances of non-compliance with certain provisions of the Code have been listed in the Corporate Governance Code (CGC) Compliance Report, along with the reasons for non-compliance. For KMG's 2019 CGC Compliance Report, see the Appendix to this Annual Report.

Following an independent review conducted by an independent consultant in 2018 using the review methodology for corporate governance in legal entities in which 50% or more of the voting shares are owned directly or indirectly by the Fund (KMG's major shareholder), KMG was assigned a "BB" corporate governance rating which shows that the Company's corporate governance system in all materials respects most of the identified metrics, however, there is insufficient evidence to demonstrate the system operates effectively.

Throughout 2019, KMG consistently and thoroughly implemented the recommendations presented by an independent consultant following the corporate governance review and included in the 2019–2020 Detailed Action Plan to Improve Corporate Governance at KMG (the "Corporate Governance Plan"), approved by KMG's Board of Directors. The Corporate Governance Plan comprises over 500 activities covering various aspects of corporate governance such as the performance of the Board of Directors and the executive body, risk management, internal control and audit, sustainability, shareholder rights, and transparency. The Corporate Secretary regularly prepares progress reports on the implementation of the Corporate Governance Plan and submits them for review by the Audit Committee and the Board of Directors. Following the review of these reports, the Board of Directors provides feedback to the Chairman of KMG's Management Board and the heads of KMG's functional units involved in the improvement of corporate governance practices.

In order to ensure proper and timely implementation of activities within the Corporate Governance Plan, the Board of Directors approved in 2019 a corporate KPI on "The Progress of the Detailed Action Plan to Improve Corporate Governance at KMG". In addition, the Fund's and KMG's Development Strategies until 2028 outline the milestones for the ambitious targets established by the "Corporate Governance Rating" KPI. These efforts demonstrate the increased focus on corporate governance shown by KMG's major shareholder, Board of Directors, Audit Committee, and management.

Thus, in 2019, KMG successfully implemented a number of initiatives to further implement the Corporate Governance Plan, with the greatest progress made in areas such as the performance of the Board of Directors, risk management, and sustainability.

"BB"
Corporate Governance Rating

[1] KMG Corporate Governance Code is available on the corporate website in section "Internal Documents"(http://www.kmg.kz).

STRATEGIC SESSION 2019

On 4 September 2019, a strategy session was held to review the implementation of KMG's Development Strategy, approved in 2018, until 2028. There was a positive discussion of the most pressing issues between members of KMG's Board of Directors and the Management Board, in particular on the strategy update with respect to the gas initiatives.

SUSTAINABILITY MEETING OF THE BOARD OF DIRECTORS

On 1 July 2019, the Board of Directors had a special sustainability meeting, to which members of the Management Board were invited. As part of the meeting, an external trainer hosted a workshop for executives and senior managers, followed by a discussion of some of the more important issues related to KMG Group's long-term sustainability agenda.

The Board of Directors and the Management Board recognise the high-priority of ecology, environmental protection and the health and safety of KMG employees across the Group's operations, as well as the great importance of building a talent pipeline and committing to universally recognised Sustainable Development Goals (SDGs).

OFF-SITE MEETING OF THE BOARD OF DIRECTORS AT PRODUCTION FACILITIES OF KMG'S SUBSIDIARIES AND ASSOCIATES

On 30 June 2019, KMG's Board of Directors held an off-site meeting at production facilities of JV Kazgermunai LLP ("KGM") and PetroKazakhstan Oil Products LLP ("Shymkent Refinery").

In the Kyzylorda Region, the Board of Directors visited an oil production and refining complex and heard KGM management's progress report on the implementation of its Smart Field project. KGM is one of KMG Group's most technologically advanced production assets.

In Shymkent, members of the Board of Directors visited a renovated refinery, where equipment upgrades were completed in 2018 as part of the State Programme of Accelerated Industrial and Innovative Development. The equipment upgrades have enabled Shymkent Refinery to produce motor fuels meeting K4 and K5 environmental standards as per the Customs Union's Technical Regulations (Euro-4 and Euro-5 compliant fuels). The refinery's throughput capacity is now up to 6.0 mln tonnes of crude oil per annum, with the refining depth increased to 88.7% and the light product yield up to 76%.

DELEGATION OF CERTAIN ISSUES BY KMG'S BOARD OF DIRECTORS TO BOARD COMMITTEES

In 2018, the Board of Directors started to consider delegating issues to Board Committees to reduce the number of items on the Board of Directors' agenda allowing it to focus on the discussion of strategic and key issues while maintaining high quality and efficient decision making on the delegated issues.

The Board of Directors delegated the following issues to the Nomination and Remuneration Committee: the election of members of the Board of Directors and the executive body in subsidiaries and associates; performance assessments, remuneration, succession, and development plans for members of the executive body and the Corporate Secretary; KPIs for executives who are not members of the executive body.

The Board of Directors delegated to the Audit Committee the issues related to overseeing the risk management and internal control systems, as well as internal audit.

Given the delegation of issues, the Board of Directors is now regularly updated by the Committee chairs on matters reviewed by the respective Board Committees. The Committee chairs' reports have been included in the Board of Directors' 2020 activity plan.

FOLLOW-UP ON KMG'S KEY ISSUES

To oversee the implementation of KMG's strategic initiatives and ensure timely corrective actions, KMG's Board of Directors requires the Chairman of KMG's Management Board to report regularly on key changes in the Group's operations and give other updates on HSE issues, interim financial and operating results, interested-party transactions approved by the Management Board, progress on implementation of the Group's strategy, KPIs achievement, investment projects implementation, as well as follow-up reports on KMG's consolidated Development Plan, risk reports, reports from the Board Committee chairs on delegated issues, follow-up reports on resolutions of the Board of Directors, and performance reports submitted by functions reporting to the Board of Directors.

At every meeting, the Board of Directors' Strategy and Portfolio Management Committee considers and discusses progress reports on major oil and gas projects (Kashagan, Karachaganak, and Tengiz), as well as on transformation and privatisation programmes.

QUALITY AND PROMPTNESS OF PRESENTING MATERIALS TO THE BOARD OF DIRECTORS

KMG has amended its Charter to adjust timings for the submission of materials for meetings of the Board of Directors. The Chairman of the Board of Directors draws up a meeting agenda at least ten calendar days prior to the meeting, and at least fifteen business days prior to the meeting considering issues relating to KMG's Development Strategy, KMG's consolidated Development Plan, motivational KPIs for the head and members of the executive body, KMG's annual report or involvement in establishing a legal entity.

Rules for the preparation of materials for meetings of KMG's Board of Directors and its Committees have been developed and approved. In accordance with the rules, regular feedback on the quality and promptness of materials prepared for the Board meetings is collected from each member of the Board of Directors.

New forms of the key documents used in preparations for the Board meetings have been introduced to facilitate the most concise and informative communication to the Board members of all information they would require to review the relevant issues. These documents must disclose the relevant risks and economic impact, as well as alignment with KMG's Development Strategy and Business Plan.

REPORT BY THE BOARD OF DIRECTORS

The Board of Directors is responsible for the overall management of KMG's activities. Resolutions of the Board of Directors are adopted in the procedure set forth in the applicable laws and the KMG Charter. Even though the applicable laws and the KMG Charter allow the Board of Directors to adopt resolutions as long as a quorum is achieved and a certain majority of votes is cast in favour, KMG endeavours to have the most important resolutions adopted at meetings held in person and to have all Board members take part in the voting. KMG makes every effort to prepare such resolutions through preliminary consultations and to have such issues approved by a qualified majority vote, ensuring that the perspectives of independent directors are taken into account.

The Board of Directors determines KMG's business priorities and approves its Development Strategy; considers and makes resolutions on potential acquisitions and other significant financial issues, including the terms of bonds and derivatives issued by KMG; approves major and interested party transactions; approves acquisitions and transfers (assignments) of subsoil use rights; approves conclusion of partnership contracts (agreements) with strategic partners for joint implementation of subsoil use projects; approves investment projects funded by KMG or its subsidiaries; reviews the results of independent analysis of KMG's corporate governance framework; and approves a corporate governance improvement plan.

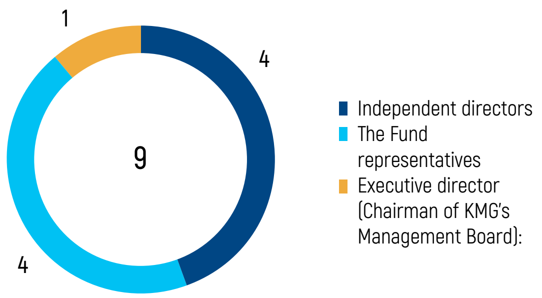
MEMBERSHIP OF THE BOARD OF DIRECTORS

KMG has a high proportion of independent Non-Executive directors with four directors out of the Board of nine directors being classified as independent.

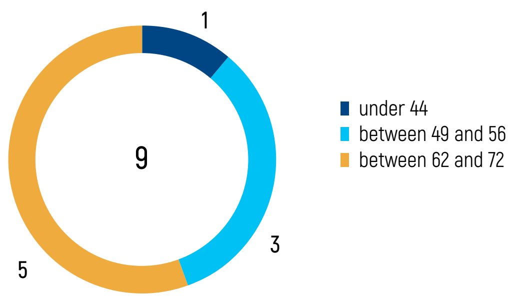
As at year end 2019, the Board composition was as follows:

The Board of Directors has one woman, B. K. Grewal. Out of nine Board members, three are Kazakhstan nationals, four are UK nationals, one is a national of Malaysia, and one is a national of Portugal.

TOTAL NUMBER OF BOARD MEMBERS:



THE BOARD OF DIRECTORS' BREAKDOWN BY AGE:



Average age of Board members: 59 years

Board and Committee membership

Board members	Nomination and Remuneration Committee	Strategy and Portfolio Management Committee	Finance Committee	Audit Committee	Health, Safety, Environment and Sustainable Development Committee	2014	2015	2016	2017	2018	2019
independent director											
Christopher John Walton[1]	●	●	● Chairman		●	first term	first term	first term	second term	second term	second term
Stephen James Whyte	●	● Chairman	●	●	●				first term	first term	first term
Philip John Dayer	●	●	●	● Chairman	● Chairman					first term	first term
Luís Maria Viana Palha da Silva	● Chairman	●	●	●	●						first term
representative of Samruk-Kazyna JSC											
Baljeet Kaur Grewal		●	●					first term	first term	first term	second term
Uzakbay Karabalin	●	●			●			first term	first term	first term	second term
Almasadam Satkaliyev										first term	first term
Anthony Espina	●	●	●								first term
CEO											
Alik Aidarbayev										first term	first term

Tenure of the Board members: first term / second term; ● Committee Chairman (green dot)

[1] Chairman of the Board of Directors.

In 2017, Samruk Kazyna JSC determined KMG's Board of Directors to consist of nine members. However, over time, the membership decreased and at the beginning of 2019, the Board of Directors consisted of seven members. This was followed by the election of two more members to the Board of Directors in 2019. During 2019, the following changes occurred in the membership of KMG's Board of Directors:

On 4 January 2019, Yerlan Baimuratov left the Board of Directors of KMG

On 29 April 2019, Luís Maria Viana Palha da Silva was elected to the Board of Directors of KMG as a member/an independent director

On 20 May 2019, Anthony Espina was elected to the Board of Directors of KMG member/representative of Samruk-Kazyna JSC

The procedure for nominating and selecting candidates to the Board of Directors is set out in the KMG Charter and other regulatory documents. Board members are elected by the General Meeting of Shareholders, supported by the Chairman of the Board of Directors and the Nomination and Remuneration Committee chair. The recruitment and hiring process is driven by transparency, impartiality, and meritocracy.

Members of the Board of Directors are elected from the candidates nominated as representatives of shareholders and other entities. Candidates to the Board of Directors are expected to possess the knowledge, skills, and experience required to perform their functions and support the creation of KMG's long-term business value and sustainable growth, as well as to have an impeccable business reputation.

The Chairman of the Board of Directors is elected by the General Meeting of Shareholders.

Independent directors are elected in accordance with the approved guidelines for election of independent directors at companies that are part of Samruk-Kazyna Group.

Members of the Board of Directors are elected for a three-year term. Through a special consideration procedure, a member of the Board of Directors with a six-year continuous tenure may be re-elected for a new term, in each case considering the need for the Board to be effectively refreshed. As an exception, a member of the Board of Directors with a nine-year tenure may be re-elected (for independent directors, a detailed and compelling case needs to be prepared, to be disclosed by the Company to all stakeholders).

BREAKDOWN OF THE BOARD OF DIRECTORS BY EXPERTISE AND PREVIOUS EXPERIENCE OF SERVICE ON BOARDS AT OTHER COMPANIES

C. J. Walton
Transport, oil & gas, finance

A. S. Aidarbayev
Oil & gas

A. M. Satkaliyev
Oil & gas, privatisation

U .S. Karabalin
Oil & gas

B. K. Grewal
Strategy, finance

A. Espina
Stock markets

P. J. Dayer
Finance, audit, risk management

S. J. Whyte
Oil & gas, strategy

L. M. Palha
Oil & gas, petrochemicals, HR

KMG believes that the Board of Directors is well-balanced across all areas in terms of its skills and expertise.

Christopher John Walton

Chairman of the Board of Directors, Independent Director

Member of KMG's Board of Directors since 2014

Date of birth: 19 June 1957

Education:

- Bachelor of Arts (BA) in Political Science, the University of Western Australia
- Master in Business Administration (MBA), Finance, the University of Western Australia
- Fellow of the Royal Aeronautical Society
- Fellow of the Institute of Directors

Experience

In addition to his role as Chairman of KMG's Board of Directors, Christopher Walton is Audit Chair of the Submarine Delivery Agency (UK) and a Non-Executive member of the Royal Navy's National Shipbuilding Strategy Client Board.

Pro-bono, Mr Walton is a trustee of the Guild of Freemen of the City of London's Charity. He recently stepped down as the Interim Chairman of the UK Institute of Directors.

He is an experienced company chairman: Lothian Buses plc (buses and trams), Goldenport Holdings (shipping) and Asia Resource Minerals plc (coal mining). In addition, he was the Senior Independent Director of Rockhopper Exploration plc (offshore oil exploration) and Audit Chair of JSC NC Kazakhstan Temir Zholy.

In the past he has been a Non-Executive member of the Audit Committee of the UK Department for Digital, Culture, Media and Sport. In addition, Mr Walton was a member of the Bank of the England's Regional Economic Advisory Panel (SE England & Anglia) from 2002 to 2005.

As Finance Director of easyJet plc, Mr. Walton successfully directed its IPO. He has held senior finance and commercial posts at Qantas, Air New Zealand, Australia Post and Australian Airlines. Mr. Walton has also worked for BP Australia, in the Australian Senate and for Hamersley Iron.

Mr Walton is a Court member (and Treasurer) of the Guild of Freemen of the City of London.

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

Alik Aidarbayev

Member of KMG's Board of Directors, Chairman of KMG's Management Board

Member of KMG's Board of Directors since 2018

Date of birth: 19 May 1963

Education:

- Oil and Gas Fields Development Technology and Complex Mechanisation, Kazakh Polytechnic Institute named after V. I. Lenin

Experience

Between 1985 and 1995, Alik Aidarbayev worked at Zhetibayneft's Upstream Unit as an operating engineer, at Mangyshlakneft Oil Production Association as Deputy Head of a reservoir pressure maintenance shop, and later at SJSC Yuzhkazneftegas as Head of a reservoir pressure maintenance shop, Head of the Upstream Unit, Deputy CEO and First Vice President.

At different periods he was CEO of JSC Turgai Petroleum, CEO of JSC Mangistaumunaigaz, Upstream Managing Director at KMG, CEO of JSC KazMunaiGas Exploration Production, Akim of the Mangystau Region, First Vice Minister for Investments and Development of the Republic of Kazakhstan, and Deputy Chairman of the Management Board at Samruk-Kazyna JSC.

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

Almasadam Satkaliyev

Member of KMG's Board of Directors, representative of Samruk-Kazyna JSC

Member of KMG's Board of Directors since 2018

Date of birth: 31 October 1970

Education:

- Stanford Executive Programme (SEP) and Stanford Graduate School of Business, Stanford University (US)
- Executive MBA and Graduate School of Business (a joint programme with Duke University's Fuqua School of Business), Nazarbayev University (Kazakhstan)
- Master in Economics, the Russian Presidential Academy of National Economy and Public Administration (Russia)
- The Finance Economics programme (specialisation: Economics), Department of Public Sector Economy and Finance, the Institute of Public Administration and Civil Service of the Russian Presidential Academy of National Economy and Public Administration (Russia)
- Mechanics and Applied Mathematics, Al-Farabi Kazakh National University (Almaty)

Experience

Almasadam Satkaliyev served as CEO of TaSSaT LLP, a manager and Head of the Clearance Department at CJSC NCOT KazTransOil, Vice President of Economics and Managing Director at the Nur-Sultan Representative Office, Head of the Project Management Department at JSC NCOT KazTransOil, CFO and Vice President of Economics at JSC Kazakhstan Electricity Grid Operating Company (KEGOC).

At different periods he was First Vice President of JSC Kazakhstan Electricity Grid Operating Company (KEGOC), Director for Power Generation Asset Management at JSC Kazakhstan Holding for the Management of State Assets Samruk, Director - Head of KEGOC Group, Vice Minister of Energy and Mineral Resources of the Republic of Kazakhstan, Chairman of the Management Board, First Vice President and President of KEGOC, Managing Director at Samruk-Kazyna JSC, Chairman of the Management Board of JSC Samruk-Energy, Deputy Chairman of KAZENERGY Association, and Head of the Asset Management Department at Samruk-Kazyna JSC.

Almasadam Satkaliyev also acted as a member of the Boards of Directors at JSC NC Kazakhstan Temir Zholy and Kazakhstan Electricity Association, Chairman of the Board of Directors of JSC KEGOC, Chairman of the Kazakhstan National Committee at the World Energy Council (WEC), a member of the Board and Chairman of the Coordination Council for Energy Development at KAZENERGY Association, Chairman of the Energy Committee and a member of the Presidium of National Chamber of Entrepreneurs of the Republic of Kazakhstan Atameken, and Chairman of the Committee on Power and Electrical Engineering at Association of Kazakhstan Machinery Industry.

Apart from that, Kazakhstani Electric Power Association awarded him an honorary title "Honored Power Engineer of the CIS" for his work in the field of energy.

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

Uzakbay Karabalin

Member of KMG's Board of Directors, representative of Samruk-Kazyna JSC

Member of KMG's Board of Directors since 2016

Date of birth: 14 October 1947

Education:

- Mining Engineering, the Gubkin Russian State University of Oil and Gas
- Postgraduate programme at the Gubkin Russian State University of Oil and Gas
- Candidate of Technical Sciences
- Doctor of Technical Sciences
- Academician of the National and International Engineering Academies of the Republic of Kazakhstan

Experience

Uzakbay Karabalin held various positions at Kazneftegazorazvedka's administration office (the South Emba oil and gas prospecting expedition), Kazakh Scientific Research Geological Exploration Oil Institute, Prikaspiygeologiya's regional administration office, the Guryev branch of Kazakh Polytechnic Institute named after V. I. Lenin, the Industry Department of the Administration Office of the President and of the Cabinet of Ministers of the Republic of Kazakhstan.

At different periods he was Head of the Main Oil and Gas Department at the Ministry of Energy and Mineral Resources of the Republic of Kazakhstan, Deputy Minister of Energy and Fuel Resources of the Republic of Kazakhstan, Deputy Minister of Oil and Gas Industry of the Republic of Kazakhstan, First Vice President and Acting President of CJSC NOGC Kazakhoil, President of CJSC KazTransGas, Vice Minister of Energy and Mineral Resources of the Republic of Kazakhstan, President of KMG, CEO of JSC Mangistaumunaigaz, CEO of the Kazakh Institute of Oil and Gas, Minister of Oil and Gas of the Republic of Kazakhstan, and First Deputy Minister of Energy of the Republic of Kazakhstan.

Uzakbay Karabalin was also Chairman of the Boards of Directors at CJSC KazTransOil, CJSC NC Oil and Gas Transportation, CJSC NC KazMunaiGas and JSC KazMunaiGas Exploration Production, Chairman of the Coordination Council and Deputy Chairman of KAZENERGY Association, a member of the Supervisory Board at KazRosGas LLP, a member of National Investors' Council under the President of the Republic of Kazakhstan, Chairman of the Board of Directors of the Atyrau University of Oil and Gas, and a member of the Board of Directors (Independent Director) of the Kazakh Institute of Oil and Gas.

Holds 9,655 ordinary shares in JSC KazTransOil.

Baljeet Kaur Grewal

Member of KMG's Board of Directors, representative of Samruk-Kazyna JSC

Member of KMG's Board of Directors since 2016

Date of birth: 2 May 1976

Education:

- Bachelor in International Economics with first-class honours, the University of Hertfordshire (UK) The Executive MBA programme, Cambridge University (UK)
- Advanced Exec Ed from Massachusetts Institute of Technology (MIT) Sloan School of Management on Blockchain Technologies.

Experience

Baljeet Grewal provides strategic oversight to the Fund's portfolio of investments and advises on corporate and investment strategy development.

She has 18 years of international experience in senior executive posts in sovereign wealth funds and global investment banks. She was Advisor at the Asian Development Bank (West Asian Mission), Managing Director & Vice Chairman at the investment research arm of Kuwait Finance House, Vice President of Maybank Group (Malaysia) and held senior investment banking posts at ABN AMRO Bank and Deutsche Bank.

Baljeet has deep experience in strategy, investment advisory and national economic strategies in emerging markets. She worked in close cooperation with the ECB, IMF, World Bank and various governing bodies on regulatory and policy development in emerging markets. She is an award winning research analyst having led a successful investment research arm in the Middle East and has extensive experience in the oil and gas sector of developing and frontier markets. Baljeet is a key advocate of women in finance.

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

Anthony Espina

Member of KMG's Board of Directors, representative of Samruk-Kazyna JSC

Member of KMG's Board of Directors since 2019

Date of birth: 27 June 1948

Education:

- Bachelor of Business, University of Southern Queensland

Experience:

He started his career as a computer programmer in Australia in 1969. In 1971, he returned to Hong Kong and worked as a computer systems analyst developing business applications for the largest shipbuilder. In 1973, he joined Arthur Andersen & Co. as an auditor and was promoted to partner in 1982. His clients included large banks, insurance companies, fund management companies and the Hong Kong Government. During this time, in addition to assisting international banks in the development of IT Strategic Plans and implementation of banking systems, he also developed the housing database for the Hong Kong Housing Authority, which housed over 3 mln of the Hong Kong population (7.5 mln).

In 1986, he joined Deloitte as a partner in charge of consulting. During his time with Deloitte, he was seconded to the Hong Kong Government and developed the Central Clearing and Settlement System for the Stock Exchange of Hong Kong.

In 1991, he founded his own securities dealing and investment advisory business. In 2005, he was chairman of the Hong Kong Securities Association and is currently Permanent Honorary President of the Association. In 2012, he advised on the purchase of ATF Bank, one of the top ten banks in Kazakhstan, and in May 2013, he was appointed as CEO and Chairman of the Management Board of ATF Bank until his retirement in April 2019. He was also an Independent Non-Executive Director of the ENPF, the central provident fund of Kazakhstan from July 2014 to May 2017.

Joint appointment and membership in the Board of Directors:

- INED of China Cloud Copper Company Limited (listed on Hong Kong Exchanges and Clearing);
- NED of ATF Bank in Kazakhstan (listed on KASE, Kazakhstan).

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

Philip John Dayer

Member of KMG's Board of Directors, Independent Director

Member of KMG's Board of Directors since 2018

Date of birth: 5 January 1951

Education:

- Bachelor of Laws, King's College London (UK)
- Fellow of the Institute of Chartered Accountants in England and Wales

Experience

After his qualification as a chartered accountant, Philip Dayer began his career in investment banking specializing in corporate finance at major banks.

In 2005, he retired from ABN AMRO Hoare Govett and since then has been an independent director at various oil and gas, software, and financial service companies. In 2006, he was engaged by Rosneft as a consultant and participated in the company's successful IPO.

Philip Dayer is currently a member of the Boards of Directors at PJSC Severstal, VTB Capital plc. and The Parkmead Group. From 2010 to 2018, he was a member of the Board of Directors of JSC KazMunaiGas Exploration Production.

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

Stephen James Whyte

Member of KMG's Board of Directors, Independent Director

Member of KMG's Board of Directors since 2017

Date of birth: 20 January 1966

Education:

- Bachelor of Science in Geophysics (with honours), the University of Edinburgh (UK)
- International Baccalaureate, Pearson College UWC (Canada)

Experience

Stephen James Whyte has extensive experience in the oil and gas industry. At different periods he headed field development groups at Shell, directed joint ventures and infrastructure at Shell EP Europe, was Commercial Director, Business Development Manager, Non-Operating Assets Manager and Head of Exploration at Clyde Petroleum B.V., Upstream Vice President and Head of Shell EP's Brazil office, Senior Vice President Commercial at BG Group, COO and Head of Exploration and Production at Galp Energia. Between April 2017 and December 2019, he held the role of the Non-Executive Chairman of Genel Energy plc.

Currently, Stephen Whyte serves as Non-Executive Director at Echo Energy plc. He was also Non-Executive Chairman of the Board of Directors at Sound Energy plc and Executive Director on the Board of Directors of Galp Energia, a Portuguese major. In these companies, he served as a member and Chairman of nominations, remuneration, audit, and HSE committees.

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

Luís Maria Viana Palha da Silva

Member of KMG's Board of Directors, Independent Director

Member of KMG's Board of Directors since 2019

Date of birth: 18 February 1956

Education:

- Bachelor in Economics, Lisbon School of Economics and Management (Portugal)
- Bachelor in Economics; Management and Business Administration, the Catholic University of Portugal
- Advanced Management Programme (AMP), the Wharton School of the University of Pennsylvania (US)
- Key Strategic Issues in Modern Retailing, INSEAD business school
- Leading Organic Growth, the Darden School of the University of Virginia (US)

Experience

Between 1981 and 1986, Luís Maria Viana Palha da Silva was a manager at a leading Portuguese inorganic chemistry company. From 1987 to 1992, he was CFO of Covina, Companhia Vidreira Nacional, a leading Portuguese producer of sheet glass.

Over the next three years, he served as Secretary of State for Trade, responsible for foreign trade and controlling national investment, foreign trade, food safety and competition authorities of the Government of Portugal.

In his tenure as CFO of Cimpor - Cimentos de Portugal from 1995 to 2001, he turned the company into a regional leader in the production of cement, concrete, aggregates, lime and other construction materials after a series of mergers and acquisitions. In 2001, he joined Jerónimo Martins (JM) as CFO and then as CEO. From 2004 to 2010, as he held these positions at the JM Group level, Jerónimo Martins' became one of the top three market caps in Portuguese stock exchange. In recent years, he worked at Galp Energia as Vice Chairman of the Board of Directors and Head of Refining and Marketing responsible for the development of two refineries in Portugal.

Since 2015 he has been Chairman of the Board of Directors at PHAROL.

At different periods he was President of Apetro (the Portuguese association of oil companies), an independent member of the Board of Directors and Audit Committee at NYSE Euronext in New York, and Chairman of the Portuguese Issuers Association (AEM). Currently, he is a Non-Executive member of the Board of Directors of Nutrinveste (one of largest Portuguese olive oil producers), Chairman of the Audit Committee of Seguradoras Unidas (insurance company in Portugal, with presence in Angola and Mozambique) and Chairman of the General Meeting and member of Supervisory Board of EDP Electricidade de Portugal (leading electricity company in Portugal, listed in Euronext Lisbon).

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

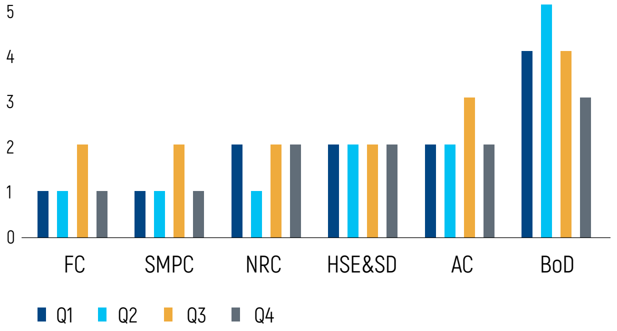
BOARD ACTIVITIES DURING 2019

The Board of Directors had 18 meetings in 2019, reviewing 307 issues.
Committee meetings:

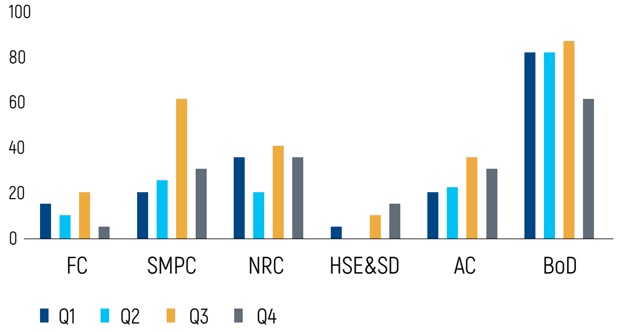
- The Finance Committee (FC): 5 individual meetings, 46 issues
- The Strategy and Portfolio Management Committee (SPMC, formerly the Strategy and Innovation Committee): 5 individual meetings, 125 issues
- The Nomination and Remuneration Committee (NRC): 7 individual meetings, 99 issues
- The Audit Committee (AC): 9 individual meetings, 110 issues
- The Health, Safety, Environment and Sustainable Development Committee (HSE & SD Com): 3 individual meetings, 36 issues

In 2019, the Board of Directors placed particular focus on updating the Company's Development Strategy, ensuring its financial stability, overseeing investment project management and sustainability issues, improving corporate governance, internal audit and risk management, developing management KPIs, and driving digital transformation as well as safety and well-being of employees.

NUMBER OF MEETINGS



NUMBER OF ISSUES REVIEWED



Actual attendance by Board members at Board and Committee meetings

Members of the Board of Directors	Board and Committee meetings in 2019					
	Board of Directors	Audit Committee	Nomination and Remuneration Committee	Strategy and Portfolio Management Committee	Finance Committee	Health, Safety, Environment and Sustainable Development Committee
Christopher John Walton	18/18	–	7/7	5/5	5/5	3/3
Stephen James Whyte	18/18	9/9	7/7	5/5	5/5	3/3
Philip John Dayer	18/18	9/9	7/7	5/5	5/5	3/3
Luís Maria Viana Palha da Silva[1]	11/11	5/5	4/4	3/3	3/3	2/2
Baljeet Kaur Grewal	18/18	–	–	5/5	5/5	–
Uzakbay Karabalin	18/18	–	7/7	5/5	–	2/3
Almasadam Satkaliyev	18/18	–	–	–	–	–
Anthony Espina[2]	11/11	–	4/4	3/3	3/3	–
Alik Aidarbayev	18/18	–	–	–	–	–

Note: The first figure shows the number of meetings attended by a member of the Board of Directors, and the second figure is the total number of meetings they were entitled to attend

1. Elected to the Board of Directors of KMG as a member /an independent director of KMG on April 29, 2019.
2. Elected to the Board of Directors of KMG as a member/representative of Samruk-Kazyna JSC on May 20, 2020.

CHAIRMAN OF THE BOARD OF DIRECTORS AND HIS ROLE

Chairman of the Board of Directors is responsible for providing overall leadership for the Board of Directors, ensuring that the Board of Directors fully and effectively fulfils its main roles and builds a constructive dialogue between Board members, major shareholders and the Management Board.

INDEPENDENT DIRECTORS AND THEIR ROLE

Independent directors meet all statutory independence criteria, as well as the requirements of the procedure for selecting independent directors at the Fund's companies and the KMG Code of Corporate Governance.

In line with global best practices, the Company seeks to ensure that its independent directors meet the high standards, and hereby declares that there are no other circumstances which are likely to impair, or could appear to impair, its directors' independence.

LIABILITY INSURANCE

In accordance with the established internal standards and in line with global best practice, KMG takes out an annual third-party liability insurance policy covering the Company's officers, including members of the Board of Directors.

KMG maintains an annual liability insurance policy covering members of the Board of Directors and the Group's officers throughout the year. The insurance policy provides financial protection to directors and officers against possible claims arising as a result of unintentional and/or erroneous actions by officers. A D&O policy covers legal defence costs for directors, as well as financial expenses incurred as a result of any claim against directors arising as a result of their office.

The Group selects a local insurer through a competitive bidding process, with a mandatory requirement to have at least 95% of the risk reinsured in a market with a reliability rating of at least "A–" as per the Standard & Poors' scale.

The insured amount (liability limit) is USD 100 mln, with worldwide insurance cover.

The Group's D&O policy terms and conditions are in line with the national and global best practices in director and officer liability insurance.

SUCCESSION PLANNING FOR THE BOARD OF DIRECTORS, INDUCTION AND DEVELOPMENT

KMG is developing a succession programme for members of the Board of Directors, which is linked to the development of a similar programme for the Management Board. The project is expected to be completed in 2020.

KMG has in place an Induction Programme for newly elected members of KMG' Board of Directors, approved by KMG's Board of Directors dated 23 February 2017. In March 2019, the Programme was amended by resolution of the Board of Directors based on the results of the review of best practices in corporate governance. In particular, the performance in completing the Induction Programme for newly elected members of the Board of Directors will now be taken into account when assessing the performance of the Board members.

The Corporate Secretary conducts monitoring of the Programme implementation, i.e. its actual completion by all newly elected members of the Board of Directors. During 2019, Anthony Espina and Luís Maria Viana Palha da Silva, newly elected members of the Board of Directors, completed the Programme, including site visits to a number of production facilities.

Members of the Board of Directors are trained on a regular basis in accordance with an approved programme. On 1 July 2019, all members of the Board of Directors took part in the themed training "Global Trends in Sustainable Development and Their Impact on Organisations" organised by Ernst & Young.

MANAGING CONFLICTS OF INTEREST

The Board of Directors and, above all, independent directors are actively involved in discussing issues where a potential conflict of interest may arise (preparation of financial and non-financial statements, approval of interested-party transactions, nomination of candidates to the executive body, remuneration for members of the executive body, etc.). All Board Committees are currently chaired by independent directors, and the Audit Committee is comprised of independent directors only.

In addition, Philip Dayer is the Non-Executive chairman of VTB Capital plc ("VTB") and from time to time KMG engages VTB's advisory services. In those cases, Philip Dayer has no part in the decision to engage VTB and he will receive no direct or indirect benefit from any such engagement.

There are no conflicts of interest related to the service of members of the Board of Directors or Management Board on governing bodies of other organisations.

PERFORMANCE ASSESSMENT OF THE BOARD OF DIRECTORS

In accordance with the KMG Corporate Governance Code, the Board of Directors, Board Committees, and Board members are evaluated annually through a structured process approved by the Board of Directors. The process needs to be in line with the Fund's relevant methodology. In addition, at least once every three years the performance assessment process is run with the involvement of an independent professional organisation.

In 2020, the Board of Directors carried out a self-assessment and in accordance with the KMG Corporate Governance Code, KMG plans to involve an independent professional organisation in the performance assessment process for the Board of Directors, Board committees, and Board members.

Therefore, an independent consultant will conduct an independent performance assessment in the first half of 2020. Its results are to be reviewed in depth at a meeting of the Nomination and Remuneration Committee of the Board of Directors.

Independent consultant is solely an external provider of performance assessment services for the Board of Directors and has no other connection with the Company or individual members of the Board of Directors or the Management Board.

CORPORATE SECRETARY

Damir Sharipov

Nationality: Republic of Kazakhstan

Date of birth: 22 January 1980

Education:

- Al-Farabi Kazakh National University (International Relations Department), majoring in international law.
- Certified Corporate Secretary, certified trainer in corporate governance for corporate secretaries, trainer at Samruk-Kazyna Corporate University.

Experience:

Between 2001 and 2007, he held various jobs working at the Tengiz field in the Atyrau Region. Moreover, from 2007 to 2014, he served in different capacities at JSC Development Bank of Kazakhstan, KMGand JSC KazTransGas. Since 5 January 2015, he has been Corporate Secretary at KMG.

Damir was appointed the Corporate Secretary at KMG on 5 January 2015.

On 1 February 2019, Damir Sharipov was elected to the Corporate Secretaries Committee of the National Council for Corporate Governance at the Presidium of the National Chamber of Entrepreneurs of the Republic of Kazakhstan Atameken and on 16 December 2019, he joined the National Association of Corporate Secretaries (Russia).

The Corporate Secretary's main role is ensuring regular communication between KMG and its shareholders; between shareholders and the Board of Directors, the Internal Audit Service, the Management Board and other bodies within KMG; and between KMG and its key subsidiaries and associates.

The Corporate Secretary's key responsibilities include assisting the Board of Directors and shareholders in making timely, high-quality corporate decisions; acting as an adviser to the Board members on any matter related to their roles or the applicability of the KMG Corporate Governance Code's provisions, and monitoring the implementation of the KMG Corporate Governance Code. The Corporate Secretary is responsible for practices of the corporate governance improvement process at KMG. The Corporate Secretary is a Company employee acting independently and reporting to the Board of Directors.

BOARD COMMITTEE PERFORMANCE REPORT

Members of the Board of Directors involved in the activities of Board Committees focus on in-depth review and analysis of interrelated functions, issues, and areas. Committee meetings involve invited experts, business leaders, and other stakeholders. Committees make recommendations to the Board of Directors to support its decision making.

Roles and responsibilities of the Board Committees

Committee	Responsibilities
Strategy and Portfolio Management Committee	The Committee assists the Board of Directors by considering and making recommendations on: • the development strategy and investment policy, including priority areas; • improving investment attractiveness; • effective financial and business planning at KMG; • monitoring KMG's transformation.
Nomination and Remuneration Committee	The Committee assists the Board of Directors by considering and making recommendations on: • succession planning for the Board of Directors and Management Board; • conducting ongoing, objective performance assessments of the Board of Directors, Management Board, Corporate Secretary, and other employees; • pursuing effective HR, pay and remuneration policies, and providing social support, professional development, and training opportunities for KMG officers and employees.
Finance Committee	The Committee assists the Board of Directors in pursuing an effective financial policy at KMG by considering and making recommendations on: • conducting an effective ongoing assessment of KMG's financial position; • monitoring KMG's leverage, financial structure, and financial strategy to achieve short-term and long-term strategic objectives and plans; • pre-reviewing and overseeing the implementation of investment projects.
Audit Committee	The Committee assists the Board of Directors by considering and making recommendations on: • implementing effective controls over KMG's financial and business operations; • monitoring the reliability and effectiveness of internal controls and risk management, as well as the implementation of corporate governance regulations; • overseeing its external and internal audit functions; • reviewing the Company's annual and quarterly financial statements; • monitoring KMG's compliance arrangements.
Health, Safety, Environment and Sustainable Development Committee	The Committee was established towards the end of 2018 to assist the Board of Directors on: • ensuring HSE compliance; • embedding sustainability in strategic planning and social and economic development at KMG; • KMG's social commitments and programmes under subsoil use contracts; • monitoring KMG's environmental performance.

FINANCE COMMITTEE

In 2019, the Finance Committee held five meetings and reviewed about 46 issues.

Members:
1. Christopher John Walton – Chair since August 2017;
2. Stephen James Whyte – Member since August 2017;
3. Baljeet Kaur Grewal - Member since August 2017;
4. Philip John Dayer- Member since May 2018;
5. Luís Maria Viana Palha Da Silva - Member since June 2019;
6. Anthony Espina - Member since June 2019.

STATEMENT BY THE CHAIRMAN OF THE FINANCE COMMITTEE

In 2019, the Committee coordinated KMG's efforts to improve its financial position, including its financial stability. The most critical deals designed to reduce KMG's net debt and improve its liquidity included an earlier repayment made as part of prepayments for crude oil supplies of TCO.

Financial stability is regularly reviewed by the Finance Committee, prompting in-depth, insightful discussions with a focus on assessing the impact that various oil price scenarios may have on KMG's liquidity, implementation and financing of significant investment projects, M&A deals, etc. The Finance Committee also addressed the revision of certain covenants under Eurobonds previously issued by KMG. The Finance Committee regularly makes recommendations on various approaches to financial reporting.

C. J. Walton
Chairman of the Finance Committee of the Board of Directors
Independent Director

KEY ISSUES REVIEWED BY THE FINANCE COMMITTEE IN 2019

- Financial stability (at each meeting), including:
  - scenario planning of cash flows taking into account oil prices, key liabilities of KMG and KMG Group, progress on social projects, etc.
  - measures to improve the financial and monetary stability of KMG and KMG Group
  - management of liabilities and liquidity, including by revising Eurobond offering terms
  - optimisation of KMG's capital structure and transfer pricing
  - limits on the balance sheet and off-balance sheet liabilities for counterparty banks of KMG
- Value chains of KMG in the Oil and Oil Products and Gas segments for 2020–2024
- Certain aspects of a potential IPO by KMG
- Investor engagement by KMG

Attendance by members at Committee meetings in 2019

Committee members	Meeting No. and date					
	1/2019 06.03.19	2/2019 08.05.19	3/2018 02.07.19	4/2018 02.09.19	5/2018 05.11.19	Attendance %
S. J. Whyte	+	+	+	+	+	100
C. J. Walton	+	+	+	+	+	100
P. J. Dayer	+	+	+	+	+	100
B. K. Grewal	+	+	+	+	+	100
L. M. Palha[1]			+	+	+	100
A. Espina[2]			+	+	+	100

[1] Elected to the Board of Directors of KMG as a member /an independent director of KMG on April 29, 2019.
[2] Elected to the Board of Directors of KMG as a member/representative of Samruk-Kazyna JSC on May 20, 2020.

NOMINATION AND REMUNERATION COMMITTEE

In 2019, the Nomination and Remuneration Committee held seven meetings and reviewed about 99 issues.

Members:
1. Luís Maria Viana Palha Da Silva –Chair since June 2019;
2. Philip John Dayer –Member since May 2018;
3. Christopher John Walton –Member since August 2017;
4. Stephen James Whyte - Member since August 2017;
5. Uzakbay Suleimenovich Karabalin - Member since August 2017;
6. Anthony Espina –Member since June 2019.

STATEMENT BY THE CHAIRMAN OF THE NOMINATION AND REMUNERATION COMMITTEE

In 2019, the Committee focused on pursuing effective HR, pay and remuneration policies, succession planning and providing social support, professional development, and training opportunities for KMG officers and employees. The Committee also addressed issues within its competence related to the membership of KMG's Board of Directors and that of its committees, including to ensure compliance with the recommendations to appoint individual independent directors as Committee Chairs. The Committee specifically focused on issues related to the Management Board, supervisory boards and executive bodies of KMG's subsidiaries, and on developing key performance indicators for KMG Group's executive management.

A skills and expertise matrix was first designed and approved in 2018 to maintain an appropriate balance of skills and expertise on the Board of Directors. The matrix was reviewed in March 2019 to reflect the refreshed membership of the Board. In November 2019, a consolidated matrix completed by members of the Board of Directors was submitted to the Committee for review, with a recommendation to use the matrix in recruiting candidates to the Board of Directors.

The Committee placed a particular emphasis on the employee pay and motivation system at KMG, including non-financial incentives. The Committee also focused on promoting the roles of the Ombudsman and compliance functions across KMG Group. Looking forward, we will continue to ensure that KMG employees work in a supportive, meritocratic and progressive environment.

With strong emphasis on social responsibility and inclusion, the Committee will continue to ensure that social issues, including situations of social tension in the regions, unemployment issues, as well as the Company's social support programs for both KMG employees and employees of subsidiaries are addressed.

Luís Maria Viana Palha da Silva
Chairman of the Nomination and Remuneration Committee
Independent Director

KEY ISSUES REVIEWED BY THE NOMINATION AND REMUNERATION COMMITTEE IN 2019

- Determining the skills, knowledge, and experience required from candidates to KMG's Board of Directors subject to KMG's current needs and long-term development strategy
- Membership of KMG's Board of Directors
- Committees of KMG's Board of Directors. Reviewing bids for the tender for advisory services on the remuneration policy and preparing recommendations for KMG's Board of Directors
- Drafting a work plan for the Nomination and Remuneration Committee of KMG's Board of Directors for 2020
- Approval of the Rules for Recruiting and Screening Candidates to KMG's CEO-1
- KMG's KPI Tree for 2020
- Monitoring social tension among employees of KMG Group and their contractors, proposed solutions and long-term activities to address relevant issues
- Approval of the standard regulations on the Ombudsman at KMG's subsidiaries
- Amendments to the Induction Programme for newly elected members of KMG's Board of Directors
- Approval of motivational KPI scorecards for KMG managers and KPI targets for 2019
- Approval of the Training Plan and Professional Development Programme for Members of KMG's Board of Directors
- Information on seconding KMG employees
- Succession planning across KMG Group

Attendance by members at Committee meetings in 2019

Committee members	Meeting No. and date								
	1/2019 04.02.19	2/2019 06.03.19	3/2019 06.05.19	4/2019 02.07.19	5/2019 30.05.19	6/2019 06.11.19	6/2019 07.11.19	7/2019 23.12.2019	Attendance %
P. J. Dayer	+	+	+	+	+	+	+	+	100
C. J. Walton	+	+	+	+	+	+	+	+	100
S. J. Whyte	+	+	+	+	+	+	+	+	100
U. S. Karabalin	+	+	+	+	+	+	+	+	100
L. M. Palha[1]				+	+	+	+	+	100
A. Espina[2]				+	+	+	–	+	80
Ye. U. Baimuratov[3]	–	Resigned from the Committee							

1. Elected to the Board of Directors of KMG as a member /an independent director of KMG on April 29, 2019.
2. Elected to the Board of Directors of KMG as a member/representative of Samruk-Kazyna JSC on May 20, 2020.
3. Left the Board of Directors of KMG on January 4, 2019.

STRATEGY AND PORTFOLIO MANAGEMENT COMMITTEE

In 2019, the Strategy and Portfolio Management Committee held five meetings and reviewed 125 issues.

Members:
1. Stephen James Whyte –Chair since May 2018;
2. Christopher John Walton - Member since August 2017;
3. Uzakbay Karabalin - Member since August 2017;
4. Baljeet Kaur Grewal - Member since August 2017;
5. Philip John Dayer - Member since May 2018;
6. Luís Maria Viana Palha Da Silva - Member since June 2019;
7. Anthony Espina - Member since June 2019.

STATEMENT BY THE CHAIRMAN OF THE STRATEGY AND PORTFOLIO MANAGEMENT COMMITTEE

In 2019, the Strategy and Portfolio Management Committee focused on KMG's long-term strategy, with a particular emphasis on its gas strategy. The Committee's overall responsibility is ensuring organic and M&A growth of reserves and production. Particular attention during the year was paid to exploration projects, including M&A opportunities. At every meeting, the Committee heard progress reports on major fields such as Kashagan, Karachaganak, and Tengiz, as well as status reports on transformation, privatisation, and divestment programmes. The Committee continued cross-segment reviews of the Company's value chain, designing an adjustment plan, and making deep-dives into oil and gas transportation and marketing.

The Committee also initiated a review of the concept of managing KMG's subsidiaries and associates via Boards of Directors/supervisory boards to effectively cascade KMG's decisions down to its subsidiaries and associates. The Committee continued its extensive involvement in building a new procurement system that prioritises quality over cost. The Committee strongly focused on building a competitive environment for oil-field services, as well as on increasing accountability for delayed procurement.

In particular, the Committee concentrated on the efforts of LLP KMG Engineering in building competence centres, including projects for promoting technical competency standards. The Committee reviewed detailed benchmarking to measure losses at Company's refineries.

Alongside other strategic issues relating to the Board of Directors, the Committee considered opportunities for enhancing KMG's equity story. The Committee focused on building KMG's investment portfolio, reflecting project prioritisation, and establishing criteria for making investment decisions, including minimum return requirements, and funding sources and arrangements.

The Committee identified and supported a material M&A opportunity as well as reviewing smaller acquisition and divestment transaction in the course of the year.

The Committee amended the procedures to better incorporate the need for Ultimate Beneficial owners to be identified in all transactions as well as requiring Compliance and other reviews in all transactions.

Stephen Whyte
Chairman of the Strategy and Portfolio Management Committee
Independent Director

KEY ISSUES REVIEWED BY THE STRATEGY AND PORTFOLIO MANAGEMENT COMMITTEE IN 2019:

- KMG's gas strategy. Strategy for building a competitive environment for oil-field services
- Approval of amendments and additions to KMG's Development Strategy
- Mature field strategy
- Approval of the Road Map for KMG's Digital Transformation Programme for 2019–2024
- Transformation Programme of KMG under KMG Group's Privatisation and Divestment Programme
- Concept of managing KMG's subsidiaries and associates via Boards of Directors/supervisory boards. Identifying KMG's business unit to allocate ownership for aligning KMG's innovative and budgeting efforts to support R&D or innovation projects
- Signing off investment projects
- Reviewing the Consolidated Development Plan of KMG for 2020–2024
- Information on fuel lost or burnt at refineries
- Full cross-segment review of the value chain
- Crude oil distribution in the domestic market
- Production of coal bed methane from the Karaganda Coal Basin
- Updates on KMG's investment portfolio for 2020–2024
- Exploration projects
- The adoption of a Development project Stage Gate Management process to improve project management performance and capital expenditures planning.

Attendance by members at Committee meetings in 2019

Committee members	Meeting No. and date					
	1/2019 05.03.19	2/2019 07.05.19	3/2019 03.07.19	4/2019 03.09.19	5/2019 05.11.19	Attendance %
S. J. Whyte	+	+	+	+	+	100
C. J. Walton	+	+	+	+	+	100
P. J. Dayer	+	+	+	+	+	100
U. S. Karabalin	+	+	+	+	+	100
B. K. Grewal	+	+	+	+	+	100
L. M. Palha[1]			+	+	+	100
A. Espina[2]			+	+	+	100

1. Elected to the Board of Directors of KMG as a member /an independent director of KMG on April 29, 2019.
2. Elected to the Board of Directors of KMG as a member/representative of Samruk-Kazyna JSC on May 20, 2020.

AUDIT COMMITTEE

Members:
1. Philip John Dayer (Chair) –Chair since May 2018;
2. Stephen James Whyte - Member since August 2017;
3. Luis Maria Viana Palha Da Silva - Member since June 2019.

CHAIRMAN'S INTRODUCTION

The Audit Committee continued to monitor the Company's system of internal control, risk management and the work of key functions as well as reviewing and challenging as appropriate the disclosures and key judgements made by management. The Audit Committee fully met the expectations and functional responsibilities set for the Audit Committee by the KMG Corporate Governance Code and Audit Committee Terms of reference, as well as decisions of the KMG Board of Directors.

We received reports from management and the external auditor each quarter highlighting significant accounting issues and judgements and have used these to inform our debate on whether KMG's financial reporting is fair, balanced and understandable.

I would like to thank each member of the Audit Committee for their contribution and believe that their expertise will be valuable to the work of the Audit Committee in driving KMG's performance and financial stability.

Philip John Dayer
Chairman of the Audit Committee, Independent Director

ROLE AND KEY RESPONSIBILITIES OF THE COMMITTEE

The Audit Committee assists the Board of Directors by:
- Monitoring the Company's internal control and risk management;
- Overseeing the internal and external audit arrangements; and
- Reviewing the Company's quarterly and annual financial statements.

MEETINGS AND ATTENDANCE

The Audit Committee holds regular meetings, including conference call meetings. There were nine committee meetings in 2019. During the year, the Audit Committee reviewed 110 issues, of which 39 were related to an internal audit, 12 related to external audit, 13 related to risks, and the remaining 46 were of other reviews.

Attendance by members at Audit Committee meetings in 2019

Committee members	Meeting No. and date									
	1/19 28.01.2019	2/19 05.03.2019	3/19 01.04.2019	4/19 06.05.2019	5/19 02.07.2019	6/19 02.09.2019	7/19 27.09.2019	8/19 06.11.2019	9/19 19.12.2019	Attendance %
P. J. Dayer	+	+	+	+	+	+	+	+	+	100
L. M. Palha[1]					+	+	+	+	+	100
S. J. Whyte	+	+	+	+	+	+	+	+	+	100

1. Elected to the Board of Directors of KMG as a member /an independent director of KMG on April 29, 2019.

ACTIVITIES DURING THE YEAR

FINANCIAL DISCLOSURE

The Audit Committee reviewed the quarterly and annual consolidated financial statements with interim management reports, focusing on:

- Integrity of Group's financial reporting process;
- Clarity of disclosure;
- Application of accounting policies and judgements

As part of this review, the Audit Committee received updates from management and the external auditor in relation to accounting judgements, financial statements and taxation.

EXTERNAL AUDIT

The external auditor set out its audit strategy for 2019, identifying significant audit risks to be addressed during the course of the audit. These included:

- Impairment of non-current assets
- Compliance with debt covenants
- Estimation of oil and gas reserves and resources.

As part of the annual audit of the Company's consolidated financial statements, the Audit Committee requested EY to conduct additional procedures over the Group's process of payroll accrual and payment in some subsidiaries. At the date of this report, the results of those additional procedures have not yet been finalized.

The Audit Committee approved the level of materiality adopted by the external auditor for the 2019 audit and also reviewed uncorrected audit adjustments.

FINANCIAL REPORTING

The Audit Committee considered, among other things, a number of significant issues related to KMG's financial reporting including:

- Key judgements and estimates
- Audit Committee activity
- Conclusion / Outcomes

Key judgements and estimates	Audit Committee activity	Conclusion / Outcomes
Oil and gas accounting (see notes 4, 13, 15 and 16 to the Consolidated Financial Statements)		
KMG uses technical and commercial judgements to account for: exploration; appraisal and development expenditure; and, determining estimated oil and gas reserves. Management's assumptions for future commodity prices impact the recoverability of asset carrying values. Judgement is required to decide whether it is appropriate to continue to carry intangible assets relating to exploration and evaluation (E&E) assets.	Reviewed KMG's commodity price assumptions. Reviewed KMG's discount rates used for impairment. Reviewed the external expert's assessment of oil and gas volumes. Reviewed brown fields write offs. Reviewed E&E write offs. Satisfied itself with the impairment testing performed and the impairment charges recognized.	Oil and gas assets totaled KZT 1,049.8 bln at 31 December 2019. E&E assets totaled KZT 179.9 bln at 31 December 2019. KMG's long term oil price assumptions were unchanged from 2018. E&E impairment of KZT 57.2 bln recognized during 2019. This represents 100 per cent write-offs of E&E assets where the contract areas were returned to the Government.
Recoverability of assets' carrying values (see notes 4, 13 and 15 to the Consolidated Financial Statements)		
Management judgement and estimates on uncertain matters such as product mix, loss ratios, discount rates, production profiles and the impact of inflation on operating expenses, are required to assess the carrying value of KMG's refinery cash generating units and other long-lived assets.	Reviewed the management's assessment of impairment indicators. Satisfied itself with the impairment testing performed and the impairment charges recognised.	Refinery assets totaled KZT 1,381.7 bln at 31 December 2019. During 2019 an impairment charge attributable to property, plant and equipment of KZT 144.4 bln was recognised mainly attributable to cash generating units of KMG International, the Satti jackup rig and the Batumi Oil Terminal.
Provisions (see notes 4, 26 and 34 to the Consolidated Financial Statements)		
KMG's significant provisions relate to: decommissioning; environmental matters; and, dispute resolution. Decommissioning will occur many years in the future and there is significant uncertainty surrounding precise requirements. KMG is a party to various legal actions. Management judgement and estimates are required on the merits of any case, the uncertainty surrounding the result of judicial proceedings and the timing of appeal processes.	Reviewed KMG's decommissioning assumptions. Reviewed KMG's discount rates. Received a briefing on current significant disputes involving KMG. Satisfied itself with the level of provisions.	The decommissioning provision totaled KZT 154.4 bln at 31 December 2019. The discount rates used to calculate the decommissioning provision were changed from 2018. In monetary terms, the change was not significant. Following a decision to resolve a dispute involving KMG Drilling and Services by negotiation, a settlement provision of KZT 34.1 bln was made during 2019.

In addition to the above key judgements and estimates, the Audit Committee reviewed the Group's compliance with its financing covenants given that compliance has a major impact on the going concern assumption used in the preparation of the financial statements.

AUDIT AND NON-AUDIT FEES

The Audit Committee reviews the fee structure, resourcing and terms of engagement for the external auditor annually. In addition, it reviews the non-audit services that the auditor provides to the Company on an annual basis.

Fees[1] payable to the external auditor for the year were USD 5.3 mln (2018: USD 5.8 mln), including USD 0.4 mln (2018: USD 0.95 mln) for non-audit services. Non-audit or non-audit related services consisted of other assurance services.

EXTERNAL AUDITOR

The external audit of KMG's consolidated financial statements for 2019 was conducted by an independent audit company, EY, with effect from 19 April 2019, in accordance with the decision of shareholders dated 4 March 2019.

[1] Excluding VAT.

Audit appointment and independence

The commission, consisting of the Audit Committee of KMG and Samruk-Kazyna JSC, considers the reappointment of the external auditor once in every three years before making a recommendation to the shareholders of KMG. The Audit Committee assesses the independence of the external auditor on an ongoing basis and the Audit Partner is required to rotate every five years. No partner or senior staff associated with the KMG audit may transfer to the Company.

Non-audit services by the external auditor

Provision of any non-audit advisory services by the external auditor is subject to prior approval by the Audit Committee. In addition, the external auditor annually submits a report showing the proportion of non-audit services in the total amount of services provided to KMG. In accordance with the policy of engaging audit organizations, the proportion of non-audit services must not exceed 50% of the total amount. The proportion of non-audit services for 2019 accounted for 8.09% of the total accrued amount for audit and non-audit services (see "Audit and non-audit fees").

Risk and internal control reviews

Improvement of the internal control system and risk management is one of the key tasks for KMG.

The Audit Committee held regular meetings with the Head of the risk management department to review significant risks and internal control issues.

The Audit Committee reviewed and evaluated: the quarterly risk report; the statement of risk appetite; the risk register and the risk management action plan; the risk map; risk tolerance level; key risk indicators; internal controls; and, insurance issues.

INTERNAL AUDITS

Internal audits are carried out by KMG's Internal Audit Service (the "IAS").

The activities of the IAS are governed by: Kazakhstan's laws; KMG's Charter; decisions of KMG's governing bodies; internal documents regulating the IAS activities; Regulations on KMG's Internal Audit Service; and, Guidelines for KMG's Internal Audits.

The annual Internal Audit Plan is developed from a consideration of the principal risks confronting KMG, the audit testing cycle and management requests. The Internal Audit Plan also accommodates ad hoc requests from the Audit Committee and Management.

The Audit Committee not only monitors the IAS's performance but also facilitates professional development of the IAS employees and the management of its talent pool. These issues are covered by the IAS reports and reviewed by the Audit Committee on a quarterly basis. The quarterly reports detail the progress made by the IAS against a number of objectives including obtaining certificates, completing trainings/seminars budgeted within the IAS training and upskilling programme.

The high professional level of the IAS employees is a key performance driver for KMG's internal audit function; therefore training and upskilling are prioritised.

Internal audit issues reviewed by the Audit Committee in 2019 included:

1. IAS 2018 annual performance report;
2. IAS 2019 annual audit plan;
3. 2018 KPI scorecards of the IAS head and staff shifted to a pay grade system;
4. KMG Internal Audit Service's quarterly reports, including reviews of any material findings identified in audit reports and follow-up on the implementation of internal audit recommendations;
5. Independence confirmation forms for the IAS employees;
6. IAS Strategic Plan for 2019–2021;
7. IAS 2019 budget;
8. 2019 KPIs for the IAS head and staff;
9. Appointments and terminations within the IAS;
10. Amendments to the IAS 2019 annual audit plan.

During the year, as part of the Audit Committee's oversight of the reports prepared by the company's IAS, the Audit Committee decided to engage the forensic accounting services of a major independent international audit firm to investigate internal control failings disclosed at one of the group's subsidiaries. That firm's investigations confirmed the existence of internal control failings and it produced a number of recommendations to remediate those deficiencies. The management of the company is currently reviewing those recommendations with the objective of devising an effective remediation plan.

ASSESSMENTS OF THE EXTERNAL AND INTERNAL AUDIT PROCESS PERFORMANCE

In 2019, surveys were run among members of the Audit Committee and units of KMG interacting with the external auditor, to facilitate an assessment of the external auditor's performance. The assessment was based on the results of a completed questionnaire and a specific discussion between members of the Audit Committee with input from the relevant senior management. The assessment results were reviewed at an Audit Committee meeting and communicated to the external auditor.

As required by the quality assurance and improvement programme for KMG' Internal Audit Service, following each audit, the audited entity is required to complete a form evaluating the IAS' performance. Results of these assessments are consolidated into the IAS annual performance reports approved by the Audit Committee. It is pleasing to note that the IAS role and value is appreciated by Management.

COMPLIANCE

The Compliance Department engaged an independent international firm of auditors to assist with the work of carrying out a compliance risk assessment, gap analysis and remediation plan. Good progress was made during 2019 to implement and embed that plan. In 2020, the Audit Committee reviewed the following compliance policies: Code of conduct; Anti-bribery policy; Conflict of interest; Third party due diligence procedure; and Whistleblowing policy.

To support the work of the newly established compliance department, the Audit Committee appointed an independent international audit firm to carry out a specific due diligence exercise.

The Audit Committee monitors the whistle blowing procedures and other channels of communication. All whistle blowing notifications are investigated.

OTHER ISSUES

The Audit Committee reviewed the implementation of the Detailed Action Plan to Improve Corporate Governance at KMG.

As instructed by the Audit Committee, the IAS runs regular anonymous surveys on health and safety at each audited entity. The surveys provide valuable insights to KMG's management, including insights into employee expectations regarding health and safety.

HEALTH, SAFETY, ENVIRONMENT AND SUSTAINABLE DEVELOPMENT COMMITTEE

Members:

1. Philip John Dayer – Chair since December 2018;
2. Christopher John Walton – Member since December 2018;
3. Stephen James Whyte – Member since December 2018;
4. Karabalin Uzakbay Suleimenovich – Member since May 2019;
5. Luís Maria Viana Palha Da Silva – Member since June 2019.

STATEMENT BY THE CHAIRMAN OF THE HEALTH, SAFETY, ENVIRONMENT AND SUSTAINABLE DEVELOPMENT COMMITTEE

I am pleased to inform you that the new Health, Safety, Environment and Sustainable Development Committee was launched under the Board of Directors at KMG in 2019 as part of KMG's commitment to the health, safety environment and Sustainable Development Goals (SDGs).

The Committee had three meetings during the year, reviewing 36 issues related to HSE, strategic management of ESG aspects, and sustainability reporting.

Given the particular focus on industrial safety issues, the Committee conducted in-depth reviews of safety management metrics and methods at each of our facilities and at our contractors. The official statistics and work-related incident investigations suggest that the majority of incidents have recently been linked to contractor activities, emphasising the pressing need for KMG to develop company-wide capabilities in contractor management. As part of our efforts to improve stakeholder engagement and enhance supplier responsibility, we plan to develop and approve a framework document outlining the Company's core principles and expectations from stakeholders – the Supplier HSE Responsibility Code. In this way, we were able to conduct an end-to-end review to gain a better understanding of how management takes action to improve safety performance and how we can improve the security culture at all levels of the organisation.

Transparency in our sustainability reporting was an important focus during the year, with the Company making certain progress. In 2019, we were the first oil and gas company in Kazakhstan to publish a report on greenhouse gas (GHG) emissions (Scope 1, 2 and 3) under the Carbon Disclosure Project (CDP). We were assigned a "C" rating, outperforming our international peers on this measure. We also continue publishing our Sustainability Reports, and in 2019 KMG was the first oil and gas company in Kazakhstan to have its Sustainability Report verified to GRI Standards, obtaining the GRI stamp. According to the KMG Corporate Governance Code and Development Strategy, long-term sustainability is one of KMG's key strategic goals and objectives, which is aligned with the Fund's vision, the Development Strategy of Kazakhstan, and the global investor community agenda.

The Board of Directors reaffirms its strong focus on ecology, environmental protection, health and safety of KMG employees across the Group's operations, as well as on building a talent pipeline and committing to universally recognised Sustainable Development Goals by delegating these issues to the newly established Committee.

Our agenda for 2020, same as last year, will focus on the key themes of safety, health, environmental protection, and ethical behaviour. We will also continue efforts to align the Company's sustainability agenda with global best practices.

Philip John Dayer
Chairman of the Health, Safety, Environment and Sustainable Development Committee
Independent Director

KEY ISSUES REVIEWED BY THE COMMITTEE IN 2019:

- Improving the transparency and quality of reporting by business units, and more effective management of issues relating to the Committee
- Obtaining ESG ratings from reputable international rating agencies
- Independent audit and verification of KMG's 2018 Sustainability Report
- Identification of potential safety threats, prevention of high-risk employee health and safety incidents
- Accounting for climate risks, such as water risk, GHG risks, flaring risk, and risks associated with changes in Kazakhstan's environmental laws
- Contractor engagement on HSE, and increasing supplier responsibility
- Conducting specialised internal HSE audits and review of audit results
- Detailed analysis of environmental fines and penalties imposed on KMG Group, and review of corrective actions
- Taking a holistic view of waste management: waste accounting, identification and disposal of different types of waste across KMG Group
- Embedding the UN Sustainable Development Goals (SDGs);
- Establishing a balanced framework of sustainability KPIs for the Company and individual managers
- Investigations and prevention of fatalities, traffic accidents and safety incidents, applying sanctions to managers based on incident investigation results
- Defining leadership in environmental protection and management, participation in drafting Kazakhstan's environmental laws
- Culture, training and accountability of managers and employees of KMG and its subsidiaries

DOCUMENTS AND REGULATIONS REVIEWED AND APPROVED BY THE COMMITTEE IN 2019:

- KMG 2018 Sustainability Report
- KMG Group's Sustainability Management Guidelines
- KMG' Occupational Health and Safety Policy
- KMG' Environmental Policy
- KMG' Policy on Alcohol, Narcotic Drugs, Psychotropic Substances and their Analogues
- KMG' Policy on Safe Operation of Land Vehicles
- KMG Group's corporate standard for engaging contractors on HSE
- KMG Group's corporate standard for building HSE capabilities

Attendance by members at Committee meetings in 2019

Committee members	Meeting No. and date			
	1/2019 05.03.19	2/2019 02.09.19	3/2019 05.11.19	Attendance %
P. J. Dayer	+	+	+	100
C. J. Walton	+	+	+	100
S. J. Whyte	+	+	+	100
U .S. Karabalin		+	+	100
L. M. Palha[1]		+	+	100

[1] Elected to the Board of Directors of KMG as a member /an independent director of KMG on April 29, 2019.

MANAGEMENT BOARD PERFORMANCE REPORT

MANAGEMENT BOARD'S ACTIVITIES IN 2019

The Management Board is a collective executive body in charge of KMG's day-to-day operations, as well as the development and implementation of the overall development strategy of the Company's subsidiaries. KMG's Management Board is led by Chairman of the Management Board.

The most significant issues considered by the Management Board are:
- Developing and implementing the Company's current business policy;
- Developing, approving, and monitoring the execution of the Company's quarterly, annual, and long-term activity plans, budget, and investment programme;
- Making decisions on the establishment by the Company of other legal entities, as well as on acquisitions and disposals of equity interests in other entities;
- Issues related to designing and implementing the overall development strategy of the Company's subsidiaries.

The Management Board is formed by the Board of Directors following the proposals of the Chairman of the Management Board, and comprises ten key managers of the Company.

During 2019 – 2020, there were the following changes in the Management Board:
- Dmitry Salov, Managing Director for Information Technology, Transformation and Digitalization, left the Management Board in September 2019;
- Yessen Kairzhan Managing Director for Procurement and Supplies, left the Management Board in February 2020;
- Dastan Abdulgafarov, Deputy Chairman of the Management Board for Strategy, Investment and Business Development, was appointed as the Member of the Management Board in February 2020;
- Malik Saulebay, Managing Director for Legal Support, was appointed as the Member of the Management Board in February 2020.

In 2019, the Management Board held a total of 54 meetings, reviewed and approved 660 resolutions, 649 of them at in-person meetings. 162 issues were passed on to be reviewed by the Board of Directors. The most important of them are: signing new agreements on subsoil use and approving investment projects; disposing of non-core assets; implementing the Company's Strategy and Development Plan; improving financing terms; approving quarterly risk reports and the Sustainability Report.

MANAGEMENT BOARD

Alik Aidarbayev
Chairman of KMG's Management Board

Zhakyp Marabayev
Deputy Chairman of the Management Board — Chief Operating Officer

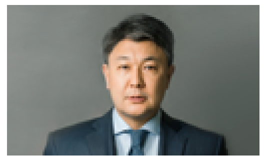
Kurmangazy Iskaziyev
Deputy Chairman of the Management Board for Geology and Exploration

Kairat Sharipbayev
Deputy Chairman of the Management Board for Gas Transportation and Marketing

Daniyar Tiyesov
Deputy Chairman of the Management Board for Oil Refining and Marketing

Daniyar Berlibayev
Deputy Chairman of the Management Board for Oil Transportation, International Projects, and Construction of the Saryarka trunk gas pipeline

Dauren Karabayev
Deputy Chairman of the Management Board – Chief Financial Officer



Dastan Abdulgafarov
Deputy Chairman of the Management Board for Strategy, Investment and Business Development

Dauletzhan Khassanov
Managing Director for Human Resources

Malik Saulebay
Managing Director for Legal Support

MEMBERSHIP OF THE MANAGEMENT BOARD

Alik Aidarbayev

Chairman of KMG's Management Board

A member of the Board of Directors.

112 For more details see the Membership of the Board of Directors section

Zhakyp Marabayev

Deputy Chairman of the Management Board — Chief Operating Officer

A member of the Management Board since 2019

Date of birth: 9 August 1962

Education:

- Mining, the Gubkin Russian State University of Oil and Gas
- State University of Management (Moscow, Russia)

Experience

Zhakyp Marabayev began his career as Head of Engineering at the Upstream Unit of Komsomolskneft in 1984. At different periods he served as Director for Commerce at Sphinx (a state-owned corporation), Head of Hydrocarbons and Petrochemicals and Deputy Head and Chief Engineer at the Ministry of Foreign Economic Relations of the Republic of Kazakhstan and Head of Offshore Activities at the Ministry of Energy and Mineral Resources of the Republic of Kazakhstan.

Other senior management positions included Vice President and CEO of JSC KazakhstanCaspiShelf, Director for Investments and New Projects and Commercial Director at CJSC NOGC Kazakhoil, Vice President for Gas Projects at CJSC NOGC Kazakhoil, Deputy Chairman and a member of the Management Board of CJSC Halyk Bank, Vice President for Operation at JSC KazTransOil, Vice President of CJSC NOGC Kazakhoil, Deputy CEO of CJSC NC Oil and Gas Transportation, , Chairman of PSA Share Managing Authority at Karachaganak Petroleum Operating B.V., CEO of JSC KazMunaiGas Exploration Production, Managing Director of KMG and Chairman of the Board of Directors of JSC KazMunaiGas Exploration Production.

From November 2006 to December 2008, he worked at KAZENERGY Association as Chairman of the Coordination Council and subsequently at North Caspian Operating Company N.V. as Deputy Managing Director until February 2019.

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

Kurmangazy Iskaziyev

Deputy Chairman of the Management Board for Geology and Exploration

A member of the Management Board since 2018

Date of birth: 11 May 1965

Education:

- Mining Engineering, Kazakh Polytechnic Institute named after V. I. Lenin
- Candidate of Geological Sciences, Tomsk Polytechnic University (Russia)

Experience

Kurmangazy Iskaziyev began his career at the Balykshinsk Exploratory Drilling Unit as an operator and a member of the drilling expedition No. 1. Then he worked as a cementing shop operator at Embaneft Association, Grade II Geologist and Chief Geologist of the Central Dispatch Office of Atyrau Drilling Operations Division at OJSC Embamunaigas, Chief Geologist and Deputy Director at Atyrau Department of Enhanced Oil Recovery and Well Overhaul, and Director of the Department of Geology and Oil and Gas Field Development at OJSC Embamunaigas.

At different periods he served as Deputy Director and Director of the Department of Geology and Oil and Gas Field Development at JSC KazMunaiGas Exploration Production, Executive Upstream Director, Managing Director for Geology, Geophysics and Reservoirs and Chief Geologist at KMG, Deputy Chairman of the Management Board for Geology and Prospective Projects at KMG, Managing Director for Non-Operating Assets (Tengiz, Kashagan, Karachaganak), Managing Director for Geology, CEO (Chairman of the Management Board) of JSC Embamunaigas and CEO (Chairman of the Management Board) of JSC KazMunaiGas Exploration Production.

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

Kairat Sharipbayev

Deputy Chairman of the Management Board for Gas Transportation and Marketing

A member of the Management Board since 2016

Date of birth: 16 August 1963

Education:

- Kazakh National Agrarian University
- Kazakh National Pedagogical University named after Abai
- Candidate of Political Sciences

Experience

Kairat Sharipbayev began his career in 1985 as an agronomist in the agricultural sector. From 1991 to 1999, he held various management positions at Koktem LLP, JSC Shyn-Asyl and Zhetisu LLP. At different periods he served as Deputy Akim of Taraz, First Vice President of CJSC Dauir, President of Kitap Publishing House and Chairman of the Board of Directors of JSC Danko.

In 2001, he began working in oil, gas and gas supply as he joined CJSC Intergas Central Asia as Director of the Gas Transportation and Marketing Department and then Deputy General Director for Marketing and Commerce. Later he was Adviser and Deputy General Director for Marketing at CJSC KazTransGas, Adviser to First Vice President, and Managing Director for Commerce at JSC NC Kazakhstan Temir Zholy, CEO of JSC KazTransGas Aimak, CEO of JSC KazTransGas, Deputy Chairman of the Management Board for gas transportation and marketing at KMG.

Chairman of the Board of Directors of JSC KazTransGas since 11 December 2015.

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

Daniyar Tiyesov

Deputy Chairman of the Management Board for Oil Refining and Marketing

A member of the Management Board since 2016

Date of birth: 6 December 1970

Education:

- Engineering, Atyrau University of Oil and Gas
- Law, East Kazakhstan State University

Experience

In 1994, Daniyar Tiyesov started working as a manager at Manas, then at Bata LLP and later as an executive director at Abyz LLP. At different periods he was Assistant to First Vice President, Secretary of the Board of Directors of OJSC Atyrau Refinery, Chief Manager at CJSC NOGC Kazakhoil, Deputy Chief Manager of the group managing the renovation of the Atyrau Refinery, Head of the day-to-day Operations Control Sector, Chief Specialist in Corporate Management and day-to-day Operations Monitoring at the Atyrau Refinery Management Department, Deputy Director of the Oil and Gas Refining and Petrochemicals Department, then Deputy Director of the Petrochemicals Development Department at CJSC NC KazMunaiGas, Head of Capital Construction Management, CEO and CFO of the Enterprise Under Construction Directorate of Atyrau Refinery LLP.

At different periods he was Deputy COO of JSC KazMunaiGas Trading House, Deputy Chairman of the Management Board for Refining, Petrochemicals, Managing Director for Oil Refining and Marketing, Deputy Chairman of the Management Board for Oil Refining and Marketing at KMG, CEO of JSC KazMunaiGas – Refining and Marketing, Senior Vice President of KMG, and Executive Vice President for Oil Transportation, Refining and Marketing of KMG.

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

Daniyar Berlibayev

Deputy Chairman of the Management Board for Oil Transportation, International Projects and Construction of the Saryarka trunk gas pipeline

A member of the Management Board since 2019

Date of birth: 21 December 1968

Education:

- Law, Al-Farabi Kazakh National University

Experience

Between 1991 and 1994, Daniyar Berlibayev worked first as a junior research fellow at the Kazakh branch of the Academy of Sciences of the Soviet Union, then as a legal consultant and Head of the Legal Unit at Barikon. At different periods he was Chief Specialist in Project Assessment Management at the National Foreign Investment Agency, Deputy Head of the National Foreign Investment Agency at the Ministry of National Economy of the Republic of Kazakhstan, Head of the Legal Expertise Directorate of the Legal Department, and then Deputy Director of the Legal Department at the State Export-Import Bank of the Republic of Kazakhstan (Ex-Im Bank).

Since 1997 Daniyar Berlibayev has been working for KMG Group. At CJSC KazTransOil, he was Head of the Investment Projects Department, Head of the Corporate Finance Department, Executive Director for Finance as well as Finance and Economics Adviser. At different periods he was Vice President, Deputy General Director for Economics and Finance, and First Vice President at CJSC KazTransGas, Deputy CEO at CJSC Intergas Central Asia, First Deputy CEO at CJSC NC Oil and Gas Transportation, First Deputy CEO at CJSC KazTransGas, Managing Director for Corporate Governance at CJSC NC KazMunaiGas, Deputy Director for Corporate Development at CJSC KazTransGas, Managing Director for Finance and Economics at CJSC NC KazMunaiGas, and CEO of CJSC NMSC Kazmortransflot. From 2005 to 2007, he served as First Deputy CEO at JSC KazTransGas and CEO of JSC Intergas Central Asia.

At different periods he served as Vice President of Midstream and Downstream at KMG, Managing Director of Gas Projects and CEO of JSC KazMunaiGas – Refining and Marketing, CEO of JSC KazTransGas, Managing Director for Gas Projects at KMG, First Deputy Chairman of the Management Board at KMG, Deputy Chairman of the Management Board for the Corporate Centre.

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

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Dauren Karabayev

Deputy Chairman of the Management Board – Chief Financial Officer

A member of the Management Board since 2016

Date of birth: 11 June 1978

Education:

- International Economic Relations, the Kazakh State Academy of Management
- Master of Science in Finance, Texas A&M University
- CFA Charter holder

Experience

Dauren Karabayev began his career as a credit analyst at ABN AMRO Bank Kazakhstan in 2001 and was promoted to Head of the Credit Department in 2003.

In 2004, he came to Halyk Bank as Managing Director and was Deputy Chairman of the Management Board from 2007 to June 2016.

Until September 2016 he worked as an engagement manager at McKinsey & Company.

Since 2017, he is a Chairman of the Board of Directors of JSC KazMunaiGas Exploration Production that has been listed on the London Stock Exchange.

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

Dastan Abdulgafarov

Deputy Chairman of the Management Board for Strategy, Investment and Business Development

A member of the Management Board since 2020

Date of birth: 16 December 1974

Education:

- Republican Physics and Mathematics School named after Zhautykov
- International Law, Kazakhstan Institute of Law and International Relations
- International Economics and Law, Diplomatic Academy of the Ministry of Foreign Affairs of the Republic of Kazakhstan
- Master of Petroleum Business, ENI Corporate University (Milan)
- Executive MBA (Finance and Investments), Moscow School of Management Skolkovo

Experience

At different periods he worked as a lawyer in the international contract department, Chief Manager of the new projects development department, Director of the new projects development department, Deputy director, then Director of the new offshore projects development department, Head of the project management group at KMG and JSC "MNC KazMunaiTeniz". He held position as an Advisor of the General Director, Managing Director for Business Development and Deputy General Director for Economics and Finance at JSC KazMunaiGas Exploration Producion, Managing Director for support of the exploration and production business, Head of Staff - Managing Director for Development at KMG.

Has experience in KMG group of more than 18 years, of which 14 years in senior positions.

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

Dauletzhan Khassanov

Managing Director for Human Resources

A member of the Management Board since 2018

Date of birth: 21 October 1971

Education:

- Economics, West Kazakhstan Agricultural University
- Mining Engineering, Atyrau University of Oil and Gas

Experience

At different periods Dauletzhan Khassanov served as Deputy Chief Accountant at JSC Teniz, Chief Accountant at the Kurmangazy district telecom centre of OJSC Kazakhtelecom, Deputy Chief Accountant at OJSC Ozenmunaigas and OJSC Embamunaigas, Chief Accountant at JSC Caspi Neft and Eurasian Group LLP, Deputy Director for Economics and Finance, Director of the Finance Department, and Deputy Chief Accountant at a production unit of JSC Embamunaigas and at JSC KazMunaiGas Exploration Production.

He also acted as Deputy General Director for Economics and Finance at JV Kazgermunai LLP, Share Managing Director at JVs of JSC KazMunaiGas Exploration Production, a part-time director at Technological Transport and Well Servicing Department LLP, President of JSC Karazhanbasmunai, CEO and Chairman of the Management Board at JSC Ozenmunaigas, Deputy CEO, a member of the Management Board and Executive Director for Exploration and Production Assets Management at JSC KazMunaiGas Exploration Production, and General Director for Economics and Finance and a member of the Management Board at JSC NMC Tau-Ken Samruk.

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

Malik Saulebay

Managing Director for Legal Support

Member of the Management Board since 2020

Date of birth: 7 May 1975

Education:

- Republican Physics and Mathematics School named after Zhautykov
- Economics, Kazakh State Academy of Management
- Law, Kazakh Academy of Labour and Social Relations
- MBA with first-class honours, Gubkin Russian State University of Oil and Gas

Experience

25 years of professional experience

Malik Saulebay started his career in 1995 and until 2000 held various positions in the banking industry (leading economist and Deputy Department Director at Kazpochtabank, senior accountant/controller at JSC ALFA-BANK, Head of Directorate at OJSC TransAsian Trade Bank), and from 2000 to 2005 – in public prosecutions (prosecutor at the Prosecutor's Office in the City of Astana, Almatinsky District, Assistant to Deputy General Prosecutor and Head of Directorate at the Prosecutor's Office in the City of Astana and the Transport Prosecutor's Central Regional Office). Malik Saulebay has a breast badge for Excellence in Public Prosecution and in 2005 he successfully passed a qualification exam and was included into the state register of judges.

From 2005 to 2006, he served as Deputy Chairman of the Management Board at JSC Kazakhstan Mortgage Company, Head of Directorate at the Committee on Insolvent Debtors of the Ministry of Finance of the Republic of Kazakhstan.

In 2006, he was Director for Asset Management at JSC KazTransGas; from 2007 to 2009 – CEO of JSC KazTransOil-Service; from 2009 to 2011 – Adviser to the CEO, Managing Director for Legal Affairs at JSC KazMunaiGas – Refining and Marketing; from 2011 to 2016 – Managing Director for Legal Affairs, Head of Staff and member of the Management Board at JSC KazMunaiGas Exploration Production; from 2016 to 2018 – Vice President for External and Corporate Relations at JSC Karazhanbasmunai; from 2018 to 2019 – Managing Director for Risk and Legal Affairs, member of the Management Board at JSC Samruk-Energy. Malik Saulebay has served at KMG as Managing Director for Legal Affairs since May 2019 and as a member of the Management Board since February 2020.

Holds no shares in KMG or its subsidiaries and associates (directly or indirectly) and is not involved in any transactions therewith.

REMUNERATION REPORT

REMUNERATION OF THE BOARD OF DIRECTORS

The Resolution of the Fund's Management Board dated 26 September 2016 approved the Guidelines on Forming Boards of Directors at the Fund's companies, which provide, inter alia, for a procedure for remuneration payable to members of such Boards of Directors. Remuneration reflects the duties of the respective member of the Board of Directors, the scale of the company's operations, and its long-term goals and objectives. Remuneration is also paid to independent directors. The level of remuneration payable to representatives of the Fund on such Boards is determined by a resolution of the Fund's Management Board.

Independent Directors Christopher John Walton, Philip John Dayer, Stephen James Whyte and Luís Maria Viana Palha da Silva, and Board Members Baljeet Kaur Grewal and Anthony Espina receive a fixed annual remuneration of USD 150,000 each, while a member of the Board of Directors Uzakbay Karabalin receive a fixed annual remuneration of KZT 18.2 mln.

In addition, independent directors and members of the Board of Directors Baljeet Kaur Grewal and Anthony Espina receive additional remuneration as follows:

- As Chair of KMG's Board of Directors – USD 75,000 per year;
- As Chairs of:
  - the Audit Committee – USD 35,000 per year
  - the Nomination and Remuneration Committee – USD 25,000 per year
  - the Finance Committee – USD 25,000 per year
  - the Strategy and Portfolio Management Committee – USD 25,000 per year
  - the Health, Safety, Environment and Sustainable Development Committee – USD 25,000 per year.
- As members of:
  - the Audit Committee – USD 17,500 per year
  - the Strategy and Portfolio Management Committee – USD 12,500 per year
  - the Nomination and Remuneration Committee – USD 12,500 per year
  - the Finance Committee – USD 12,500 per year
  - the Health, Safety, Environment and Sustainable Development Committee – USD 12,500 per year.

For participating in a meeting initiated by Chairman of KMG's Board of Directors, Chairman of the Management Board of Samruk-Kazyna JSC, and/or Chairman of KMG's Management Board, Independent Directors Baljeet Kaur Grewal and Anthony Espina receive USD 2,000 per meeting, with no more than one meeting held per day.

Neither KMG, nor any entity of the group that KMG is part of, issued loans to members of the Board of Directors during the year.

Actual annual remuneration paid to members of the Board of Directors, in US dollar

Members of the Board of Directors	Fixed annual remuneration for BoD membership	Annual remuneration for BoD chairmanship	Annual remuneration for Committee chairmanship	Annual remuneration for Committee membership	Remuneration for participation in individual meetings[2]	Total
Christopher John Walton	150,000	75,000	Finance Committee – 25,000	Nomination and Remuneration Committee – 12,500 Audit Committee – 7,583 Strategy and Portfolio Management Committee – 12,500 Health, Safet, Environment and Sustainable Development Committee – 5,477	82,000	370,060
Stephen James Whyte	150,000	–	Strategy and Portfolio Management Committee– 25,000	Nomination and Remuneration Committee – 12,500 Finance Committee – 12,500 Health, Safet, Environment and Sustainable Development Committee – 5,477 Audit Committee – 17,500	20,000	242,977
Philip John Dayer	150,000	–	Audit Committee – 35,000 Health, Safety, Environment and Sustainable Development Committee – 10,954	Nomination and Remuneration Committee – 17,778 Strategy and Portfolio Management Committee – 12,500 Finance Committee – 12,500	34,000	272,732
Luís Maria Viana Palha da Silva	100,417	–	Nomination and Remuneration Committee – 14,167	Strategy and Portfolio Management Committee – 7,083 Finance Committee – 7,083 Audit Committee – 9,917 Health, Safet, Environment and Sustainable Development Committee – 5,477	10,000	154,144
Baljeet Kaur Grewal	150,000	–	–	Strategy and Portfolio Management Committee – 12,500 Finance Committee – 12,500	92,000	267,000
Uzakbay Karabalin	47,028[1]	–	–	–	–	47,028
Almasadam Satkaliyev	–	–	–	–	–	–
Anthony Espina	91,935	–	–	Nomination and Remuneration Committee – USD 7,083 Strategy and Portfolio Management Committee – 7,083 Finance Committee – 7,083	10,000	123,184
Alik Aidarbayev	–	–	–	–	–	–

1. The annual remuneration of Uzakbay Karabalin amounted KZT 18 mln, which is equivalent to USD 47,028 (the average rate of National Bank of Kazakhstan for 2019 amounted to KZT 382.75).
2. Meeting initiated by the Chairman of the BoD and / or the Chairman of the Management Board of Samruk-Kazyna JSC, the Chairman of the Management Board of KMG.

REMUNERATION OF MEMBERS OF THE MANAGEMENT BOARD

KMG's Board of Directors determines the remuneration policy and the procedure for assessing performance of members of KMG's Management Board in line with the Corporate HR Management Standard of Samruk-Kazyna Group that was approved by the decision of the Management Board of Samruk-Kazyna JSC dated December 14, 2017.

Remuneration paid to members of the Management Board for the reporting period (year) is performance-related to encourage them to meet the strategic and priority goals outlined in measurable, interrelated, consistent, and balanced motivational KPI scorecards.

A motivational KPI scorecard outlines corporate and functional KPIs.

Remuneration is determined to provide a reasonable and justified ratio of the fixed and variable parts, depending on KMG's performance and the employee's personal contribution.

The Nomination and Remuneration Committee of the Board of Directors pre-reviews issues related to building an effective and transparent remuneration framework.

When building the remuneration framework and determining the specific remuneration for members of KMG's Management Board, the actual amounts payable are expected to be sufficient to engage, motivate, and retain persons with skills and expertise required for KMG.

The total remuneration paid to members of KMG's Management Board for 2019 amounted to KZT 565,558,538.93 including all salaries and financial benefits paid by KMG to members of the Management Board for serving on the Board in 2019, as well as the total annual bonus paid to members of the Management Board (executives) for 2018 under the Remuneration Rules for Members of the Management Board (executives), Employees of the Internal Audit Service, and the Corporate Secretary of KMG, approved by Resolution of KMG's Board of Directors dated 13 February 2013.

CORPORATE CONTROL

In the event of corporate conflicts, the parties attempt to settle by negotiation to efficiently protect the interests of KMG and other stakeholders.

In order to be effectively prevented or addressed, corporate conflicts primarily need to be identified as soon and fully as possible, with all corporate governance bodies to act in a consorted manner.

Corporate conflicts are addressed by the Chairman of the Board of Directors assisted by the Corporate Secretary. If the Chairman of the Board of Directors is involved in a corporate conflict, such cases are addressed by the Nomination and Remuneration Committee.

INTERNAL AUDIT SERVICE

The Internal Audit Service (IAS) reports and is accountable to KMG's Board of Directors and supervised by the Audit Committee of KMG's Board of Directors. The activities of the IAS are governed by Kazakhstan's laws, KMG's internal documents, and the International Standards for the Professional Practice of Internal Auditing.

The IAS focuses on providing the Board of Directors with independent and objective information to ensure the effective management of KMG and its subsidiaries and associates by employing a systematic approach towards improving risk management, internal control, and corporate governance processes.

To perform its activities in accordance with the annual audit plan, the IAS:

- assesses the reliability and effectiveness of applicable internal controls and risk management
- assesses the reliability, completeness, and objectivity of the accounting policy as well as financial statements of KMG and its subsidiaries and associates based on such policies
- assesses the efficiency of resource management at KMG and its subsidiaries and associates and the methods used to ensure asset integrity
- monitors compliance with Kazakhstan's laws, corporate operational, investment, and financial rules and regulations.

The IAS uses audit results to make recommendations on improving KMG's operations. The IAS consistently monitors and oversees the development and execution of measures to implement its recommendations.

In line with the International Standards for the Professional Practice of Internal Auditing and to ensure the proper quality of internal audit, the IAS has in place a framework for continuous professional development of auditors. As a result, 31 of 36 employees of IAS (86%) hold international certificates and diplomas, such as:

- Certified Internal Auditor: 7
- Diploma in International Financial Reporting: 5
- Kazakhstan's Professional Accountant: 10
- Certified Accounting Practitioner/Certified International Professional Accountant: 4
- Certified Professional Internal Auditor: 13
- Certified Fraud Examiner: 2
- Certified Information Systems Auditor: 2
- Association of Chartered Certified Accountants: 1

COMPLIANCE SERVICE

The role of KMG in the national economy requires a responsible approach to fostering a favourable business environment and is reflected in its approaches towards corporate governance, including corporate compliance. KMG, therefore, adopts global best practices in compliance when developing its internal rules and procedures to promote its strategic objectives in line with applicable laws and ethical standards, and to mitigate reputational and legal risks that have a significant effect on its business stability, efficiency, and integrity.

KMG is committed to improve existing corporate standards in line with best global practices in corporate governance. As part of the efforts to ensure the Company's and its employees' compliance with legal and ethical anti-corruption standards, KMG reviewed risk factors in corporate business processes to assess the likelihood of potential damage from risk occurrence, and assessed performance of existing controls for each potential risk.

Integrity and compliance are paramount for every business as they enable its successful and sustainable operation, promote zero tolerance to corruption and foster transparency and openness within the corporate culture and employee behaviours and attitudes. These principles are central to the operation of the Compliance Service and lie at the heart of robust corporate governance.

KMG's Compliance Service, with a direct functional reporting line to the Board of Directors, was launched in 2019. The role of the Compliance Service is to ensure compliance with mandatory regulations and global best practices in pursuing anti-corruption policies and building corporate culture across KMG Group to foster transparency and integrity among its employees, as well as to create a business environment aligned with global best practices, internal policies, and Kazakhstan's laws. The Compliance Service is responsible for preventing all existing risks of KMG Group employees being involved in corrupt practices in performing their duties. While being a standalone function within KMG, the Compliance Service is integrated with all of its business units.

KMG applies a common group-wide policy to prevent corruption, embezzlement, and misuse of funds, misappropriation of, or deliberate damage to, inventories, misrepresentation and falsification of financial statements or other documents, abuse of office, negligence or omission, as well as other offences.

In line with global best practices, KMG has also introduced anti-corruption clauses in its contracts with independent contractors, disciplinary sanctions against employees who fail to comply with corporate regulations and applicable laws, as well as awareness raising for administrative and management staff through compliance trainings on the principles of the Code of Business Ethics covering international and national anti-corruption laws.

KMG has in place whistleblowing channels administered by an independent third-party contractor. In case of any suspicions or knowledge of a breach of the Code of Business Ethics, including corruption, fraud, or non-ethical conduct, every employee can report them via a hotline, with such information then forwarded to relevant compliance officers to identify the cause and remedy the breach. The investigation results are presented to the Board of Directors each quarter. A total of 28 whistleblowing reports were received via the hotline in 2019, including six reports that were confirmed, with recommendations and answers promptly prepared and sent via the independent contractor to the whistleblowers.

RISK MANAGEMENT AND INTERNAL CONTROL

Risk management at KMG relies on the corporate risk management system (CRMS) implemented at all levels across the Group. The CRMS is a key element of the corporate governance system, supporting timely identification, assessment and monitoring of all material risks, as well as timely and adequate mitigation measures.

The CRMS policy of KMG and its subsidiaries outlines the terminology, goals, tasks, main principles of design and operation, and organisational structure of the CRMS at KMG Group. The purpose of the CRMS is to ensure an optimal balance between the Company's growth in value, profitability and risks.

CRMS PRINCIPLES

The Company's risk management is guided by the following principles:

1. Single methodology: the CRMS processes across all KMG Group entities are based on unified methodological approaches;
2. Continuity: the CRMS operates on an ongoing basis;
3. Comprehensiveness: the CRMS covers all activities of the Company and all types of associated risks; KMG Group applies relevant controls to all business processes at all management levels;
4. Accountability: the CRMS organisational structure defines roles in decision making and risk management control at all levels across KMG Group;
5. Awareness and timely communication: the risk management process draws upon objective, reliable and relevant information;
6. Efficiency: KMG Group makes smart use of the resources required for risk management activities, ensuring cost efficiency of risk management;
7. Reasonable assurance: due to inherent internal and external constraints such as the human factor, appropriateness of controls, etc., the CRMS can only provide reasonable but not absolute assurance that the Company's strategic and operational goals will be achieved;
8. Adaptability: the CRMS is continuously improved to ensure the identification of all potential risks related to operations, as well as to maximise the effectiveness of risk control and management;
9. Rigorous process: all activities are performed in line with the procedures outlined in the internal regulations of KMG and its subsidiaries;
10. Leadership commitment: the Company's management is actively involved in and provides support to, the implementation and improvement of the risk management system at KMG Group.

IMPROVING RISK MANAGEMENT

KMG Group's efforts to improve its CRMS and drive a robust risk culture are guided by the Detailed Plan for Improving Corporate Governance of KMG for 2019–2020. The Plan outlines key initiatives supporting the Company's CRMS goals.

KMG has been continuously improving its CRMS and consistently enhancing its risk management framework. We remain fully committed to continuous development and improvement of the Company's CRMS, and in 2019 KMG:

- refreshed KMG's Risk Committee;
- invited the head of the Internal Audit Service to attend the Risk Committee meetings as a permanent invited non-voting expert;
- conducted a survey on risk management culture at KMG with the survey report reviewed by KMG's Risk Committee;
- approved KMG's Risk Culture Improvement Action Plan for 2020;
- had its Board of Directors approve the risk appetite statement, Risk Register, Risk Management Action Plan, a risk map, risk tolerance levels and KMG's Key Risk Indicator Register for 2020;
- approved guidelines on the internal control system and business continuity management system;
- approved KMG's Business Process Classifier for 2019, KMG's Timetable for Developing and Updating Risk and Control Matrices and Flowcharts for 2019 and 2020, KMG's Corporate-Level Risk and Control Matrix, and the roadmap for improving the ICS and BCMS across KMG and its subsidiaries;
- approved KMG's Register of Risk Coordinators;
- expanded the Corporate Reinsurance Programme by including joint ventures, increasing coverage and sourcing new insurance products; and
- relocated Kazakhstan Energy Reinsurance Company Ltd. from the Islands of Bermuda to the Astana International Financial Centre (AIFC), Nur-Sultan, to exclude a controlled foreign company from the Group's taxable base for local tax purposes.

The Company with Compliance Service and other units established a working group, outlined the corruption risk assessment guidelines, arranged training sessions and prepared the Register of Corruption Risks. KMG's Board of Directors approved the Report on Assessment of Corruption Risks at KMG and the Action Plan to Minimise Corruption Risks under the Action Plan for Ensuring Compliance with the Law of the Republic of Kazakhstan On Anti-Corruption across Subsidiaries of Samruk-Kazyna JSC for 2019 approved by an order of the Chairman of the Management Board of the Fund.

The following decisions were made in 2019 to set limits for KMG's counterparty banks:

- The Management Board approved internal limits on the balance sheet and off-balance sheet liabilities for ten counterparty banks of KMG;
- The Board of Directors set limits for two counterparty banks of KMG;
- Four reports on compliance with the limits set for KMG's counterparty banks were approved (as part of KMG's quarterly risk reports).

KMG assessed the impact of existing and potential US sanctions against Russia on KMG Group and designed initiatives to respond to external challenges. A report on the potential impact of the US-China trade conflict on KMG's operations was also prepared.

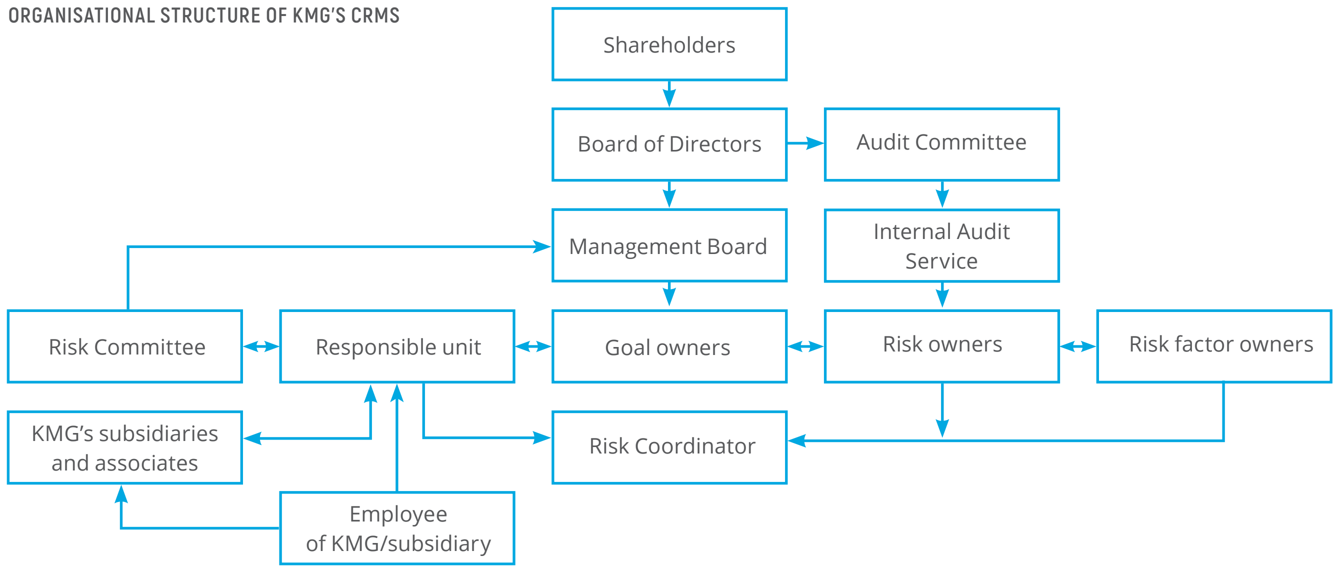
PLANNED IMPROVEMENTS TO RISK MANAGEMENT IN 2020 AND BEYOND

- Automate CRMS processes via the automated risk management system across KMG Group;
- Develop risk and control matrices and flowcharts for 24 business processes and test (analyse) the design of controls, evaluate the current maturity levels of the ICS across subsidiaries, coordinate the ICS roll-out across subsidiaries, train employees;
- Develop and approve business continuity plans, test the plans and develop improvement recommendations, evaluate the current maturity levels of the BCMS across subsidiaries, coordinate the BCMS roll-out across subsidiaries, train employees;
- Develop and manage the operations of Kazakhstan Energy Reinsurance Company Ltd. at AIFC and extend the Corporate Reinsurance Programme to new companies;
- Explore and adopt cyber insurance across KMG and its subsidiaries;
- Further improve our score on Risk Management and Internal Control within KMG's target corporate governance rating, implement initiatives under the Detailed CRMS Improvement Plan for 2020, foster a robust risk culture at KMG Group.

CRMS PARTICIPANTS

Risk management at KMG is an ongoing process embedded throughout the organisation including its Board of Directors, Management Board, managers and employees. Each officer is responsible for ensuring risks are properly assessed when making decisions. To provide reasonable assurance that strategic and operational goals will be achieved, all CRMS participants take steps to identify potential events that can impact the Company's operations and to limit such exposure to the levels acceptable to the Company (set levels).

ORGANISATIONAL STRUCTURE OF KMG'S CRMS



Functional map of CRMS participants

Board of Directors	Audit Committee of the Board of Directors	Internal Audit Service (IAS)
• Approves strategic, mid- and short-term goals; • Ensures the availability of an effective CRMS, including by approving the CRMS Policy; • Approves the Company's risk appetite along with tolerance levels for KMG's risks; • Approves the Risk Register, risk map, key risk indicator (KRI) and KMG's Risk Management Action Plan; • Reviews and approves quarterly risk reports; • Approves CRMS performance indicators and arranges for annual performance assessment of KMG's CRMS; • Approves KMG's business continuity plans.	• Reviews all matters relating to internal and external (financial) audit, financial reporting and risk management, and prepares recommendations to the Board of Directors; • Previews the Company's risk appetite, Risk Register, risk map, Risk Management Action Plan, KRI, quarterly risk reports and CRMS Policy with subsequent amendments prior to approval by the Board of Directors.	• Assesses the performance of the risk management process, notifies the Board of Directors of significant gaps in the CRMS and develops recommendations to improve the risk management process; • Assesses the performance of preventive measures on risks/risk factors (control procedures) and develops recommendations to eliminate identified gaps (as necessary); • Notifies KMG's responsible unit of new risk factors identified during audits and absent from the Register.
Management Board	**Risk Committee of the Management Board**	**Risk Management Department**
• Implements the CRMS Policy, including oversight of compliance with the CRMS Policy across KMG's units; • Sets up the CRMS and ensures its effective operation; • Approves the register of risk owners, risk factor owners and risk coordinators; • Reviews KMG's quarterly risk reports and takes appropriate steps within its remit; • Improves internal documents on risk management at KMG and its subsidiaries.	• Reviews risk management guidelines; • Reviews new approaches to risk management and their relevance for the Company; • Reviews proposals on appointing risk owners, risk factor owners, and risk coordinators; • Reviews the Company's risks and mitigation measures; • Approves the Company's risk appetite, risk tolerance levels, Risk Register, risk map, Risk Management Action Plan, KRI and quarterly risk reports.	• Develops and updates guidelines on the CRMS, internal control system (ICS) and business continuity management system (BCMS); • Provides advisory support to CRMS participants on the operation of the CRMS, ICS and BCMS; • Conducts training on risk management, ICS and BCMS; • Prepares the Risk Register, risk map, Risk Management Action Plan and quarterly risk reports; • Monitors compliance with risk tolerance and KRI levels; • Develops risk and control matrices and business process flowcharts (together with business process owners) ; • Coordinates the implementation of the ICS and BCMS at KMG and its subsidiaries; • Oversees the implementation of risk management measures and monitors the status of risks; • Cooperates with the IAS, business units, external advisers and other stakeholders on risk management, the ICS and BCMS within its remit.

Goal owners (Company employees – heads of KMG or its subsidiaries)	Risk owners (Company employees in positions not lower than deputy heads reporting directly to the chief officer)	Risk factor owners (Company employees in positions not lower than functional unit/business unit heads)
• Have accountability for achieving approved operational/non-operational targets; • Approve quantitative/qualitative risk values that influence the achievement of set KPIs (targets) and align the Risk Management Action Plan; • Oversee timely implementation of the approved Risk Management Action Plan.	• Manage risk factors which, if realised, may cause an operational/non-operational risk; • Duly manage and control risk factors relating to the operation of processes overseen by risk factor owners; • Provide timely, complete information on the status of risk factors and implementation of mitigation measures to KMG's responsible unit; • Develop and implement a business continuity plan; • Develop risk management mechanisms for individual risk types, as well as control procedures relating to the operation of mitigation processes overseen by risk factor owners at KMG (corporate standards, regulations and policies on managing certain types of risks).	• Manage risk factors which, if realised, may cause an operational/non-operational risk; • Duly manage and control risk factors relating to the operation of processes overseen by risk factor owners; • Provide timely, complete information on the status of risk factors;a nd the implementation of mitigation measures to the responsible KMG unit; • Develop and implement a business continuity plan; • Develop risk management mechanisms for individual risk types, as well as control procedures relating to the operation of mitigation processes overseen by risk factor owners at KMG (corporate standards, regulations and policies on managing certain types of risks).
Subsidiaries, including jointly controlled entities and joint ventures of KMG (KMG's subsidiaries)	**Risk Coordinator**	**Employee of KMG/subsidiary**
• Ensure timely set-up of the risk identification and assessment process in line with the CRMS guidelines; • Duly manage and control risks relating to the operation of business processes at subsidiaries; • Submit timely risk reports, along with complete information on the status of operational/non-operational risks, as well as on the implementation of relevant mitigation measures and the occurrence of risk events to the responsible KMG unit; • Develop and implement a business continuity plan for subsidiaries.	• A responsible employee of a business unit designated by the risk/risk factor owner; • Organises and coordinates risk/risk factor management efforts within their business unit and interacts with the responsible unit.	• Performs duties relating to risk management as per the job description; • Timely notification to the responsible unit of KMG/KMG's subsidiary and their immediate supervisor of any actual or potential errors/gaps that have caused or may cause potential loss, as well as of any actual or potential risk events in the manner and time specified by internal regulations on the CRMS; • Takes training in risk management in line with the approved training programme.

ROLE OF THE BOARD OF DIRECTORS WITHIN THE CRMS

The following documents are submitted for review to KMG's Board of Directors at least once a year:

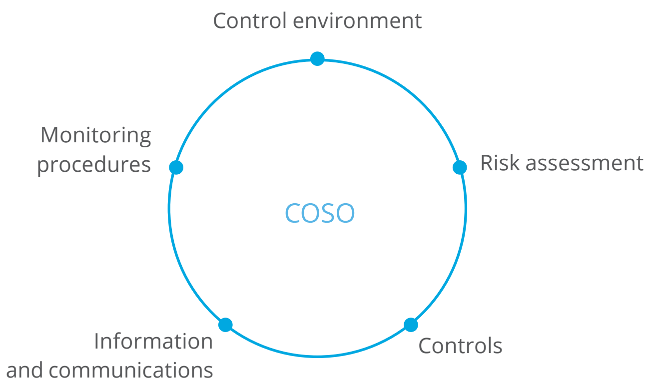
- Proposals on the Company's risk appetite;
- Consolidated Risk Register;
- Risk map;
- The Company's Risk Management Action Plan.

In addition, a risk report (consolidated based on the coverage of KMG's subsidiaries and associates) is submitted on a quarterly basis to the Board of Directors for consideration with the Board duly reviewing and discussing it in full. The Board of Directors takes appropriate measures to bring the existing risk management and internal control system in line with the principles and approaches determined by the Board of Directors.

INTERNAL CONTROL SYSTEM (ICS)

The ICS is an integral part of the CRMS. The system uses the COSO framework and includes five interrelated elements.

INTERNAL CONTROL SYSTEM (ICS)



KMG and its subsidiaries implement the ICS to achieve reasonable assurance that KMG will reach its goals across three key areas:

- Improving operational efficiency;
- Preparing complete and reliable financial statements;
- Complying with Kazakhstan's laws and KMG's internal documents.

The ICS is a key element of KMG's corporate governance system and is defined as the totality of processes, procedures, behaviours and activities that support efficient and effective operations, drive progress towards KMG's operational goals and minimise process-level risks.

KMG's Internal Control System Policy outlines the objectives, operating principles and elements of the ICS. In order to implement the Internal Control System Policy, the Company has put in place the Internal Control System Guidelines detailing related roles, responsibilities, operating procedures, organisation and performance criteria.

KMG and its subsidiaries annually approve Timetables for developing respective business process flow charts and risk and control matrices, as well as test (review) the design of controls and prepare improvement recommendations. The results of these ICS activities are communicated to business process owners, the IAS, Management Board and Board of Directors.

CORPORATE INSURANCE

Insurance is central to ensuring robust risk control and financial management across the Group as it serves to protect the property interests of the Company and its shareholders against unexpected losses that may result from operations, including as a result of external factors.

The Group's insurance function is centralised to ensure the enforcement of the group-wide Corporate Standard for obtaining and maintaining insurance cover in implementing a comprehensive approach to managing continuous coverage.

KMG's Corporate Insurance Programme includes the following key types of insurance coverage:

- Insurance of core operating assets of the Company;
- Public liability insurance;
- Energy risk insurance.

When taking out insurance policies for its core production assets, KMG covers the risks of damage to (loss of) property due to emergencies and other incidents and maintains business liability insurance.

A reinsurance company is only considered for reinsurance when holding a financial credit rating of at least "A–" on the Standard and Poor's scale.

The Group applies industry best practice in negotiating the best insurance and risk coverage terms.

KEY RISKS

Risk description and likely impacts	Mitigation and management
Production decline risk	
Declines in production from mature fields is KMG's key operational risk.	To maintain production rates at mature fields, KMG: • implements measures to increase time between well repairs; • ensures timely execution of well services, workovers and well interventions; • implements upgrade programmes for obsolete equipment; • deploys new technologies to maintain production rates at mature fields.
Work-related injury risk	
Employee non-compliance with the established health and safety rules, and breaches of operational discipline may pose a threat to the life and health of employees.	To prevent industrial accidents, KMG implements organisational and technical measures that ensure: • safe work execution and prevention of work-related injuries and occupational diseases; • timely training and knowledge testing; • internal health and safety controls; • deployment of new technologies and mechanised techniques, and improvement of industrial safety for production facilities.
Risk of emergencies or man-made disasters at production facilities	
The Company's operations are potentially hazardous. KMG is exposed to the risk of damage to property, third parties or the environment caused by accidents or emergencies, man-made disasters at production facilities or third party misconduct.	To mitigate operational risks, the Company: • ensures timely maintenance and repair of equipment as required by relevant regulations; • performs timely retrofits and upgrades; • performs timely diagnostics and identification of potential hazards, as well as industrial safety assessments of production facilities; • improves the technical expertise and qualifications of operating personnel. The Company is phasing in advanced protection, safety and security technology and solutions. In accordance with statutory HSE requirements, KMG takes out annual mandatory liability insurance for facility owners whose operations have an inherent risk of damage to third parties, as well as mandatory environmental insurance. In addition, annual voluntary property insurance is taken out (against the risk of accidental destruction, loss or damage) for insured events (reference to the insurance information in this Annual Report). 119 For more details see the Liability insurance section
Environmental risk and climate change risk	
The Company is exposed to the risk of adverse environmental impact and the risk of tougher responsibility for non-compliance with environmental laws, as well as risks related to climate change.	The Company's priorities in environmental protection: • Greenhouse gas management and flaring reduction; • Water management; • Production waste management; • Land reclamation; • Energy efficiency improvement. To mitigate the environmental risk, the Company: • ensures preventive management of significant environmental aspects, based on project management and a risk-based approach, to improve environmental performance; • engages stakeholders on environmental issues; • comprehensively develops the corporate environmental function and aligns KMG's activities with green economy principles. The Company takes an active role in the working group of the authorised body tasked with developing new environmental laws.

Risk description and likely impacts	Mitigation and management
Risk of gas shortages	
Gas export volumes might decrease due to (1) higher domestic gas consumption, given the introduction of gas chemical projects in the domestic market, (2) a decrease in gas production due to gas re-injection, aimed at maintaining oil production plateau and/or driven by the lack of gas processing capacities, and also (3) due to insufficient development of the resource base gas production.	The company has envisaged the implementation of a number of projects to increase the resource base of marketable gas by expanding the capacity for processing associated petroleum gas, reducing gas re-injection and burning associated petroleum gas in the fields. Planned and ongoing work on the development of new perspective fields, as well as an increase in gas production at existing fields.
Geological risk	
The implementation of new exploration projects is always associated with geological risks arising from the uncertainty of geology: lack of hydrocarbon discoveries, failure to confirm recoverable oil (gas) reserve estimates.	• Collection, analysis, synthesis and update of the geological and geophysical data base; • Planning of geophysical surveys and exploration for hydrocarbons, application of effective study techniques and data processing and interpretation methods; • High-resolution 2D/3D seismic surveys; • Building sedimentary, geology and basin models of the region and fields based on qualitative analyses and advanced methods of geochemical and lithology analyses; • Attracting strategic partners for joint exploration and development of new fields including carry financing arrangements to reduce the financial impact of geological risks.
Social unrest in operating regions	
The Company is exposed to the risk of unauthorised strikes.	To mitigate social risks, the Company: • runs awareness raising activities across operations including management holding reporting meetings directly with representatives of the workforce and trade unions; • the Company builds an integrated youth policy system to drive engagement among young employees and encourage them to participate in social activities and be part of the corporate team; • runs regular surveys, analyses and monitoring of employee satisfaction and social stability in its operating regions, with corresponding Action Plans developed based on their findings.
Liquidity and financial stability risks	
Liquidity and financial stability risks are key risks.	To overcome these risks, along with debt management activities and efforts to prevent liquidity shortages, the Company is focused on improving operational efficiency, clear prioritisation of capital expenditures, commitment to financial discipline, rationalisation of the Company's asset and project portfolios, and transition to portfolio-based project management.
Compliance risk	
The Company has zero tolerance towards intentional corruption for personal or material gain, including for the benefit of third parties, or any other fraudulent or corrupt practices regardless of the amount of monetary damage.	The Company consistently implements and reinforces internal controls, embedding group-wide policies to prevent unlawful or wrongful acts by third parties or by its employees and maintaining the procedure for conducting internal investigations of unlawful or wrongful acts of its employees. The Company also maintains a speak-up hotline. The Company has adopted policies and standards, as well as committed itself to: • implementing and consolidating its internal and compliance controls; • conducting anti-corruption monitoring; • analysing corruption risks ; • promoting an anti-corruption culture; • establishing an organisational and legal framework to foster accountability, controllability and transparency of decision-making procedures; • implementing and complying with business ethics standards; • preventing conflicts of interest.

Risk description and likely impacts	Mitigation and management
Oil price fluctuations	
The Company is exposed to the risk of energy price volatility.	KMG continuously monitors and analyses price and demand dynamics for crude oil and oil products. The Company's strategic and current planning model is based on a scenario approach and can be adjusted as necessary. The Company has internal reserves and is capable of optimising its costs and capital investments to meet its obligations if prices of oil, gas or oil products fall. It also keeps open the option of purchasing financial instruments to hedge against a significant drop in oil prices.
Country risks and the risk of sanctions	
The Company operates internationally. Any significant adverse change in the economic and political situation in a recipient country could affect the Company's operations. Sanctions against certain countries, including sectoral sanctions, can affect the Company's operations and its prospective projects.	The Company mitigates country risks by setting country-specific limits based on the analysis of the recipient country (from the economic, political, strategic, social and other perspectives). The Company analysed the impact on its operations from economic sanctions, along with potential response measures. Joint projects/material transactions with Russian entities were reviewed, with relevant potential operational and financial risks explored. The Company monitors existing sanctions to minimise negative impacts and implications considering the potential widening of sanctions, which may have a targeted impact on the Company's prospective projects. To reduce risks, the Company provides for mechanisms to exit projects or implement them independently in the event of a tougher sanctions regime.
Cyber risks	
Growing global cybercrime and increased impact of digitalisation on production and management processes at KMG lead to increased risks of attacks on the Company's ITC system aimed at compromising its integrity, accessibility and security.	The Company rolls out specialist information security hardware and software solutions to ensure automated monitoring of external and internal threats. The Company runs tests to check its ICT system for vulnerability to external attacks, analyses its IT infrastructure security, audits network elements and monitors its operating systems security on a regular basis. The Company's information security management system is maintained to meet the current international standards.
Reputational risks	
The Company is exposed to reputational risk which affects its business reputation and relationships with investors, counterparties, partners and other stakeholders.	The Company implements a range of measures to manage this risk including publications in the media, holding of briefings, press conferences and management presentations highlighting various aspects of the Company's activities and raising awareness among stakeholders. The Company maintains a speak-up hotline and a procedure ensuring prompt responses to complaints and claims to eliminate their root causes.
FX risk	
Currency risk is a potential negative change in the Company's financial performance due to exchange rate fluctuations.	Given the currency mix of its revenues and liabilities, the Company is also exposed to FX risk in its operations. The strategy for managing this risk involves the use of a holistic approach that considers natural (economic) hedging options. KMG ensures the optimal balance of assets and liabilities denominated in foreign currency, and calculates earnings considering the FX risk.
Tax risk	
The Company is exposed to the persistent risks of changes in tax laws and lack of clear interpretation, as well as the risk of increased tax burden and loss of entitlement to tax benefits.	The Company continuously monitors changes in tax laws, evaluates and forecasts the extent to which they can potentially impact its operations, as well as following trends in law enforcement practice and considers the implications of regulatory changes for its operations. The Company's specialists regularly take part in various working groups responsible for drafting tax legislation. To mitigate tax risks, the Company improves its tax administration processes and conducts tax audits.

Risk description and likely impacts	Mitigation and management
Interest rate and commercial bank liquidity risk	
Higher interest rates and lower financial stability of the banking sector can have a negative impact on the cost of borrowing, as well as the placement of idle cash.	To mitigate these risks, the Company diversifies investments in financial instruments in accordance with the treasury portfolio's pre-defined limits and regularly monitors how idle cash is placed across KMG Group. Most of KMG's earnings are generated in US dollars, while the main source of borrowing is the international lending market. For these reasons, KMG's debt portfolio is largely denominated in US dollars. The interest rates for servicing a portion of these loans are based on LIBOR and EURIBOR interbank lending rates. An increase in these interest rates may result in higher costs of servicing the Company's debt while an increase in the cost of loans for the Company may have a negative impact on its solvency and liquidity. KMG has implemented measures to significantly reduce the Company's debt and improve operational efficiency to move the Company into the green zone of credit risk.
Investment (project) risk	
The Company is implementing a number of projects in hydrocarbon exploration, production, transportation and processing, which could be exposed to significant risks associated with external and internal factors. The materialisation of such risks can significantly affect the success of these projects.	The Company regularly monitors the status of project implementation in the regions in which it operates, making timely adjustments to project implementation plans as necessary. Where risk can arise affecting the timing, budget or quality of projects, mitigation measures may include negotiations with stakeholders, reduction of operating costs, optimisation of the investment programme, etc.
Risks of changes in applicable laws, and litigation and arbitration risks	
The Company's performance can be impacted by changes in applicable laws including subsoil use, tax, currency, customs regulations, etc., as well as the risk of negative court decisions on court or arbitration disputes involving the Company.	The Company continuously monitors changes in laws as well as evaluating and forecasting the extent to which they can potentially impact the operations of Group entities. The Company regularly takes part in working groups to develop and discuss draft laws in various areas of the law. The Company continuously monitors laws as well as judicial and law enforcement practices and actively applies them in resolving legal issues and disputes arising in the course of the Company's operations.

Risk description and likely impacts	Mitigation and management
COVID-19 Pandemic Risk	
The outbreak of coronavirus COVID-19 had a negative impact on trade and the economy globally. The long-lasting impact from negative risk factors associated with the threat of the COVID-19 pandemic might lead to implication on the Company's performance: • significant decline in energy prices; • threats to the health; • of workers and members of their families, the need to introduce a quarantine regime in organizations and limitations of activities due to quarantine measures; • restriction of imports of goods, works, services from China rstrictions on the movement of labor, in connection with measures taken by the Government of China, aimed at curbing COVID-19 spread (including the ban on the departure of citizens from China); • restrictions on air / aiway communication with China, which might lead to a delay in the implementation of investment projects with Chinese goods / wok servce, the involvement of foreign labor from China; • decrease in gas exports to China due to a significant decrease in gas demand from China.	The Company constantly monitors changes in the situation with the spread of COVID-19 in the world and also carries out all the necessary preventive measures, aimed at curbing the spread of COVID-19 at workplaces. The Company ensures preparedness for the potential deterioration of the epidemiological situation as well as the implementation of a number of measures in order to ensure business continuity in case of detection of COVID-19.

SHAREHOLDER AND INVESTOR RELATIONS

KMG Shareholders[1]

Shareholder	Ordinary shares	Ordinary shares, %	Preferred shares	Total shares	Total shares, %
JSC Sovereign Wealth Fund Samruk-Kazyna	551,698,745	90.42	–	551,698,745	90.42
The National Bank of Kazakhstan	58,420,748	9.58	–	58,420,748	9.58

Securities issues[1]

Type of shares	Authorised shares	Outstanding shares	Unissued shares
Ordinary	849,559,596	610,119,493	239,440,103

There were no changes in the shareholder structure in the reporting period.

The annual General Meeting of Shareholders, with its roles performed by the Management Board of Samruk-Kazyna JSC according to applicable law and the KMG Charter, pending approval of the following documents:

1. KMG 2019 annual financial statements (consolidated and separate)
2. KMG's 2019 net profit distribution
3. Amount of dividend per KMG share

The General Meeting of Shareholders also will review the matter concerning shareholder queries regarding the Company's and its officers' actions and corresponding responses.

No extraordinary General Meetings of Shareholders were held during the year.

1. As at 31 December 2019.

DIVIDENDS

Principles of KMG's Dividend Policy:

- Guaranteed payment of dividends on the state-owned stake;
- Ensuring financial support for the Fund's[1] activities, including new activities and investment projects financed by the Fund;
- The Group companies finance their own growth programmes, including investment activities.

Dividend history

Indicator	2017	2018
Dividend per share, KZT	61.54	60.64
Total dividends paid, KZT bln	36.2	36.9
Total dividends / net profit under IFRS, % (according to the Dividend Policy)	8.29%	5.32%

CREDIT RATINGS

Credit Ratings	Rating	Outlook
S&P	BB	Negative
Moody's	Baa3	Positive
Fitch	BBB–	Stable

As at 27 March 2020

Significant improvements in KMG's financial performance prompted upgrades of KMG's credit ratings on a stand-alone basis by the three leading global rating agencies in 2018-2019.

- On 8 November 2018, S&P Global Ratings upgraded KMG's long-term ratings from "BB–" to "BB". Outlook: Stable. The upgrade reflects the agency's expectation of continued improvement in KMG's stand-alone credit profile metrics. S&P upgraded KMG's stand-alone credit profile (SACP) from "B" to "B+".
- On 22 August 2019, Moody's upgraded KMG's outlook from "stable" to "positive" and affirmed its "Baa3" rating. KMG's baseline credit assessment (excluding any extraordinary government support) was upgraded from "Ba3" to "Ba2". The upgrade reflects the improvement in KMG's credit metrics, including reduced leverage and increased interest coverage.
- On 28 March 2019, Fitch affirmed KMG's long-term issuer default rating at "BBB–". Outlook: Stable. The agency upgraded KMG's stand-alone credit profile (excluding any extraordinary government support) to "BB–". This upgrade reflects (1) KMG's substantial upstream operations; (2) integration with more stable midstream and downstream segments; and (3) KMG's status as a national oil and gas company.
- On 27 March 2020, S&P Global Ratings affirmed its "BB" rating and revised its outlook on KMG to "negative" on the back of lower oil prices.
- On 27 March 2020, Fitch affirmed KMG's ratings at "BBB-", Outlook: Stable.

1. Sovereign Wealth Fund Samruk-Kazyna Joint-Stock Company (hereinafter - Samruk-Kazyna, the Fund).

BOND ISSUES

As at 31 December 2019, KMG's consolidated debt (expressed in USD) was USD 10.0 bln, including USD 7.3 bln (around 73%) in bond issues.

KMG borrows both on the national and global capital markets in line with its flexible, balanced debt management policy. KMG bonds are among the most liquid instruments among those offered by Kazakhstan's issuers. KMG's FX-denominated bonds have been historically attractive to a wide range of investors. KMG bonds' investor base includes thousands of institutional and retail investors, mostly based in the USA, Europe, and Asia. KMG's Eurobonds are traded on the London Stock Exchange and the Kazakhstan Stock Exchange.

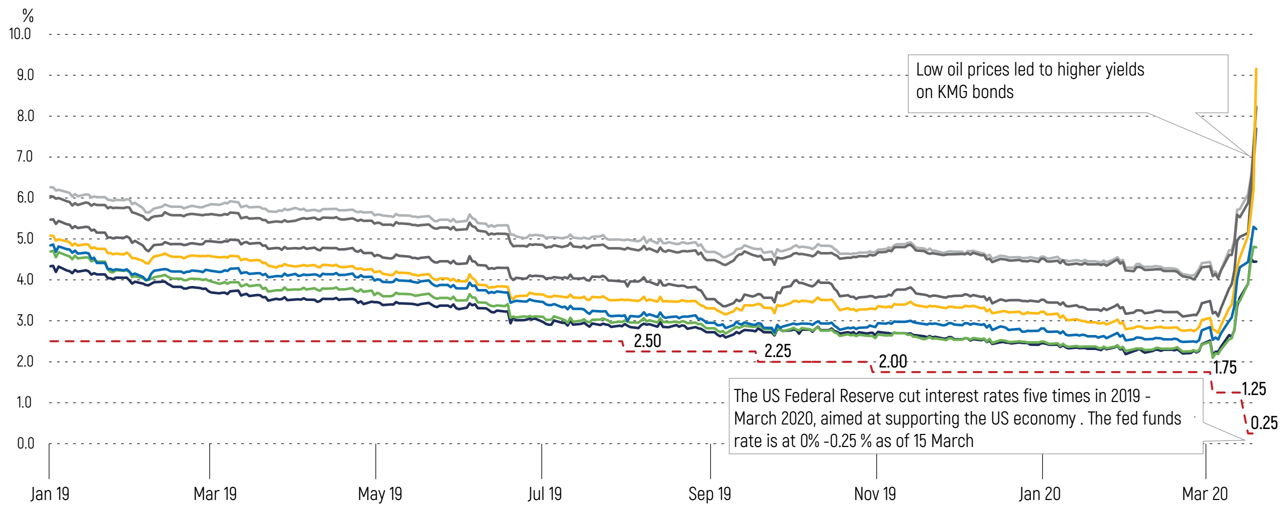
As at 31 December 2019, KMG had seven outstanding Eurobond issues for a total amount of USD 6.41 bln on par value. In 2019, KMG's Eurobonds' yields decreased due to lower global interest rates, low country risk (average of CDS on Kazakhstan in 2019: 70 bps), and KMG's improved credit profile.

KMG's outstanding Eurobonds[1]

Currency	Issue size, USD bln	Outstanding amount, USD bln	Coupon rate, % p.a.	Issue date	Maturity date	ISIN: REGS/ 144A
USD	1.00	0.41	4.4	30 April 2013	30 April 2023	XS0925015074/ US46639UAA34
USD	0.50	0.50	3.875	19 April 2017	19 April 2022	XS1595713279/ US48667QAM78
USD	1.00	1.00	4.75	19 April 2017	19 April 2027	XS1595713782/ US48667QAN51
USD	1.25	1.25	5.75	19 April 2017	19 April 2047	XS1595714087/ US48667QAP00
USD	0.50	0.50	4.75	24 April 2018	24 April 2025	XS1807299174/ US48667QAR65
USD	1.25	1.25	5.375	24 April 2018	24 April 2030	XS1807300105/ US48667QAQ82
USD	1.50	1.50	6.375	24 April 2018	24 October 2048	XS1807299331/ US48667QAS49
Total	7.00	6.41				

Source: Bloomberg.

KMG'S EUROBONDS MID-YIELDS



[1] Senior unsecured, as at 31 December 2019.

INVESTOR COMMUNICATIONS

KMG continues to successfully implement its investor relations programme targeting current and potential investors and the investment community at large.

Communications with investors are handled at the highest level, including Chairman of the Board of Directors, Chairman of the Management Board, members of the Management Board, and heads of KMG's strategic, financial, and operating units, as well as the Investor Relations and Regulatory Disclosure Department.

Throughout 2019, KMG maintained a regular direct communication channel between management and investors through roadshows, group and one-on-one meetings, conferences and other events organised by global institutions and investment banks in Kazakhstan and internationally. In May and October 2019, top managers held a series of successful roadshow meetings with a number of key European and US investment funds and institutions – bondholders and potential investors. Investors emphasised the importance of face-to-face meetings with the Company management through roadshows, and strongly welcomed the initiative to hold regular meetings. KMG targets to continue regular investor engagement by holding roadshows, one-on-one or group meetings and participating in investor conferences.

KMG holds quarterly conference calls for investors with the Deputy Chairman and members of the Management Board, as well as department directors.

Direct communication through regular meetings and conference calls enables the investment community, including investors, analysts, representatives of financial news publications and international rating agencies, to get insights into the Company's strategic development, as well as its financial and operating results directly from management.

Investor materials are published by the Company and made publicly available. KMG publishes on a quarterly basis the Management's Discussion and Analysis of Financial Condition and Results of Operations, along with a quarterly results presentation and press release, as well as IFRS financial statements. Analyst databooks are also made available to enable detailed analyses of the Company's operations.

The Board of Directors and Management Board use comments and feedback from investors to inform decisions on further enhancement of this critical two-way dialogue, including an initiative by the Board of Directors to commission an independent investor perception survey on the Company.

KMG intends to continue developing its IR function to boost the Company's investment appeal and reduce the cost of new debt.

2019 investor calendar

Q1 2019	• Investor conference call on full-year 2018 financial and operating results • Management's discussion and analysis of the financial condition and results of operation, and quarterly results presentation
Q2 2019	• Investor conference call on first-quarter results • Management's discussion and analysis of the financial condition and results of operations, and quarterly results presentation. • 2018 Annual Report publication • Investor roadshow in May (London, Frankfurt, New York, Boston, Chicago, Los Angeles)
Q3 2019	• Investor conference call on second-quarter results • Management's discussion and analysis of the financial condition and results of operations, and quarterly results presentation. • 2018 Sustainability Report publication
Q4 2019	• Investor conference call on third-quarter results • Management's discussion and analysis of the financial condition and results of operations, and quarterly results presentation. • Participation in the "Kazakhstan in Focus Day" investor event held in London, UK, and in The Emerging & Frontier Markets Conference in New York, USA • Investor roadshow in October (London, Frankfurt, Zurich, New York, Boston, Los Angeles)

#1

BY

BY OIL REFINING

IN KAZAKHSTAN

The Company occupies 81% of the Republic of Kazakhstan's oil refining market

KAZAKHSTAN'S DOMESTIC CONSUMERS WERE FULLY SELF-SUFFICIENT IN FUELS AND LUBRICANTS (K4, K5). 37 THOUSAND TONNES OF PETROL WERE EXPORTED

Following the completion of the extensive upgrade of Kazakhstan's leading refineries – Atyrau, Pavlodar, and Shymkent refineries – the throughput capacity and refining depths were increased, oil product quality was elevated to meet the K-4 and K-5 (equivalent to Euro-4 and Euro-5) standards

NEXT:
FINANCIAL STATEMENTS

AUDITOR'S REPORT

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Independent auditor's report

To the Shareholders and Management of "National Company "KazMunayGas" JSC

Opinion

We have audited the consolidated financial statements of National Company "KazMunayGas" JSC and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2019 and 2018, the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2019 and 2018 and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements section* of our report. We are independent of the Group in accordance with the International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants* (including International Independence Standards) (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide an opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the consolidated financial statements section* of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Key audit matter	How our audit addressed the key audit matter
Impairment of non-current assets	
We considered this matter to be one of most significance in the audit due to materiality of the balances of non-current assets, including upstream, exploration and evaluation, downstream assets and investments in upstream and midstream joint ventures and associates, to the consolidated financial statements, the high level of subjectivity in respect of assumptions underlying impairment analysis and significant judgements and estimates made by management. In addition, the combination of volatility in oil prices and Tenge, increased inflation and cost of debt and uncertainty about future economic growth affects the Group's business prospects and therefore triggers potential impairment of the Group's assets. Significant assumptions included discount rates, oil and petroleum products prices forecasts and inflation and exchange rate forecasts. Significant estimates included production forecast, future capital expenditure and oil and gas reserves available for development and production. Information on non-current assets and the impairment tests performed is disclosed in *Note 4* to the consolidated financial statements.	We involved our business valuation specialists in the testing of impairment analysis and calculation of recoverable amount performed by management. We analyzed the assumptions underlying management forecast. We compared oil and petroleum products prices used in the calculation of recoverable amounts to available market forecasts. We compared the discount rates and long-term growth rates to general market indicators and other available evidence. We tested the mathematical integrity of the impairment models and assessed the analysis of the sensitivity of the results of impairment tests to changes in assumptions. We analysed disclosures on impairment test in the consolidated financial statements.

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Compliance with debt covenants

In accordance with the terms of certain financing arrangements, the Group should comply with certain financial and non-financial covenants. There is a higher likelihood that covenants impacted by trading volumes, revenue and profit may be breached particularly in subsidiaries impacted by volatility of oil prices and higher operating expenses, therefore, we focused on this area during our audit. Breaching covenants could result in funding shortages. Cross default provisions are in place under the Group's financing arrangements. Compliance with the financing covenants is one of the matters of most significance in the audit since it can have a major impact on the going concern assumption used in the preparation of the consolidated financial statements, and on classification of interest-bearing liabilities in the consolidated statement of financial position.

Information on compliance with covenants is disclosed in *Note 25* to the consolidated financial statements.

We examined the terms of financing arrangements and analysed financial and non-financial covenants, terms of early repayment and events of default. We examined the presence of confirmations received from the banks related to compliance with financial covenants. We compared data used in the calculations with the financial statements. We tested arithmetic accuracy of financial covenants calculations.

We analysed the disclosures in respect of debt covenants compliance in the consolidated financial statements of the Group.

Estimation of oil and gas reserves and resources

We considered this matter to be one of most significance in our audit due to the fact that the estimate of hydrocarbon reserves and resources has significant impact on the impairment test, depreciation, depletion and amortization and decommissioning provisions.

Reserves and resources are also a fundamental indicator of the future potential of the group's performance.

Information on estimation of oil and gas reserves and resources is disclosed in *Note 4* to the consolidated financial statements as part of significant accounting estimates.

We performed procedures to assess competence, capabilities and objectivity of the external expert engaged by the Group to estimate volumes of oil and gas reserves and resources. We assessed the assumptions used by the external expert and compared the assumptions to the macroeconomic indicators, hydrocarbon production, operating costs, capital expenditures forecasts and other performance indicators, approved by the Group's management. We compared the estimates of reserves and resources to the estimates included in the consideration of impairment, depreciation, depletion and amortization and decommissioning provisions.

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Other information included in the Group's 2019 annual report

Other information consists of the information included in the Group's 2019 Annual Report, other than the consolidated financial statements and our auditor's report thereon. Management is responsible for the other information.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of management and the Audit Committee for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The Audit Committee is responsible for overseeing the Group's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

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As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

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We also provide the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The partner in charge of the audit resulting in this independent auditor's report is Gulmira Turmagambetova.

Ernst & Young LLP

ERNST & YOUNG

Gulmira Turmagambetova
Auditor / General Director
Ernst and Young LLP

Auditor qualification certificate
No. 0000374 dated 21 February 1998

State audit license for audit activities on the territory of the Republic of Kazakhstan: series МФЮ-2 No. 0000003 issued by the Ministry of finance of the Republic of Kazakhstan on July 15, 2005

050060, Republic of Kazakhstan, Almaty
Al-Farabi ave., 77/7, Esentai Tower

5 March 2020

CONSOLIDATED FINANCIAL STATEMENTS

for the year ended December 31, 2019 with independent auditors' report

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

		For the years ended December 31		
In millions of tenge	Note	2019	2018 (Reclassed)[1]	2017 (Reclassed)[1]
Revenue and other income				
Revenue	6	6,858,856	6,988,964	4,793,763
Share in profit of joint ventures and associates, net	7	827,979	697,326	414,950
Finance income	14	240,880	161,027	122,574
Gain on sale of subsidiaries	5	17,481	18,359	–
Other operating income		24,936	23,035	20,165
Total revenue and other income		7,970,132	7,888,711	5,351,452
Costs and expenses				
Cost of purchased oil, gas, petroleum products and other materials	8	(3,913,744)	(4,312,958)	(2,729,514)
Production expenses	9	(721,693)	(604,475)	(624,346)
Taxes other than income tax	10	(454,295)	(477,732)	(354,447)
Depreciation, depletion and amortization	35	(337,424)	(285,186)	(238,021)
Transportation and selling expenses	11	(420,402)	(370,777)	(238,063)
General and administrative expenses	12	(213,967)	(213,485)	(163,780)
Impairment of property, plant and equipment, intangible assets, exploration and evaluation assets	13	(207,819)	(165,522)	(24,660)
Reversal of impairment of investment in joint venture	19	–	–	14,845
Other expenses		(7,203)	(23,283)	(34,767)
Finance costs	14	(317,433)	(427,655)	(306,355)
Net foreign exchange gain/(loss)		8,479	(38,320)	67,055
Total costs and expenses		(6,585,501)	(6,919,393)	(4,632,053)
Profit before income tax		**1,384,631**	**969,318**	**719,399**
Income tax expenses	30	(226,180)	(279,260)	(190,285)
Profit for the year from continuing operations		**1,158,451**	**690,058**	**529,114**
Discontinued operations				
Profit/(loss) after income tax for the year from discontinued operations	5	6	3,453	(3,666)
Net profit for the year		1,158,457	693,511	525,448

		For the years ended December 31		
In millions of tenge	Note	2019	2018 (Reclassed)[1]	2017 (Reclassed)[1]
Net profit/(loss) for the year attributable to:				
Equity holders of the Parent Company		1,197,157	695,864	443,408
		1,158,457	693,511	525,448
Net profit/(loss) for the year attributable to				
Equity holders of the Parent Company		1,197,157	695,864	443,408
Non-controlling interest		(38,700)	(2,353)	82,040
		1,158,457	693,511	525,448
Other comprehensive income				
Other comprehensive income/(loss) to be reclassified to profit or loss in subsequent periods				
Exchange differences on translation of foreign operations		(32,072)	479,196	(75,011)
Tax effect		(1,240)	–	–
Reclassified differences on translation of disposal group		–	(476)	(424)
Net other comprehensive (loss)/income to be reclassified to profit or loss in the subsequent periods		(33,312)	478,720	(75,435)
Other comprehensive loss not to be reclassified to profit or loss in subsequent periods				
Actuarial loss on defined benefit plans of the Group		**(5,688)**	**(3,658)**	**(1,148)**
Actuarial loss on defined benefit plans of joint ventures		**199**	**(160)**	**(173)**
Other		–	–	(150)
Tax effect		1,179	(86)	8
Net other comprehensive loss not to be reclassified to profit or loss in the subsequent periods		(4,310)	(3,904)	(1,463)
Net other comprehensive (loss)/income for the year		(37,622)	474,816	(76,898)
Total comprehensive income for the year, net of tax		1,120,835	1,168,327	448,550
Total comprehensive income for the year attributable to:				
Equity holders of the Parent Company		1,159,447	1,161,007	366,949
Non-controlling interest		(38,612)	7,320	81,601
		1,120,835	1,168,327	448,550

Deputy Chairman of the Management Board – Chief Financial Officer — D.S. Karabayev

Managing director – financial controller — A.Zh. Beknazarova

Chief accountant — Y.Y. Orynbayev

[1] Certain numbers shown here do not correspond to the consolidated financial statements for the years ended December 31, 2018 and 2017, and reflect reclassifications made, refer to Note 3

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

				As at December 31
In millions of tenge	Note	2019	2018 (Reclassed)[1]	2017 (Reclassed)[1]
Assets				
Non-current assets				
Property, plant and equipment	15	4,484,271	4,515,170	4,080,165
Right-of-use assets		38,379	–	–
Exploration and evaluation assets	16	179,897	189,800	253,326
Investment property		9,541	24,188	27,423
Intangible assets	17	171,172	173,077	185,205
Long-term bank deposits	18	52,526	52,297	48,523
Investments in joint ventures and associates	19	5,590,384	4,895,444	3,823,630
Deferred income tax asset	30	73,714	97,881	98,681
VAT receivable		133,557	113,073	96,666
Advances for non-current assets		73,367	27,176	124,907
Loans and receivables due from related parties	22	615,546	638,528	672,449
Other financial assets		2,488	4,753	4,161
Other non-current assets		17,162	16,942	17,401
		11,442,004	10,748,329	9,432,537
Current assets				
Inventories	20	281,215	312,299	250,369
VAT receivable		74,049	66,522	69,605
Income tax prepaid	30	54,517	53,143	36,135
Trade accounts receivable	21	397,757	493,977	467,867
Short-term bank deposits	18	359,504	386,459	1,638,941
Loans and receivables due from related parties	22	138,719	148,615	169,502
Other current assets	21	262,094	204,723	196,110
Cash and cash equivalents	23	1,064,452	1,539,453	1,263,987
		2,632,307	3,205,191	4,092,516
Assets classified as held for sale	5	7,604	61,760	24,905
		2,639,911	3,266,951	4,117,421
Total assets		14,081,915	14,015,280	13,549,958
Equity and liabilities				
Equity				
Share capital	24	916,541	916,541	709,345
Additional paid-in capital	24	40,794	40,794	243,876
Other equity		83	83	83
Currency translation reserve		1,731,747	1,764,108	1,295,091
Retained earnings		5,469,236	4,341,063	3,665,192
Attributable to equity holders of the Parent Company		**8,158,401**	**7,062,589**	**5,913,587**
Non-controlling interest	**24**	**38,255**	**80,480**	**870,018**
Total equity		8,196,656	7,143,069	6,783,605

				As at December 31
In millions of tenge	Note	2019	2018 (Reclassed)[1]	2017 (Reclassed)[1]
Non-current liabilities				
Borrowings	25	3,584,076	3,822,648	3,417,112
Provisions	26	273,589	229,797	203,775
Deferred income tax liabilities	30	509,462	479,598	380,738
Lease liabilities		35,996	6,550	5,314
Prepayment on oil supply agreements	27	—	480,250	581,578
Other non-current liabilities		43,694	45,213	51,879
		4,446,817	5,064,056	4,640,396
Current liabilities				
Borrowings	25	253,428	330,590	884,140
Provisions	26	103,538	98,471	78,812
Income tax payable	30	13,011	13,272	10,081
Trade accounts payable	28	667,861	632,739	513,851
Other taxes payable	29	86,666	105,026	101,198
Lease liabilities		10,922	2,656	1,676
Prepayment on oil supply agreements	27	—	384,199	332,330
Other current liabilities	28	303,016	236,163	201,940
		1,438,442	1,803,116	2,124,028
Liabilities directly associated with the assets classified as held for sale	5	—	5,039	1,929
Total liabilities		5,885,259	6,872,211	6,766,353
Total equity and liabilities		14,081,915	14,015,280	13,549,958
Book value per ordinary share	24	13.154	11.424	11.195

Deputy Chairman of the Management Board – Chief Financial Officer *D.S. Karabayev*

Managing director – financial controller *A.Zh. Beknazarova*

Chief accountant *Y. Orynbayev*

1. Certain numbers shown here do not correspond to the consolidated financial statements for the years ended December 31, 2018 and 2017, and reflect reclassifications made, refer to Note 3

CONSOLIDATED STATEMENT OF CASH FLOWS

		For the years ended December 31		
In millions of tenge	Note	2019	2018 (Reclassed) [1]	2017 (Reclassed) [1]
Cash flows from operating activities				
Profit before income tax from continuing operations		1,384,631	969,318	719,399
Profit/(loss) before income tax from discontinued operations		6	3,453	(3,666)
Profit before income tax		**1,384,637**	**972,771**	**715,733**
Adjustments:				
Depreciation, depletion and amortization	35	337,424	285,186	238,021
Impairment of property, plant and equipment, intangible assets, exploration and evaluation assets	13	207,819	165,522	24,660
Reversal of impairment of investment in joint venture	19	–	–	(14,845)
Impairment of assets classified as held for sale		24	168	68
(Reversal of) /allowance for impairment of long term advances	12	(11)	–	1,188
(Reversal of) /allowance for obsolete inventories		(2,534)	4,339	345
Accrual/(reversal) of expected credit losses for trade receivables	12	1,892	(1,489)	1,056
Accrual/(reversal) of expected credit losses other current assets	12	12,246	1,225	(120)
VAT written-off	12	6,910	3,031	7,923
Accrual/(reversal) of impairment of VAT receivable	12	15,703	4,215	(24,158)
Adjustment on the re-measurement to fair value less costs to sell		–	2,291	711
Net foreign exchange differences		4,142	(6,061)	(62,879)
Loss on disposal of property, plant and equipment, intangible assets and investment property, net		6,430	3,517	3,815
Unrealized (gains)/ losses from derivatives on petroleum products		(465)	(415)	231
Realized (gains)/ losses from derivatives on petroleum products		(8,410)	1,435	3,534
Adjustment for repayment of advances received for the supply of oil (Note 27)		(864,450)	(344,274)	(244,559)
Finance costs	14	317,433	427,655	306,355
Finance costs from discontinued operations		–	85	131
Finance income	14	(240,880)	(161,027)	(122,574)
Finance income from discontinued operations		–	(66)	(427)
Gains on sale of subsidiaries	5	(17,481)	(18,359)	–
Share in profit of joint ventures and associates, net	30	(827,979)	(697,326)	(414,950)
Change in financial guarantees		(6,956)	1,405	1,381
Movements in provisions	26	2,967	6,711	(9,896)
Operating profit before working capital changes		328,461	650,539	410,744
Change in VAT receivable		(28,070)	(12,250)	(9,466)
Change in inventory		11,710	(55,606)	(53,833)
Change in trade accounts receivable and other current assets		11,466	26,369	(17,795)
Change in trade and other payables and contract liabilities		(23,578)	(39,896)	61,908
Change in advances received for oil supply (Note 27)		–	172,322	175,133
Change in other taxes payable		(19,916)	28,022	81,303
Cash generated from operations		280,073	769,500	647,994
Dividends received from joint ventures and associates		126,461	160,061	271,783
Net (payment)/ receipt of derivative instruments		(7)	(225)	57
Income taxes paid		**(161,979)**	**(186,199)**	**(112,605)**
Interest received		118,207	134,365	104,804
Interest paid		(238,954)	(248,341)	(216,640)
Net cash flow from operating activities		123,801	629,161	695,393
Cash flows from investing activities				
Withdrawal/(placement) of bank deposits, net		28,987	1,295,272	(457,273)
Purchase of property, plant and equipment, intangible assets, investment property and exploration and evaluation assets		**(444,193)**	**(430,305)**	**(464,353)**
Proceeds from sale of property, plant and equipment, intangible assets, investment property and exploration and evaluation assets		**42,776**	**8,711**	**1,408**
Proceeds from disposal of subsidiaries (Note 5)		56,760	18,112	9,151
Cash acquired with subsidiaries		–	–	181
Acquisition of and contribution to joint ventures		(889)	(1,467)	(3)
Proceeds from disposal of joint ventures (Note 19)		–	2,000	–
Refund of contribution to joint ventures		–	93,072	1,715
Loans given to related parties		(56,516)	(64,716)	(184,708)
Repayment of loans due from related parties (Note 31)		47,656	40,984	455
Refund/(acquisition) of debt securities		454	244	(332)
Proceeds from Note receivable from a shareholder of a joint venture (Note 31)		5,403	29,174	–
Net cash flows (used in)/ from investing activities		(319,562)	991,081	(1,093,759)
Cash flows from financing activities				
Proceeds from borrowings (Note 25)		271,772	1,249,907	1,508,170
Repayment of borrowings (Note 25)		**(444,656)**	**(2,069,977)**	**(689,074)**
Dividends paid to Samruk-Kazyna and National Bank of RK (Note 24)		**(36,998)**	**(36,273)**	**(45,878)**
Dividends paid to non-controlling interests (Note 24)		(5,693)	(6,390)	(12,416)
Share buyback by subsidiary (Note 24)		(2,318)	(642,524)	–
Distribution to Samruk-Kazyna		(36,297)	(13,553)	(22,652)
Payment of principal lease liabilities		(16,181)	(1,558)	(1,069)
Net cash flows (used in)/from financing activities		(270,371)	(1,520,368)	737,081
Effects of exchange rate changes		(14,985)	179,467	22,437
Change in allowance for expected credit losses		(279)	(98)	–
Net change in cash and cash equivalents		(481,396)	279,243	361,152
Net change in cash and cash equivalents		**(481,396)**	**279,243**	**361,152**
Cash and cash equivalents, at the beginning of the year		1,545,848	1,266,605	905,453
Cash and cash equivalents, at the end of the year		1,064,452	1,545,848	1,266,605

[1] Certain numbers shown here do not correspond to the consolidated financial statements for the years ended December 31, 2018 and 2017, and reflect reclassifications made, refer to Note 3

NON-CASH AND OTHER TRANSACTIONS: SUPPLEMENTAL DISCLOSURE

The following significant non-cash transactions and other transactions were excluded from the consolidated statement of cash flows:

Account payable for non-current assets

For the year ended December 31, 2019 accounts payable for purchases of property, plant and equipment increased by 97,382 million tenge (2018: 41,609 million tenge, 2017: 11,795 million tenge).

Additions to Property, Plant and Equipment (PPE)

In 2018 and 2017 the Group received PPE on deferred payment terms in the amount of 33,216 million tenge and 135,393 million tenge, respectively, which were directly capitalized within additions to PPE (Note 25).

Contribution of pipelines

In 2018 the Company issued common shares for the total amount of 207,196 million tenge in exchange for gas pipelines received from Samruk-Kazyna and earlier recognized as additional paid in capital (Note 24).

Derecognition of borrowings from subsoil use contracts' project partners

In 2019 one and in 2018 two subsoil use contracts were terminated voluntarily by the Group and its projects partners. These projects were funded on carry-financing basis, according to which the share of expenses of the Group was financed by the project partners. These amounts were recognized as borrowings and were payable upon start of the commercial production and in case of positive cash flows. As the projects were ceased, the Group derecognized related borrowings for 110,930 million tenge and 53,263 million tenge in 2019 and 2018, respectively (Note 25).

Capitalization of borrowing costs

For the year ended December 31, 2019 the Group capitalized in the carrying amount of property, plant and equipment borrowing costs of 2,525 million tenge (2018: 21,715 million tenge, 2017: 26,532 million tenge) (Note 25).

Financial guarantee

During 2019 the Group provided a financial guarantee for joint venture to secure its borrowings. At initial recognition of the fair value of the financial guarantee issued was recognized as addition to the carrying amount of investments in joint venture for the amount of 11,162 million tenge and was recognized as an increase in the carrying amount of investment in joint venture (2018 and 2017: nil) (Note 19).

Deputy Chairman of the Management Board – Chief Financial Officer D.S. Karabayev

Managing director – financial controller A.Zh. Beknazarova

Chief accountant Y.Y. Orynbayev

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Attributable to equity holder of the Parent Company							
In millions of tenge	Share capital	Additional paid-in capital	Other equity	Currency translation reserve	Retained earnings	Total	Non-controlling interest	Total
As at December 31, 2016	**696,377**	**243,655**	**222**	**1,370,264**	**3,322,319**	**5,632,837**	**801,560**	**6,434,397**
Net profit for the year	–	–	–	–	443,408	443,408	82,040	525,448
Other comprehensive loss	–	–	–	(75,173)	(1,286)	(76,459)	(439)	(76,898)
Total comprehensive income for the year	–	–	–	(75,173)	442,122	366,949	81,601	448,550
Contribution to share capital	12,968	221	–	–	–	13,189	–	13,189
Dividends (Note 24)	–	–	–	–	(45,879)	(45,879)	(13,269)	(59,148)
Distributions to Samruk-Kazyna (Note 24)	–	–	–	–	(23,634)	(23,634)	–	(23,634)
Transactions with Samruk-Kazyna	—	—	—	—	(29,736)	(29,736)	—	(29,736)
(Note 24)	–	–	–	–	(29,736)	(29,736)	–	(29,736)
Execution of share-based payments	–	–	(131)	–	–	(131)	131	–
Forfeiture of share-based payments	**–**	**–**	**(8)**	**–**	**–**	**(8)**	**(5)**	**(13)**
As at December 31, 2017	709,345	243,876	83	1,295,091	3,665,192	5,913,587	870,018	6,783,605
Effect of adoption of IFRS 9 and IFRS 15	**–**	**–**	**–**	**–**	**(12,391)**	**(12,391)**	**(6)**	**(12,397)**
As at January 1, 2018	709,345	243,876	83	1,295,091	3,652,801	5,901,196	870,012	6,771,208
Net profit for the year	–	–	–	–	695,864	695,864	(2,353)	693,511
Other comprehensive income	–	–	–	469,017	(3,874)	465,143	9,673	474,816
Total comprehensive income for the year	–	–	–	469,017	691,990	1,161,007	7,320	1,168,327
Contribution to share capital (Note 24)	207,196	(203,082)	–	–	–	4,114	–	4,114
Dividends (Note 24)	–	–	–	–	(36,272)	(36,272)	(6,200)	(42,472)
Distributions to Samruk-Kazyna (Note 24)	–	–	–	–	(27,383)	(27,383)	–	(27,383)
Transactions with Samruk-Kazyna (Note 24)	–	–	–	–	(88,546)	(88,546)	–	(88,546)
Acquisition of subsidiaries	**–**	**–**	**–**	**–**	**–**	**–**	**345**	**345**
Share buyback by subsidiary (Note 24)	–	–	–	–	148,473	148,473	(790,997)	(642,524)
As at December 31, 2018	**916,541**	**40,794**	**83**	**1,764,108**	**4,341,063**	**7,062,589**	**80,480**	**7,143,069**
Effect of adoption of IFRS 16 (Note 3)	–	–	–	–	(4,268)	(4,268)	(910)	(5,178)
As at January 1, 2019 (restated)	916,541	40,794	83	1,764,108	4,336,795	7,058,321	79,570	7,137,891

Net profit for the year	–	–	–	–	1,197,157	1,197,157	(38,700)	1,158,457
Other comprehensive (loss)/income	–	–	–	(32,361)	(5,349)	(37,710)	88	(37,622)
Total comprehensive income for the year	–	–	–	(32,361)	1,191,808	1,159,447	(38,612)	1,120,835
Dividends (Note 24)	–	–	–	–	(36,998)	(36,998)	(4,138)	(41,136)
Distributions to Samruk-Kazyna (Note 24)	–	–	–	–	(6,194)	(6,194)	–	(6,194)
Transactions with Samruk-Kazyna (Note 24)	–	–	–	–	(14,184)	(14,184)	–	(14,184)
Share buyback by subsidiary (Note 24)	–	–	–	–	(1,991)	(1,991)	(473)	(2,464)
Contribution to share capital without change in ownership shares	–	–	–	–	–	–	1,908	1,908
As at December 31, 2019	916,541	40,794	83	1,731,747	5,469,236	8,158,401	38,255	8,196,656

Deputy Chairman of the Management Board – Chief Financial Officer — D.S. Karabayev

Managing director − financial controller — A.Zh. Beknazarova

Chief accountant — Y.Y. Orynbayev

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2019

1. GENERAL

JSC "National Company "KazMunayGas" (the "Company", "KazMunayGas" or "Parent Company") is oil and gas enterprise of the Republic of Kazakhstan, which was established on February 27, 2002 as a closed joint stock company pursuant to the Decree No. 811 of the President of the Republic of Kazakhstan dated February 20, 2002 and the Resolution of the Government of the Republic of Kazakhstan (the "Government") No. 248 dated February 25, 2002. The Company was formed as a result of the merger of National Oil and Gas Company Kazakhoil CJSC ("Kazakhoil") and National Company Transport Nefti i Gaza CJSC ("TNG"). As the result of the merger, all assets and liabilities, including ownership interest in all entities owned by these companies, have been transferred to KazMunayGas. The Company was reregistered as a joint stock company in accordance with the legislation of the Republic of Kazakhstan in March 2004.

Starting from June 8, 2006, the sole shareholder of the Company was JSC "Kazakhstan Holding Company for State Assets Management "Samruk" ("Samruk"), which in October 2008 was merged with the state owned Sustainable Development Fund "Kazyna" and formed JSC "National Welfare Fund Samruk-Kazyna" ("Samruk-Kazyna"), now renamed to JSC "Sovereign Wealth Fund Samruk-Kazyna". The Government is the sole shareholder of Samruk Kazyna. On August 7, 2015 National Bank of Republic of Kazakhstan ("National Bank of RK") purchased 10% plus one share of the Company from Samruk-Kazyna.

As at December 31, 2019, the Company has an interest in 54 operating companies (2018: 57 and 2017: 52) (jointly the "Group").

The Company has its registered office in the Republic of Kazakhstan, Nur-Sultan, Kunayev, 8.

The principal activity of the Group includes, but is not limited, to the following:

- participation in the Government activities relating to the oil and gas sector;
- representation of the state interests in subsoil use contracts through interest participation in those contracts; and
- corporate governance and monitoring of exploration, development, production, processing, transportation and sale of hydrocarbons and the designing, construction and maintenance of oil-and-gas pipeline and field infrastructure

The consolidated financial statements comprise the financial statements of the Company and its controlled subsidiaries (Note 33).

These consolidated financial statements of the Group were approved for issue by the Deputy Chairman of the Management Board – Chief Financial Officer, Managing director − financial controller and the Chief accountant on March 5, 2020.

2. BASIS OF PREPARATION

These consolidated financial statements have been prepared on a historical cost basis, except as described in the accounting policies and the notes to these consolidated financial statements. All values in these consolidated financial statements are rounded to the nearest millions, except when otherwise indicated.

The Group changed the presentation unit of the consolidated financial statements from thousands tenge to millions tenge since the Group believes that it is more relevant to users of consolidated financial statements.

STATEMENT OF COMPLIANCE

These consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by International Accounting Standards Board ("IASB").

The preparation of the consolidated financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Group's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the Group consolidated financial statements are disclosed in Note 4.

FOREIGN CURRENCY TRANSLATION

Functional and presentation currency

Items included in the financial statements of each of the Group's entities included in these consolidated financial statements are measured using the currency of the primary economic environment in which the entities operate ("the functional currency"). The consolidated financial statements are presented in Kazakhstan tenge ("tenge" or "KZT"), which is the Company's functional currency.

Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the consolidated statement of comprehensive income.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined.

Differences arising on settlement or translation of monetary items are recognised in profit or loss with the exception of monetary items that are designated as part of the hedge of the Group's net investment of a foreign operation. These are recognised in other comprehensive income until the net investment is disposed of, at which time, the cumulative amount is reclassified to profit or loss. Tax charges and credits attributable to exchange differences on those monetary items are also recorded in other comprehensive income.

Group Companies

The results and financial position of all of the Group's subsidiaries, joint ventures and associates (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities for each statement of financial position presented are translated at the closing rate at that reporting date;
- income and expenses for each statement of comprehensive income are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rate on the dates of the transactions); and
- all resulting exchange differences are recognized as a separate component of other comprehensive income.

Exchange rates

Weighted average currency exchange rates established by the Kazakhstan Stock Exchange ("KASE") are used as official currency exchange rates in the Republic of Kazakhstan.

The currency exchange rate of KASE as at December 31, 2019 was 382.59 tenge to 1 US dollar. This rate was used to translate monetary assets and liabilities denominated in United States dollars ("US dollar") as at December 31, 2019 (2018: 384.20 and 2017: 332.33 tenge to 1 US dollar). The currency exchange rate of KASE as at March 5, 2020 was 380.53 tenge to 1 US dollar.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES NEW AND AMENDED STANDARDS AND INTERPRETATIONS

The accounting policies adopted in the preparation of the consolidated financial statements are consistent with those followed in the preparation of the Group's annual consolidated financial statements for the year ended December 31, 2018, except for the adoption of new standards and interpretations effective as of January 1, 2019. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

The Group applied in 2019, for the first time, IFRS 16 Leases. The nature and effect of these changes are disclosed below.

Several other amendments and interpretations apply for the first time in 2019, but do not have an impact on the consolidated financial statements of the Group.

IFRS 16 Leases

IFRS 16 supersedes IAS 17 Leases, IFRIC 4 Determining whether an Arrangement Contains a Lease, SIC-15 Operating Leases – Incentives and SIC-27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease. The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for most leases under a single on-balance sheet model.

Lessor accounting under IFRS 16 is substantially unchanged from IAS 17. Lessors will continue to classify leases as either operating or finance leases using similar principles as in IAS 17. Therefore, IFRS 16 did not have an impact for leases where the Group is the lessor.

The Group adopted IFRS 16 using the modified retrospective method of adoption with the date of initial application of January 1, 2019. Under this method, the standard is applied retrospectively with the cumulative effect of initially applying the standard recognised at the date of initial application. The Group elected to use the transition practical expedient allowing the standard to be applied only to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 at the date of initial application. The Group also elected to use the recognition exemptions for lease contracts that, at the commencement date and upon initial adoption of the standard, have a lease term of 12 months or less and do not contain a purchase option ('short-term leases'), and lease contracts for which the underlying asset is of low value ('low-value assets'), relied on its assessment of whether leases are onerous immediately before the date of initial application and used hindsight in determining the lease term where the contract contained options to extend or terminate the lease.

The effect of adoption IFRS 16 on consolidated financial statement as at January 1, 2019 is as follows:

In millions of tenge	As at January 1, 2019
Assets	
Property, plant and equipment (Note 15)	(524)
Right-of-use assets	44,398
Advances for non-current assets	(2,364)
Total assets	41,510
Equity	
Retained earnings	(4,268)
Non-controlling interest	(910)
	(5,178)
Liabilities	
Lease liabilities	46,688
Total equity and liabilities	41,510

The Group assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

(a) Nature of the effect of adoption of IFRS 16

The Group has lease contracts for various items of plant, machinery, vehicles and other equipment. Before the adoption of IFRS 16, the Group classified each of its leases (as lessee) at the inception date as either a finance lease or an operating lease. A lease was classified as a finance lease if it transferred substantially all of the risks and rewards incidental to ownership of the leased asset to the Group; otherwise it was classified as an operating lease. Finance leases were capitalised at the commencement of the lease at the inception date at fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments were apportioned between interest (recognised as finance costs) and reduction of the lease liability. In an operating lease, the leased property was not capitalised and the lease payments were recognised as rent expense in profit or loss on a straight-line basis over the lease term. Any prepaid rent and accrued rent were recognised under advances received, trade accounts payable and other payables, respectively.

Upon adoption of IFRS 16, the Group applied a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The standard provides specific transition requirements and practical expedients, which has been applied by the Group.

Leases previously classified as finance leases

The Group did not change the initial carrying amounts of recognised assets and liabilities at the date of initial application for leases previously classified as finance leases (i.e., the right-of-use assets and lease liabilities equal the lease assets and liabilities recognised under IAS 17). The requirements of IFRS 16 was applied to these leases from January 1, 2019.

Leases previously accounted for as operating leases

The Group recognised right-of-use assets and lease liabilities for those leases previously classified as operating leases, except for short-term leases and leases of low-value assets. The right-of-use assets for most leases were recognised based on the carrying amount as if the standard had always been applied, apart from the use of incremental borrowing rate at the date of initial application. In some leases, the right-of-use assets were recognised based on the amount equal to the lease liabilities, adjusted for any related advances received and accrued lease payments previously recognised. Lease liabilities were recognised based on the present value of the remaining lease payments, discounted using the incremental borrowing rate at the date of initial application.

The lease liabilities as at January 1, 2019 can be reconciled to the operating lease commitments as of December 31, 2018 as follows:

In millions of tenge	
Operating lease commitments as at December 31, 2018	71,902
Weighted average incremental borrowing rate as at 1 January 2019	8.12%
Effect of discounting using incremental borrowing rate as at January 1, 2019	(20,840)
Discounted operating lease commitments as at January 1, 2019	51,062
Less commitments relating to short-term leases and low-value assets	(4,374)
Add commitments relating to leases previously classified as finance leases	9,206
Lease liabilities as at January 1, 2019	55,894

(b) Summary of new accounting policies

Set out below are the new accounting policies of the Group upon adoption of IFRS 16, which have been applied from the date of initial application:

Right-of-use assets

The Group recognises right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Mostly right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term. Right-of-use assets are subject to impairment.

Lease liabilities

At the commencement date of the lease, the Group recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating a lease, if the lease term reflects the Group exercising the option to terminate. The variable lease payments that do not depend on an index or a rate are recognised as expense in the period on which the event or condition that triggers the payment occurs. In calculating the present value of lease payments, the Group uses the incremental borrowing rate. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made.

Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of property, plant and equipment (i.e., those leases that have a lease term of 12 months or less from the commencement date and from the date of the first adoption and do not contain a purchase option). Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis over the lease term.

Significant judgement in determining the lease term of contracts with renewal options

The Group determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease, if it is reasonably certain not to be exercised.

IFRIC Interpretation 23 Uncertainty over Income Tax Treatment

The Interpretation addresses the accounting for income taxes when tax treatments involve uncertainty that affects the application of IAS 12 Income Taxes. It does not apply to taxes or levies outside the scope of IAS 12, nor does it specifically include requirements relating to interest and penalties associated with uncertain tax treatments. The Interpretation specifically addresses the following:

- Whether an entity considers uncertain tax treatments separately
- The assumptions an entity makes about the examination of tax treatments by taxation authorities
- How an entity determines taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates
- How an entity considers changes in facts and circumstances

The Group determines whether to consider each uncertain tax treatment separately or together with one or more other uncertain tax treatments and uses the approach that better predicts the resolution of the uncertainty.

The Group applies significant judgment in identifying uncertainties over income tax treatments. Since the Group operates in a complex multinational environment, it assessed whether the Interpretation had an impact on its consolidated financial statements. Upon adoption of the Interpretation, the Group considered whether it has any uncertain tax positions, particularly those relating to transfer pricing. The Company's and the subsidiaries' tax filings in different jurisdictions include deductions related to transfer pricing and the taxation authorities may challenge those tax treatments. The Group determined, based on its tax compliance and transfer pricing study, which it is probable that its tax treatments (including those for the subsidiaries) will be accepted by the taxation authorities. The Interpretation did not have an impact on the consolidated financial statements of the Group.

Amendments to IFRS 9: Prepayment Features with Negative Compensation

Under IFRS 9, a debt instrument can be measured at amortized cost or at fair value through other comprehensive income, provided that the contractual cash flows are 'solely payments of principal and interest on the principal amount outstanding' (the SPPI criterion) and the instrument is held within the appropriate business model for that classification. The amendments to IFRS 9 clarify that a financial asset passes the SPPI criterion regardless of an event or circumstance that causes the early termination of the contract and irrespective of which party pays or receives reasonable compensation for the early termination of the contract.

These amendments had no impact on the consolidated financial statements of the Group.

Amendments to IAS 19: Plan Amendment, Curtailment or Settlement

The amendments to IAS 19 address the accounting when a plan amendment, curtailment or settlement occurs during a reporting period. The amendments specify that when a plan amendment, curtailment or settlement occurs during the annual reporting period, an entity is required to determine the current service cost for the remainder of the period after the plan amendment, curtailment or settlement, using the actuarial assumptions used to remeasure the net defined benefit liability (asset) reflecting the benefits offered under the plan and the plan assets after that event. An entity is also required to determine the net interest for the remainder of the period after the plan amendment, curtailment or settlement using the net defined benefit liability (asset) reflecting the benefits offered under the plan and the plan assets after that event, and the discount rate used to remeasure that net defined benefit liability (asset).

The amendments had no impact on the consolidated financial statements of the Group as it did not have any plan amendments, curtailments, or settlements during the period.

Amendments to IAS 28: Long-term interests in associates and joint ventures

The amendments clarify that an entity applies IFRS 9 to long-term interests in an associate or joint venture to which the equity method is not applied but that, in substance, form part of the net investment in the associate or joint venture (long-term interests). This clarification is relevant because it implies that the expected credit loss model in IFRS 9 applies to such long-term interests.

The amendments also clarified that, in applying IFRS 9, an entity does not take account of any losses of the associate or joint venture, or any impairment losses on the net investment, recognised as adjustments to the net investment in the associate or joint venture that arise from applying IAS 28 Investments in Associates and Joint Ventures.

Since the Group's current practice is in line with these amendments, they had no impact on the consolidated financial statements of the Group.

Annual Improvements 2015-2017 Cycle

IFRS 3 Business Combinations

The amendments clarify that, when an entity obtains control of a business that is a joint operation, it applies the requirements for a business combination achieved in stages, including remeasuring previously held interests in the assets and liabilities of the joint operation at fair value. In doing so, the acquirer remeasures its entire previously held interest in the joint operation. An entity applies those amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after 1 January 2019, with early application permitted.

These amendments had no impact on the consolidated financial statements of the Group as there is no transaction where joint control over the former joint operation is obtained.

IFRS 11 Joint Arrangements

An entity that participates in, but does not have joint control of, a joint operation might obtain joint control of the joint operation in which the activity of the joint operation constitutes a business as defined in IFRS 3. The amendments clarify that the previously held interests in that joint operation are not remeasured. An entity applies those amendments to transactions in which it obtains joint control on or after the beginning of the first annual reporting period beginning on or after 1 January 2019, with early application permitted.

These amendments had no impact on the consolidated financial statements of the Group as there is no transaction where a joint control over the former joint operation is obtained.

IAS 12 Income Taxes

The amendments clarify that the income tax consequences of dividends are linked more directly to past transactions or events that generated distributable profits than to distributions to owners. Therefore, an entity recognises the income tax consequences of dividends in profit or loss, other comprehensive income or equity according to where it originally recognised those past transactions or events. An entity applies the amendments for annual reporting periods beginning on or after 1 January 2019, with early application permitted. When the entity first applies those amendments, it applies them to the income tax consequences of dividends recognised on or after the beginning of the earliest comparative period. Since the Group's current practice is in line with these amendments, they had no impact on the consolidated financial statements of the Group.

IAS 23 Borrowing Costs

The amendments clarify that an entity treats as part of general borrowings any borrowings originally made to develop a qualifying asset when substantially all of the activities necessary to prepare that asset for its intended use or sale are complete. An entity applies those amendments to borrowing costs incurred on or after the beginning of the annual reporting period in which the entity first applies those amendments. An entity applies those amendments for annual reporting periods beginning on or after 1 January 2019, with early application permitted. The Group is assessing the potential effect of these amendments on its consolidated financial statements. Since the Group's current practice is in line with these amendments, they had no impact on the consolidated financial statements of the Group.

STANDARDS ISSUED BUT NOT YET EFFECTIVE

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are disclosed below. The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

IFRS 17 Insurance Contracts

In May 2017, the IASB issued IFRS 17 Insurance Contracts. IFRS 17 establishes a single framework for the accounting for insurance contracts and contains requirements for related disclosures. The new standard replaces IFRS 4 Insurance Contracts. The standard is effective for annual periods beginning on or after January 1, 2021. The Group does not expect the standard to have a material impact on the consolidated financial statements.

Financial reporting framework

In March 2018, the IASB issued a revised version of Conceptual Framework for Financial Reporting. In particular, the revised version introduces new definitions of assets and liabilities, as well as amended definitions of income and expenses. The new version is effective for annual periods beginning on or after January 2020. The Group does not expect the revised version of Conceptual Framework to have a material impact on the consolidated financial statements.

Amendments to IFRS 3: Definition of a Business

In October 2018, the IASB issued amendments to IFRS 3 Business Combinations. The amendments enhance definition of a business set out by the standard. The amendments are effective for acquisitions to occur on or after January 1, 2020; earlier application is permitted. Since the amendments apply prospectively to transactions or other events after the date of first application the Group will not be affected by these.

Amendments to IAS 1 and IAS 8: Definition of Materiality

In October 2018, the IASB issued amendments to IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors. The amendments to IAS 1 and IAS 8 introduce new definition of materiality. The amendments are effective on or after January 1, 2020; earlier application is permitted. The Group does not expect the amendments to have a material impact on the consolidated financial statements.

IFRS 7 Financial Instruments: Disclosures and IFRS 9 Financial Instruments – interest rates

In September 2019, the IASB issued amendments to IFRS 7 Financial instruments: Disclosures and IFRS 9 Financial instruments named Interest Rate Benchmark Reform. The amendments provide relief from certain requirements of hedge accounting, as their fulfillment can lead to discontinuation of hedge accounting due to uncertainty caused by the reform. The amendments are effective on or after January 1, 2020; earlier application is permitted. The Group does not expect the amendments to have a material impact on the consolidated financial statements.

IAS 1 Presentation of Financial Statements

In January 2020, the IASB issued amendments to IAS 1 Presentation of Financial Statements named Classification of Liabilities as Current or Non-current. The amendments clarify requirements for classifying liabilities as current or non-current. The amendments are effective on or after January 1, 2022; earlier application is permitted. The Group does not expect the amendments to have a material impact on the consolidated financial statements, as the Group already applies criteria set by the amendments.

The Group does not plan for early adoption in respect of above-mentioned new standards and amendments to existing standards to which this option is available.

CHANGES IN ACCOUNTING POLICIES RELATED TO PRESENTATION

In accordance with IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors, the Group decided to apply voluntary changes in accounting policies related to presentation of consolidated financial statements and elected to present its statement of comprehensive income based on nature and cash flow statement using the indirect method to improve presentation of financial information for the current year and increase the comparability of the Group consolidated financial statements with the industry peers. Reclassifications do not affect net profit or comprehensive income for the year or equity.

Changes in presentation of the consolidated statement of comprehensive income from function based to nature based approach led to reclassification of certain line items below:

	For the year ended December 31,			За годы, закончившиеся 31 декабря	
	According to the issued consolidated financial statements		Reclassified		
In millions of tenge	Notes	2018	2017	2018	2017
Cost of purchased oil, gas, petroleum products and other materials	[A]	—	—	4,312,958	2,729,514
Production expenses	[B]	—	—	604,475	624,346
Taxes other than income tax	[C]	—	—	477,732	354,447
Depreciation, depletion and amortization	[D]	—	—	285,186	238,021
Cost of sales	[A], [B], [C], [D]	5,353,492	3,704,457	—	—
General and administrative expenses	[C], [D]	247,128	200,434	213,485	163,780
Transportation and selling expenses	[C], [D]	659,447	440,568	370,777	238,063
Other expenses	[D]	24,144	33,596	23,283	34,767
Loss on disposal of property, plant and equipment, intangible assets and investment property, net	[D]	3,517	3,815	—	—
Impairment of assets held for sale	[D]	168	68	—	—
		6,287,896	4,382,938	6,287,896	4,382,938

[A] The Group elected to present Cost of purchased oil, gas, petroleum products and other materials as a separate line item.
[B] Other line items previously presented within cost of sales, except for Cost of purchased oil, gas, petroleum products and other materials, taxes and depreciation, were aggregated and shown as a separate line item of the consolidated statement of comprehensive income.
[C] The Group elected to aggregate mineral extraction and other taxes from cost of sales (2018: 187,606 million tenge, 2017: 152,739 million tenge), general and administrative expenses (2018: 13,475 million tenge, 2017: 13,223 million tenge), transportation and selling expenses (2018: 276,651 million tenge, 2017: 188,485 million tenge) and present as a separate line item of the consolidated profit and loss. The components of the line item were not altered and corresponds to the prior year issued consolidated financial statements.
[D] The Group elected to aggregate Depreciation, depletion and amortization charges from cost of sales (2018: 248,453 million tenge, 2017: 197,858 million tenge), general and administrative expenses (2018: 20,168 million tenge, 2017: 23,432 million tenge), transportation and selling expenses (2018: 12,019 million tenge, 2017: 14,020 million tenge), other expenses (2018: 4,546 million tenge, 2017: 2,711 million tenge) and present as a separate line item of the consolidated profit and loss. Additionally, Loss on disposal of property, plant and equipment, intangible assets and investment property and Impairment of assets held for sale were reclassed to Other expenses.

The Group performed reclasses below:

	Aof 31 December			
	According to the issued consolidated financial statements		Reclassified	
In millions of tenge	2018	2017	2018	2017
Other current liabilities	236,988	202,445	236,163	201,940
Financial guarantees	1,831	1,171	[illegible]	—
Lease liabilities	[illegible]	[illegible]	2,656	1,676
	238,819	203,616	238,819	203,616

Changes in presentation of the consolidated cash flow statement from direct to indirect method was applied retrospectively, also as at December 31, 2019, viewing that one of the Group's principal activities is the representation of the State interests in subsoil use contracts through interest participation in those contracts through joint ventures, the Group decided to show dividends received from joint ventures and associates within operating cash flows as dividends received in accordance with IAS 7.

BASIS OF CONSOLIDATION

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries as of December 31, 2019. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if and only if the Group has: power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee); exposure, or rights, to variable returns from its involvement with the investee, and; the ability to use its power over the investee to affect its returns.

Generally, there is a presumption that a majority of voting rights result in control. To support this presumption and when the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including: the contractual arrangement with the other vote holders of the investee; rights arising from other contractual arrangements; the Group's voting rights and potential voting rights.

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control over the subsidiary. Assets, liabilities, revenue and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of comprehensive income from the date the Group gains control until the date the Group ceases to control the subsidiary.

The financial statements of the subsidiaries are prepared for the same reporting period as the parent company, using consistent accounting policies. Profit or loss and each component of other comprehensive income are attributable to the equity holders of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interest having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies. All intra-group balances, transactions, unrealized gains and losses resulting from intra-group transactions and dividends are eliminated in full. A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognises the related assets (including goodwill), liabilities, non-controlling interest and other components of equity while any resultant gain or loss is recognised in profit or loss. Any investment retained is recognised at fair value.

BUSINESS COMBINATIONS AND GOODWILL

Объединения бизнеса учитываются с использованием метода приобретения. Стоимость приобретения оценивается Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, measured at acquisition date fair value and the amount of any non-controlling interest in the acquiree. For each business combination, the acquirer measures the non-controlling interest in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition costs incurred are expensed and included in general and administrative expenses.

When the Group acquires a business, it assesses the financial assets acquired and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree.

Any contingent consideration to be transferred by the acquirer will be recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability that is a financial instrument and within the scope of IFRS 9 Financial Instruments: Recognition and Measurement, is measured at fair value with changes in fair value recognised in the statement of profit or loss in accordance with IFRS 9. If the contingent consideration is not within the scope of IFRS 9, it is measured at fair value through profit and loss. Contingent consideration that is classified as equity is not remeasured and subsequent settlement is accounted for within equity.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests, and any previous interest held, over the net identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognised in profit or loss.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed off in this circumstance is measured based on the relative values of the operation disposed of and the portion of the cash-generating unit retained.

Business combinations achieved in stages

The acquisition date fair value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date through profit or loss.

In a business combination achieved in stages the acquirer recognises goodwill as of the acquisition date measured as the excess of (a) over (b) below:

(a) the aggregate of:
- the consideration transferred measured in accordance with this IFRS 3 Business Combinations, which generally requires acquisition-date fair value;
- the amount of any non-controlling interest in the acquiree measured in accordance with this IFRS; and
- the acquisition-date fair value of the acquirer's previously held equity interest in the acquiree.

b) the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed.

Acquisition of subsidiaries from parties under common control

Acquisitions of subsidiaries from parties under common control are accounted for using the pooling of interest method.

The assets and liabilities of the subsidiary transferred under common control are recorded in the consolidated financial statements at the carrying amounts of the transferring entity (the Predecessor) at the date of the transfer. Related goodwill, if any, inherent in the Predecessor's original acquisition is also recorded in the consolidated financial statements. Any difference between the total book value of net assets, including the Predecessor's goodwill, and the consideration paid is accounted for in the consolidated financial statements as an adjustment to equity.

The consolidated financial statements, including corresponding figures, are presented as if the subsidiary had been acquired by the Group on the date it was originally acquired by the Predecessor.

JOINT OPERATIONS

A joint operation is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets and obligations for the liabilities, relating to the arrangement.
In relation to its interests in joint operations, the Group recognizes its::
- Assets, including its share of any assets held jointly
- Liabilities, including its share of any liabilities incurred jointly
- Revenue from the sale of its share of the output arising from the joint operation
- Share of the revenue from the sale of the output by the joint operation
- Expenses, including its share of any expenses incurred jointly

INVESTMENT IN ASSOCIATES AND JOINT VENTURES

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but which does not comprise control or joint control over those policies.

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The considerations made in determining significant influence or joint control are similar to those necessary to determine control over subsidiaries.

The Group's investments in its joint ventures and associates are accounted for using the equity method. Under the equity method, the investment in a joint venture or an associate is initially recognized at cost. The carrying amount of the investment is adjusted to recognize changes in the Group's share of net assets of the joint venture or associate since the acquisition date. Goodwill relating to the joint venture or associate is included in the carrying amount of the investment and is neither amortized nor individually tested for impairment.

The consolidated statement of comprehensive income reflects the Group's share of the results of operations of the joint venture or associate. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognized directly in the equity of the joint venture or associate, the Group recognizes its share of any changes, when applicable, in the consolidated statement of changes in equity. Unrealized gains and losses resulting from transactions between the Group and the joint venture or associate are eliminated to the extent of the interest in the joint venture or associate.

The aggregate of the Group's share in profit or loss of a joint venture and an associate is shown on the face of the consolidated statement of comprehensive income and represents profit or loss after tax and non-controlling interest in the subsidiaries of the joint venture or associate. The financial statements of the joint venture or associate are prepared for the same reporting period as the Group. When necessary, adjustments are made to bring their accounting policies in line with those of the Group.

After application of the equity method, the Group determines whether it is necessary to recognize an impairment loss on its investment in its joint venture or associate. At each reporting date, the Group determines whether there is objective evidence that the investment in the joint venture or associate is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value, and then recognizes the loss as 'Impairment of investment in joint venture or associate' in the consolidated statement of comprehensive income.

Upon loss of joint control over the joint venture or significant influence over the associate, the Group measures and recognizes any retained investment at its fair value. Any difference between the carrying amount of the joint venture or associate upon loss of joint control or significant influence and the fair value of the retained investment and proceeds from disposal is recognized in profit or loss.

CURRENT VERSUS NON-CURRENT CLASSIFICATION

The Group presents assets and liabilities in the consolidated statement of financial position based on current/non-current classification. An asset as current when it is:
- expected to be realized or intended to sold or consumed in normal operating cycle;
- held primarily for the purpose of trading;
- expected to be realized within 12 (twelve) months after the reporting period; or
- cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 (twelve) months after the reporting period..

All other assets are classified as non-current.
A liability is current when: :
- it is expected to be settled in normal operating cycle;
- it is held primarily for the purpose of trading;
- it is due to be settled within 12 (twelve) months after the reporting period; or
- there is no unconditional right to defer the settlement of the liability for at least 12 (twelve) months after the reporting period.

The Group classifies all other liabilities as non-current. Deferred tax assets and liabilities are always classified as non current assets and liabilities.

OIL AND NATURAL GAS EXPLORATION, EVALUATION AND DEVELOPMENT EXPENDITURE

Costs incurred before obtaining subsoil use rights (licenses)

Costs incurred before obtaining full subsoil use rights (licenses) are expensed in the period in which they are incurred, except when costs are incurred after signing preliminary agreements with the Government of the Republic of Kazakhstan, in such cases costs incurred after this date are capitalized within exploration and evaluation.

Subsoil use rights and property acquisition costs

Exploration and production subsoil use rights and related property acquisition costs are capitalized within exploration and evaluation assets and subclassified as intangible assets. Each property under exploration and appraisal is reviewed on an annual basis to confirm that drilling activity is planned and it is not impaired. If no future activity is planned, the carrying amount of the exploration subsoil use right and related property acquisition costs is written off. Upon determination of economically recoverable reserves ('proved reserves' or 'commercial reserves') and internal approval of development, the carrying amount of the subsoil use right and related property acquisition costs held on a field by field basis is aggregated with exploration and evaluation assets and transferred to oil and gas assets or intangible assets.

Exploration and evaluation costs

Once the legal right to explore has been acquired, geological and geophysical exploration costs and costs directly associated with exploration and appraisal wells, including unsuccessful development or delineation wells are capitalized as exploration and evaluation intangible or tangible assets, according to the nature of the costs, until the drilling of the well is complete and the results have been evaluated. These costs include employee remuneration, materials and fuel used, rig costs and payments made to contractors. If no reserves are found, the exploration and evaluation asset is tested for impairment, if extractable hydrocarbons are found and, subject to further appraisal activity, which may include the drilling of further wells, are likely to be developed commercially; the costs continue to be carried as an asset while sufficient/continued progress is made in assessing the commerciality of the hydrocarbon reserves. All such carried costs are subject to technical, commercial and management review as well as review for impairment at least once a year to confirm the continued intent to develop or otherwise extract value from the discovery. When this is no longer the case, the assets are written off. When proved reserves of hydrocarbons are determined and development is sanctioned, the relevant expenditure is transferred to oil and gas assets after impairment is assessed and any resulting impairment loss is recognized.

Development costs

Expenditures on the construction, installation or completion of infrastructure facilities such as platforms, pipelines and the drilling of development wells, are capitalized within oil and gas assets.

OIL AND GAS ASSETS AND OTHER PROPERTY, PLANT AND EQUIPMENT

Oil and gas assets and other property, plant and equipment are stated at cost less accumulated depreciation, depletion and impairment ("DD&A").

The initial cost of an asset comprises its purchase price or construction cost, borrowing cost for long-term construction or development project, if recognition criteria is met, any costs directly attributable to bringing the asset into operation and the initial estimate of decommissioning obligation, if there is any. The purchase price or construction cost is the aggregate amount paid and the fair value of any other consideration given to acquire the asset.

Oil and gas assets are depreciated using a unit-of-production method, whereas tangible assets are depreciated over proved developed reserves and intangible assets – over proved reserves. Certain oil and gas assets with useful lives less than the remaining life of the fields or term of the subsoil use contracts are depreciated on a straight-line basis over useful lives.

Property, plant and equipment other than oil and gas assets and land principally comprise buildings, machinery and equipment, vehicles and others that are depreciated on a straight-line basis over the expected remaining useful average lives as follows:

Refinery assets	4-100 years
Pipelines	2-30 years
Buildings and improvements	2-100 years
Machinery and equipment	2-30 years
Vehicles	3-35 years
Other	2-20 years
Land	not depreciated

The expected useful lives of property, plant and equipment are reviewed on an annual basis and, if necessary, changes in useful lives are accounted for prospectively.

The carrying value of property, plant and equipment is reviewed for impairment whenever events or changes in circumstances indicate the carrying value may not be recoverable.

An item of property, plant and equipment, inclusive of production wells which stop producing commercial quantities of hydrocarbons and are scheduled for abandonment, is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the item) is included in the profit or loss in the period the item is derecognized.

INTANGIBLE ASSETS

Intangible assets are stated at cost, less accumulated amortization and accumulated impairment losses. Intangible assets include expenditure on acquiring subsoil use rights for oil and natural gas exploration, evaluation and development, computer software and goodwill. Intangible assets acquired separately from a business are carried initially at cost. The initial cost is the aggregate amount paid and the fair value of any other consideration given to acquire the asset.

Intangible assets, except for goodwill and subsoil use rights, are amortized on a straight-line basis over the expected remaining useful life. The expected useful lives of the assets are reviewed on an annual basis and, if necessary, changes in useful lives are accounted for prospectively. Computer software costs have an estimated useful life of 3 to 7 years. The carrying value of intangible assets is reviewed for impairment whenever events or changes in circumstances indicate the carrying value may not be recoverable. Goodwill is tested for impairment annually (as at December 31) and when circumstances indicate that the carrying value may be impaired.

Impairment is determined for goodwill by assessing the recoverable amount of each cash-generating unit (or group of cash-generating units) to which the goodwill relates. Where the recoverable amount of the cash generating unit is less than their carrying amount an impairment loss is recognized. Impairment losses relating to goodwill cannot be reversed in future periods.

IMPAIRMENT OF NON-FINANCIAL ASSETS

The Group assesses at each reporting date whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs to sell and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded subsidiaries or other available fair value indicators. Impairment losses of continuing operations are recognized in the consolidated statement of comprehensive income in those expense categories consistent with the function of the impaired asset.

The Group bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Group's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of 5 (five) years. For longer periods, a long-term growth rate is calculated and applied to projected future cash flows after the fifth year.

For assets excluding goodwill, an assessment is made at each reporting date as to whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. If such indication exists, the Group estimates the asset's or cash-generating unit's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of accumulated depreciation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in the consolidated statement of comprehensive income..

IMPAIRMENT OF EXPLORATION AND EVALUATION ASSETS

Exploration and evaluation assets are tested for impairment when reclassified to oil and gas development tangible or intangible assets or whenever facts and circumstances indicate impairment. One or more of the following facts and circumstances indicate that the Group should test exploration and evaluation assets for impairment (the list is not exhaustive):

- the period for which the Group entity has the right to explore and appraise in the specific area has expired during the period or will expire in the near future, and is not expected to be renewed;
- substantive expenditure on the further exploration for and evaluation of hydrocarbon resources in the specific area is neither budgeted nor planned;
- exploration for and evaluation of hydrocarbon resources in the specific area have not led to the discovery of commercial viable quantities of hydrocarbon resources and the Group entity has decided to discontinue such activities in the specific area;
- sufficient data exist to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale.

NON-CURRENT ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS

Non-current assets and disposal groups classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell. Non-current assets and disposal groups are classified as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset or disposal group is available for immediate sale in its present condition.

Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

In the consolidated statement of comprehensive income of the reporting period, and of the comparable period of the previous year, income and expenses from discontinued operations are reported separately from income and expenses from continuing operations, down to the level of profit after taxes, even when the Group retains a non-controlling interest in the subsidiary after the sale. The resulting profit or loss (after taxes) is reported separately in the consolidated statement of comprehensive income.

Property, plant and equipment and intangible assets once classified as held for sale are not depreciated or amortized..

ASSET RETIREMENT OBLIGATION (DECOMMISSIONING)

Provision for decommissioning is recognized in full, on a discounted cash flow basis, when the Group has an obligation to dismantle and remove a facility or an item of plant, property and equipment and to restore the site on which it is located, and when a reasonable estimate of that provision can be made. The amount recognized is the present value of the estimated future expenditure determined in accordance with local conditions and requirements. A corresponding item of property, plant and equipment of an amount equivalent to the provision is also created. This asset is subsequently depreciated as part of the capital costs of the production and transportation facilities based on the appropriate depreciation method.
Changes in the measurement of an existing decommissioning provision that result from changes in the estimated timing or amount of the outflow of resources embodying economic benefits required to settle the obligation, or change in the discount rate, is accounted for so that:

- changes in the provision are added to, or deducted from, the cost of the related asset in the current period;
- the amount deducted from the cost of the asset shall not exceed its carrying amount. If a decrease in the provision exceeds the carrying amount of the asset, the excess is recognized immediately in the consolidated statement of comprehensive income; and
- if the adjustment results in an addition to the cost of an asset, the Group considers whether this is an indication that the new carrying amount of the asset may not be fully recoverable. If it is such an indication, the Group tests the asset for impairment by estimating its recoverable amount, and accounts for any impairment loss, in accordance with IAS 36.

FINANCIAL ASSETS

INITIAL RECOGNITION AND MEASUREMENT

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (FVOCI), and fair value through profit or loss (FVPL).

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under IFRS 15.

In order for a debt financial asset to be classified and measured at amortised cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

SUBSEQUENT MEASUREMENT

For purposes of subsequent measurement, financial assets are classified in two categories:

- Financial assets at amortised cost (debt instruments)
- Financial assets at fair value through profit or loss

The Group does not have financial assets at fair value through other comprehensive income.

FINANCIAL ASSETS AT AMORTISED COST (DEBT INSTRUMENTS)

This category is the most relevant to the Group. The Group measures financial assets at amortised cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows, and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding

Financial assets at amortised cost are subsequently measured using the effective interest (EIR) method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

The Group's financial assets at amortised cost include trade and other receivables, loans due from related parties and bank deposits.

FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

Financial assets at fair value through profit or loss include certain loans due from related parties, which contain embedded derivative financial instruments, and coupon bonds included in other financial assets mandatorily required to be measured at fair value. Financial assets with cash flows that are not solely payments of principal and interest are classified and measured at fair value through profit or loss, irrespective of the business model. Notwithstanding the criteria for debt instruments to be classified at amortised cost or at fair value through OCI, as described above, debt instruments may be designated at fair value through profit or loss on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

Financial assets at fair value through profit or loss are carried in the consolidated statement of financial position at fair value with net changes in fair value recognised in the consolidated statement of comprehensive income within the profit and loss. .

DERECOGNITION

A financial asset is primarily derecognised (removed from the consolidated statement of financial position) when:

- The rights to receive cash flows from the asset have expired or
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either
  - the Group has transferred substantially all the risks and rewards of the asset, or
  - the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to recieve cash flows from an assets or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of its continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

IMPAIRMENT OF FINANCIAL ASSETS

The Group recognises an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss.

ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate.

The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade and other receivables the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

INVENTORIES

Inventories are stated at the lower of cost and net realizable value on a first-in first-out ("FIFO") basis. Cost includes all costs incurred in the normal course of business in bringing each product to its present location and condition. The cost of crude oil and refined products is the cost of production, including the appropriate proportion of depreciation, depletion and amortization and overheads based on normal capacity. Net realizable value of crude oil and refined products is based on estimated selling price in the ordinary course of business less any costs expected to be incurred to complete the sale.

VALUE ADDED TAX (VAT)

The tax authorities permit the settlement of VAT on sales and purchases on a net basis. VAT receivable represents VAT on domestic purchases net of VAT on domestic sales. Export sales are zero rated.

CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash in bank and cash on hand, demand deposits with banks with original maturities of 3 (three) months or less.

FINANCIAL LIABILITIES

INITIAL RECOGNITION AND MEASUREMENT

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans borrowings and payables, or as derivatives financial instruments.

All financial liabilities are recognized initially at fair value and in the case of loans and borrowings, plus directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, loans and borrowings and derivative financial instruments.

SUBSEQUENT MEASUREMENT

The measurement of financial liabilities depends on their classification as follows:

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss includes financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are acquired for the purpose of selling in the near term. This category includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IFRS 9. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognized in profit or loss.

The Group has not designated any financial liabilities upon initial recognition as at fair value through profit or loss.

Trade and other payables

Trade payables are recognized initially at fair value and subsequently measured at amortized cost using the EIR.

Loans and borrowings

After initial recognition, interest bearing loans and borrowings are subsequently measured at amortized cost using the EIR. Gains and losses are recognized in the consolidated statement of comprehensive income when the liabilities are derecognized as well as through the EIR amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fee or costs that are an integral part of the EIR. The EIR amortization is included in finance costs.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 (twelve) months after the reporting date. Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalized as part of the cost of that asset. Other borrowing costs are recognized as an expense when incurred.

Financial guarantee contracts

Financial guarantee contracts issued by the Group are those contracts that require a payment to be made to reimburse the holder for a loss it incurs because the specified debtor fails to make a payment when due in accordance with the terms of a debt instrument. Financial guarantee contracts are recognised initially as a liability at fair value, adjusted for transaction costs that are directly attributable to the issuance of the guarantee. Subsequently, the liability is measured at the higher of the best estimate of the expenditure required to settle the present obligation at the reporting date and the amount recognised less cumulative amortisation.

DERECOGNITION

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in profit or loss.

OFFSETTING OF FINANCIAL INSTRUMENTS

Financial assets and financial liabilities are offset and the net amount reported in the consolidated statement of financial position if, and only if, there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

FAIR VALUE OF FINANCIAL INSTRUMENTS

The fair value of financial instruments that are traded in active markets at each reporting date is determined by reference to quoted market prices or dealer price quotations (bid price for long positions and ask price for short positions), without any deduction for transaction costs.

For financial instruments not traded in an active market, the fair value is determined using appropriate valuation techniques. Such techniques may include using recent arm's length market transactions; reference to the current fair value of another instrument that is substantially the same; a discounted cash flow analysis or other valuation models.

PROVISIONS

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Where the Group expects a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognized as a separate asset but only when the reimbursement is virtually certain.

If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

Provision for obligations to the Government

The Government assigns various sponsorship and financing obligations to the Group. Management of the Group believes that such Government's assignments represent constructive obligations of the Group and require recognition on the basis of respective resolution of the Government. Furthermore, as the Government is the ultimate controlling party of the Group, the expenditures on these assignments are recognized as other distributions to the Shareholders directly in the equity, in the consolidated financial statements.

EMPLOYEE BENEFITS

Pension scheme

Payments to defined contribution retirement benefit plans are charged as an expense as they fall due. Payments made to state – managed retirement benefit schemes are dealt with as defined contribution plans where the Group's obligations under the scheme are equivalent to those arising in a defined contribution retirement benefit plan.

Long-term employee benefits

The Group provides long-term employee benefits to employees before, on and after retirement, in accordance with the collective agreements between the Group entities and their employees. The collective agreement provides for certain one-off retirement payments, financial aid for employees' disability, anniversaries, funeral and other benefits. The entitlement to benefits is usually conditional on the employee remaining in service up to retirement age.

The expected costs of the benefits associated with one-off retirement payments are accrued over the period of employment using the same accounting methodology as used for defined benefit post-employment plans with defined payments upon the end of employment. Actuarial gains and losses arising in the year are taken to other comprehensive income. For this purpose, actuarial gains and losses comprise both the effects of changes in actuarial assumptions and experience adjustments arising because of differences between the previous actuarial assumptions and what has actually occurred. Other movements are recognised in the current period, including current service cost, any past service cost and the effect of any curtailments or settlements.

The most significant assumptions used in accounting for defined benefit obligations are discount rate and mortality assumptions. The discount rate is used to determine the net present value of future liabilities and each year the unwinding of the discount on those liabilities is charged to the consolidated statement of comprehensive income as finance costs. The mortality assumption is used to project the future stream of benefit payments, which is then discounted to arrive at a net present value of liabilities.

Employee benefits other than one-off retirement payments are considered as other long-term employee benefits. The expected cost of these benefits is accrued over the period of employment using the same accounting methodology as used for the defined benefit plan. Actuarial gains and losses on other long-term employee benefits are recognised in the profit or loss.

These obligations are valued by independent qualified actuaries on an annual basis.

REVENUE RECOGNITION

Revenues are recognized when (or as) the Group satisfies a performance obligation by transferring a promised good or service (i.e. an asset) to a customer. An asset is transferred when (or as) the customer obtains control of that asset, which usually occurs when the title is passed, provided that the contract price is fixed or determinable and collectability of the receivable is reasonably assured. Specifically, domestic sales of crude oil and gas, as well as petroleum products and materials are usually recognized when title passes. For export sales, title generally passes at the border of the Republic of Kazakhstan. Revenue is measured at the fair value of the consideration received or receivable taking into account the amount of any trade discounts, volume rebates and reimbursable taxes.

Sales of support services are recognized as services are performed provided that the service price can be determined and no significant uncertainties regarding the receipt of revenues exist.

Interest income and costs

For all financial instruments measured at amortised cost and interest income is recorded using the effective interest rate (EIR). EIR is the rate that exactly discounts the estimated future cash payments or receipts over the expected life of the financial instrument or a shorter period, where appropriate, to the net carrying amount of the financial asset or liability. Interest income is included in finance income in the consolidated statement of comprehensive income.

Trade receivables

A receivable represents the Group's right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due).

Contract liabilities

A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognized when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognised as revenue when the Group performs under the contract.

EXPENSE RECOGNITION

Expenses are recognized as incurred and are reported in the consolidated financial statements in the period to which they relate on an accrual basis.

INCOME TAXES

Income tax for the year comprises current income tax, excess profit tax and deferred tax.

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted by the reporting date.

Current income tax relating to items recognized directly in equity is recognized in equity and not in the consolidated statement of comprehensive income.

Excess profit tax ("EPT") is treated as an income tax and forms part of income tax expense. In accordance with the applicable tax legislation, the Group accrues and pays EPT in respect of each subsoil use contract, at varying rates based on the ratio of aggregate annual income to deductions for the year for a particular subsoil use contract. The ratio of aggregate annual income to deductions in each tax year triggering the application of EPT is 1.25:1. EPT rates are applied to the part of the taxable income (taxable income after corporate income tax and allowable adjustments) related to each subsoil use contract in excess of 25% of the deductions attributable to each contract.

Deferred tax is calculated with respect to both corporate income tax ("CIT") and EPT. Deferred EPT is calculated on temporary differences for assets allocated to subsoil use contracts at the expected rate of EPT to be paid under the contract.

Deferred income tax is provided using the liability method on temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred income tax liabilities are recognized for all taxable temporary differences, except::

- where the deferred income tax liability arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- in respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred income tax assets are recognized for all deductible temporary differences, carryforward of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carryforward of unused tax credits and unused tax losses can be utilized except:

- where the deferred income tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- in respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred income tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized.

The carrying amount of deferred income tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilized. Unrecognized deferred income tax assets are reassessed at each reporting date and are recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the reporting date.

Deferred income tax relating to items recognized directly in equity is recognized in equity and not in the consolidated statement of comprehensive income.

Deferred income tax assets and deferred income tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred income taxes relate to the same taxable entity and the same taxation authority.

Deferred tax assets are recognized for all allowances and unused tax losses to the extent that it is probable that taxable temporary differences and business nature of such expenses will be proved. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and level of future taxable profits together with future tax planning strategies.

EQUITY

Non-controlling interest

Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from the equity of the Company's owners. Total comprehensive income is attributed to the Company's owners and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Dividends

Dividends are recognized as a liability and deducted from equity at the reporting date only if they are declared before or on the reporting date. Dividends are disclosed when they are proposed before the reporting date or proposed or declared after the reporting date but before the consolidated financial statements are authorized for issue.

Distributions to the Shareholders

Expenditures incurred by the Group based on the respective resolution of the Government based on the RK President's charge or decision and instructions of Samruk-Kazyna are accounted for as other distributions through equity. Such expenditures include costs associated with non-core activity of the Group (construction of social assets) to be transferred to the Shareholder.

SUBSEQUENT EVENTS

The results of post-year-end events that provide evidence of conditions that existed at the reporting date (adjusting events) are reflected in the consolidated financial statements. Post-year-end events that are not adjusting events are disclosed in the notes to the consolidated financial statements when material.

4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS

The preparation of the Group's consolidated financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities and the disclosure of contingent liabilities and assets, at the reporting date. However, uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods.

OIL AND GAS RESERVES

Oil and gas reserves are a material factor in the Group's computation of depreciation, depletion and amortization expenses. The Group estimates its oil and gas reserves in accordance with the methodology of the Society of Petroleum Engineers ("SPE"). In estimating its reserves under SPE methodology, the Group uses long-term planning prices. Using planning prices for estimating proved reserves removes the impact of the volatility inherent in using year-end spot prices. Management believes that long-term planning price assumptions, which are also used by management for their business planning and investment decisions are more consistent with the long-term nature of the upstream business and provide the most appropriate basis for estimating oil and gas reserves.

All reserve estimates involve some degree of uncertainty. The uncertainty depends mainly on the amount of reliable geological and engineering data available at the time of the estimate and the interpretation of this data.

The relative degree of uncertainty can be conveyed by placing reserves into one of two principal classifications, either proved or unproved. Proved reserves are more certain to be recovered than unproved reserves and may be further sub-classified as developed and undeveloped to denote progressively increasing uncertainty in their recoverability.

Estimates are reviewed and revised annually. Revisions occur due to the evaluation or re-evaluation of already available geological, reservoir or production data, availability of new data, or changes to underlying price assumptions. Reserve estimates may also be revised due to improved recovery projects, changes in production capacity or changes in development strategy. Proved developed reserves are used to calculate the unit of production rates for Depreciation Depletion & Amortization (DD&A) in relation to oil and gas production assets. The Group has included in proved reserves only those quantities that are expected to be produced during the initial subsoil use contract period. This is due to the uncertainties surrounding the outcome of such renewal procedures, since the renewal is ultimately at the discretion of the Government. An increase in the Group's subsoil use contract periods and corresponding increase in reported reserves would generally lead to lower DD&A expense and could materially affect earnings. A reduction in proved developed reserves will increase DD&A expense (assuming constant production), reduce income and could also result in an immediate write-down of the property's book value. Given the relatively small number of producing fields, it is possible that any changes in reserve estimates year on year could significantly affect prospective charges for DD&A.

RECOVERABILITY OF OIL AND GAS ASSETS, DOWNSTREAM, REFINING AND OTHER ASSETS

The Group assesses assets or CGU for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Where an indicator of impairment exists, a formal estimate of the recoverable amount is made, which is considered to be the higher of the fair value less costs to sell and value in use. These assessments require the use of estimates and assumptions such as long-term oil prices, discount rates, future capital requirements, operating performance (including production and sales volumes) that are subject to risk and uncertainty. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset/CGU is considered to be impaired and is written down to its recoverable amount. In assessing recoverable amount the estimated future cash flows are adjusted for the risks specific to the asset group and are discounted to their present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Fair value less costs to sell is identified as the price that would be received to sell the asset in an orderly transaction between market participants and does not reflect the effects of factors that may be specific to the entity and not applicable to entities in general.

As at December 31, 2019, 2018 and 2017, the Group performed its annual impairment tests of downstream, refining and other assets due to existence of impairment indicators. The Group considered forecasted refinery margins and production volumes, among other factors, when reviewing for indicators of impairment. As a result of the impairment analysis of the recoverable amount of downstream, refining and other assets an impairment charges were recognized in the consolidated financial statements for the year ended December 31, 2019 and 2018 (Note 13).

As of December 31, 2019, 2018 and 2017 the Group has material goodwill related to acquisitions of Pavlodar oil chemistry refinery LLP ("PNHZ") of 88,553 million tenge.

The Group performed annual impairment test of the goodwill related to acquisition of PNHZ in December 2019, 2018 and 2017. The Group considers the forecast for oil tolling volumes, oil tolling tariffs, capital expenditures, among other factors, when reviewing for indicators of impairment.

PNHZ calculates recoverable amount using a discounted cash flow model. The discount rate of 2019: 9.7% (2018: 9.7%, 2017: 13.25%) was calculated on the weighted average cost of capital before taxes. The weighted average cost of capital takes into account both borrowed funds and own equity. The cost of equity is derived from the expected return on investment. The cost of debt capital is based on interest-bearing loans. The inherent risk was included by applying an individual beta factor. The beta factor was estimated based on the publicly available market data. Forecasted cash flows till to 2028 were based on five-years business plan of PNHZ 2020-2024, which assumes current management estimates on potential changes in operating and capital costs. The significant part of those cash flows after 2024 was forecasted by applying expected inflation rate of 2019: 5.49% (2018: 3.53%, 2017: 3.89%), excluding capital costs, which are based on the best estimate of management as of valuation date.

As at December 31, 2019, 2018 and 2017 the recoverable amount of goodwill, which was determined based on value in use, exceeded its book value, as such no impairment of PNHZ goodwill was recognised.

Sensitivity to changes in assumptions

Results of the assessment of recoverable amount of goodwill from acquisition of PNHZ are sensitive to changes in key assumptions, in particular, assumptions related to changes in discount rate and target EBITDA in terminal period. Increase in discount rates by 1.0% from 9.7% to 10.7% and decrease of target EBITDA in terminal period by 1% from 35% to 36% would not result in decrease of the recoverable amount of PNHZ.

ASSETS RETIREMENT OBLIGATIONS

Oil and gas production facilities

Under the terms of certain subsoil use contracts, legislation and regulations the Group has legal obligations to dismantle and remove tangible assets and restore the land at each production site. Specifically, the Group's obligation relates to the ongoing closure of all non-producing wells and final closure activities such as removal of pipes, buildings and recultivation of the contract territories, and also obligations to dismantle and remove tangible assets and restore territory at each production site. Since the subsoil use contract terms cannot be extended at the discretion of the Group, the settlement date of the final closure obligations has been assumed to be the end of each subsoil use contract period. If the asset retirement obligations were to be settled at the end of the economic life of oil and gas field, the recorded obligation would increase significantly due to the inclusion of all abandonment and closure costs. The extent of the Group's obligations to finance the abandonment of wells and for final closure costs depends on the terms of the respective subsoil use contracts and current legislation.

Where neither subsoil use contracts nor legislation include an unambiguous obligation to undertake or finance such final abandonment and closure costs at the end of the subsoil use contract term, no liability has been recognized. There is some uncertainty and significant judgment involved in making such a determination. Management's assessment of the presence or absence of such obligations could change with shifts in policies and practices of the Government or in the local industry practice.

The Group calculates asset retirement obligations separately for each contract. The amount of the obligation is the present value of the estimated expenditures expected to be required to settle the obligation adjusted for expected inflation and discounted using average long-term risk-free interest rates for emerging market sovereign debt adjusted for risks specific to the Kazakhstan market.

At each reporting date the Group reviews site restoration provisions, and adjusts them to reflect the current best estimate in accordance with IFRIC 1 Changes in Existing Decommissioning, Restoration and Similar Liabilities.

Estimating the future closure costs involves significant estimates and judgments by management. Most of these obligations are many years in the future and, in addition to ambiguities in the legal requirements, the Group's estimate can be affected by changes in asset removal technologies, costs and industry practice. Uncertainties related to the final closure costs are mitigated by the effects of discounting the expected cash flows. The Group estimates future well abandonment cost using current year prices and the average long-term inflation rate.

The long-term inflation and discount rates used to determine the obligation in the consolidated statement of financial position across the Group entities at December 31, 2019 were in the range from 2.01% to 5.49% and from 4.43% to 8.95%, respectively, (2018: from 2.02% to 5.96% and from 5.5% to 10.00%, respectively, 2017: from 2.01% to 5.57% and from 5.17% to 10.00%). As at December 31, 2019 the carrying amounts of the Group's asset retirement obligations relating to decommissioning of oil and gas facilities were 54,165 million tenge (December 31, 2018: 36,288 million tenge and 2017: 35,406 million tenge, respectively) (Note 26).

Major oil and gas pipelines

According to the Law of the Republic of Kazakhstan On Major Pipelines which was made effective on July 4, 2012 mainly the Group's two subsidiaries, JSC KazTransOil and Intergas Central Asia JSC, the subsidiary of KazTransGas JSC, have legal obligation to decommission its major oil pipelines at the end of their operating life and to restore the land to its original condition. Asset retirement obligation is calculated based on estimate of the work to decommission and rehabilitate. As at December 31, 2019, the carrying values of the Group's asset retirement obligations relating to decommissioning of pipelines and land were 100,229 million tenge (December 31, 2018: 79,948 million tenge and December 31, 2017: 65,140 million tenge) (Note 26).

ENVIRONMENTAL REMEDIATION

The Group also makes judgments and estimates in establishing provisions for environmental remediation obligations. Environmental expenditures are capitalized or expensed depending upon their future economic benefit. Expenditures that relate to an existing condition caused by past operations and do not have a future economic benefit are expensed.

Liabilities are determined based on current information about costs and expected plans for remediation and are recorded on an undiscounted basis if the timing of the procedures has not been agreed with the relevant authorities. The Group's environmental remediation provision represents management best estimate based on an independent assessment of the anticipated expenditure necessary for the Group to remain in compliance with the current regulatory regime in Kazakhstan and Europe. The Group has classified this obligation as non-current except for the portion of costs, included in the annual budget for 2019. For environmental remediation provisions, actual costs can differ from estimates because of changes in laws and regulations, public expectations, discovery and analysis of site conditions and changes in clean-up technology. Movements in the provision for environmental remediation obligations are disclosed in Note 26.

EMPLOYEE BENEFITS

The cost of defined long-term employee benefits payable before, on and after retirement and the present value of the obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases, mortality rates and future pension increases.

Due to the complexity of the valuation, the underlying assumptions and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

TAXATION

In assessing tax risks, management considers to be probable obligations the known areas of tax positions which the Group would not appeal or does not believe it could successfully appeal, if assessed by tax authorities. Such determinations inherently involve significant judgment and are subject to change as a result of changes in tax laws and regulations, amendments to the taxation terms of the Group's subsoil use contracts, the determination of expected outcomes from pending tax proceedings and current outcome of ongoing compliance audits by tax authorities. The provision for tax risks other than on income tax are disclosed under provisions for taxes in Note 26. Contingent liabilities for tax risks other than on income tax are disclosed in Note 34. Provisions and contingent liabilities related to income tax are included or disclosed as income tax liabilities or contingencies (see Note 30 and 34 for further details).

FAIR VALUE OF FINANCIAL INSTRUMENTS

Where the fair value of financial assets and financial liabilities recorded in the consolidated statement of financial position cannot be derived from active markets, they are determined using valuation techniques including the discounted cash flows model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgment is required in establishing fair values. The judgments include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the reported fair value of financial instruments presented in the consolidated financial statements. Further details are disclosed in Note 32.

USEFUL LIVES OF PROPERTY, PLANT AND EQUIPMENT

The Group assesses the remaining useful lives of items of property, plant and equipment at least at each financial year-end and, if expectations differ from previous estimates, the changes are accounted for prospectively as a change in an accounting estimate in accordance with IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors.

FAIR VALUES OF ASSETS AND LIABILITIES ACQUIRED IN BUSINESS COMBINATIONS

The Group is required to recognize separately, at the acquisition date, the identifiable assets, liabilities and contingent liabilities acquired or assumed in the business combination at their fair values, which involves estimates. Such estimates are based on valuation techniques, which require considerable judgment in forecasting future cash flows and developing other assumptions.

5. DISCONTINUED OPERATIONS AND ASSETS CLASSIFIED AS HELD FOR SALE

The assets and liabilities, classified as discontinued operations, disposal group held for sale and assets classified as held for sale as at December 31, 2019, 2018 and 2017 and the results for 2019, 2018 and 2017 are as follows:

In millions of tenge	December 31, 2019			Profit after income tax for 2019 from discontinued operation
	Assets classified as held for sale	Liabilities directly associated with the assets classified as held for sale	Net assets directly associated with the disposal group	
Kazakh British Technical University JSC	–	–	–	6
Other assets	7,604	–	7,604	–
Total	7,604	–	7,604	6

In millions of tenge	December 31, 2018			Profit/(loss) after income tax for 2018 from discontinued operation
	Assets classified as held for sale	Liabilities directly associated with the assets classified as held for sale	Net assets directly associated with the disposal group	
KMG Retail	43,651	380	43,271	–
Kazakh British Technical University JSC	15,704	4,659	11,045	(4,301)
Other assets	2,405	–	2,405	7,754
Total	61,760	5,039	56,721	3,453

In millions of tenge	December 31, 2017			Loss after income tax for 2017 from discontinued operation
	Assets classified as held for sale	Liabilities directly associated with the assets classified as held for sale	Net assets directly associated with the disposal group	
Kazakh British Technical University JSC	16,803	1,925	14,878	(2,612)
Other assets	8,102	4	8,098	(1,054)
Total	24,905	1,929	22,976	(3,666)

KMG RETAIL

On February 8, 2019 the Company completed the sale of 100% interest in KMG Retail, which was classified as a disposal group held for sale since December 31, 2018, for 60,512 million tenge.

At the date of loss of control net assets of KMG Retail LLP were as follow:

In millions of tenge	Net assets at the date of disposal
Property, plant and equipment	34,266
Intangible assets	42
Cash	2,288
Other current and non-current assets	6,694
	43,290
Non-current liabilities	259
	259
Net assets	43,031
Net assets	**43,031**

The resulting gain on disposal of KMG Retail amounted to 17,481 million tenge.

KBTU

As of December 31, 2018, KMG classified Kazakhstan-British University JSC (KBTU) as a discontinued operation. In January 2019, a sale agreement on 100% shares in KBTU, between KMG and the Public Foundation "Nursultan Nazarbayev Education Fund" came into force. According to the terms of the agreement, the transfer of stake and its payment of 11,370 million tenge are made in three tranches within two years. On February 6, 2019 KMG lost control over KBTU.

At the date of loss of control net assets of KBTU were as following:

In millions of tenge	Net assets at the date of disposal
Property and equipment	6,367
Intangible assets	1,964
Bank deposits	2,091
Cash	4,732
Other current and non-current assets	1,097
	16,251
Current and non-current liabilities	5,349
	5,349
Net assets	**10,902**

The resulting gain on disposal of KBTU amounted to 149 million tenge and the loss incurred by KBTU for the period from January 1, 2019 until the date of disposal equaled to 143 million tenge were recognized in the profit from discontinued operations.

KAZTRANSGAS TBILISI LLC

As of December 31, 2017, KazTransGas JSC (KTG), the subsidiary, had 100% legal ownership in KazTransGas Tbilisi LLC (KTG Tbilisi). On March 16, 2009 the City Court of Kutaisi disqualified KTG from exercising rights to direct the relevant activities of KTG Tbilisi. As a result, the Group lost control over KTG Tbilisi and ceased consolidating it since the date of loss of control.

On September 13, 2018, KTG and the Government of Georgia signed an arbitration agreement on the peaceful settlement of the dispute as a result of which KTG sold 100% shares of KTG Tbilisi for 40,000 thousand US dollars (equivalent to 15,110 million tenge). On September 28, 2018, KTG collected proceeds from sale of interest ownership of 40,000 thousand US dollars (equivalent to 14,473 million tenge).

Additionally, in 2018 the Group sold other subsidiaries with net assets of 252 million tenge as of disposal date for the consideration of 3,501 million tenge, which resulted in the gain of 3,249 million tenge.

6. REVENUE

In millions of tenge	2019	2018 (reclassed)	2017 (reclassed)[1]
Type of goods and services			
Sales of crude oil and gas*	3,966,941	4,094,011	2,677,102
Sales of refined products*	2,043,848	2,175,909	1,422,391
Oil and gas transportation services	389,496	315,229	333,038
Refining of oil and oil products	195,896	175,618	129,067
Other revenue	262,675	228,197	232,165
	6,858,856	6,988,964	4,793,763
Geographical markets			
Kazakhstan	1,212,267	1,131,911	944,145
Other countries	5,646,589	5,857,053	3,849,618
	6,858,856	**6,988,964**	**4,793,763**

[1] In 2019 the Group decided to present sales of gas products within Sales of refined products and thus reclassed from Sales of crude oil and gas 58,026 million tenge for 2018 and 29,309 million tenge for 2017.

7. SHARE IN PROFIT OF JOINT VENTURES AND ASSOCIATES, NET

In millions of tenge	2019	2018	2017
Tengizchevroil LLP	414,940	439,149	289,980
Asian Gas Pipeline LLP (AGP)	168,086	—	—
Mangistau Investments B.V.	81,991	95,510	49,605
Caspian Pipeline Consortium	70,869	57,965	54,666
Beineu-Shymkent Pipeline	56,194	16,710	(668)
KazGerMunay LLP	17,561	27,915	17,713
KazRosGas LLP	18,091	5,254	8,622
Kashagan B.V.	13,114	34,034	(10,208)
Kazakhoil-Aktobe LLP	9,722	9,057	(16,788)
Tenizservice LLP	6,742	13,897	1,653
Kazakh-chinese pipeline JSC	3,313	—	—
Valsera Holdings B.V.	(6,107)	(7,989)	9,751
PetroKazakhstan Inc.	(18,244)	14,590	7,233
Ural Group Limited	(18,895)	(18,822)	(1,877)
Other joint ventures and associates	10,602	10,056	5,268
	827,979	697,326	414,950

8. COST OF PURCHASED OIL, GAS, PETROLEUM PRODUCTS AND OTHER MATERIALS

In millions of tenge	2019	2018	2017
Purchased oil for resale	2,448,412	2,607,706	1,445,419
Cost of oil for refining	638,293	698,473	732,682
Purchased gas for resale	493,280	356,932	242,987
Materials and supplies	217,138	182,067	147,484
Purchased petroleum products for resale	116,621	467,780	160,942
	3,913,744	4,312,958	2,729,514

9. PRODUCTION EXPENSES

In millions of tenge	2019	2018 (reclassed)	2017 (reclassed)
Payroll	338,120	291,693	311,973
Repair and maintenance[1]	129,450	98,424	86,570
Energy	88,910	71,914	63,082
Transportation costs	30,456	21,988	15,685
Lease expenses*	52,091	10,085	8,293
Others	82,666	110,371	138,743
	721,693	604,475	624,346

[1] The Group reclassed outsourced repair and maintenance amounts from Others for 2018 and 2017 for 56,527 million tenge and 43,912 million tenge, respectively. Additionally, Lease expenses were presented separately and excluded from Others for 2017 and 2018

10. TAXES OTHER THAN INCOME TAX

In millions of tenge	2019	2018	2017
Rent tax on crude oil export	133,144	145,523	83,183
Export customs duty	131,326	131,128	105,302
Mineral extraction tax	100,300	115,968	93,569
Other taxes	89,525	85,113	72,393
	454,295	477,732	354,447

11. TRANSPORTATION AND SELLING EXPENSES

In millions of tenge	2019	2018	2017
Transportation	374,686	317,402	189,949
Payroll	12,542	16,180	16,103
Other	33,174	37,195	32,011
	420,402	370,777	238,063

12. GENERAL AND ADMINISTRATIVE EXPENSES

In millions of tenge	2019	2018	2017
Payroll	78,055	73,632	77,572
Provision under Consortium case (Note 34)	34,132	—	—
Consulting services	25,448	22,435	19,523
Accrual/(reversal) of impairment of VAT receivable	15,703	4,215	(24,158)
Accrual/(reversal) of expected credit losses for other current assets (Note 21)	12,246	1,225	(120)
Social payments	8,933	24,095	28,024
VAT that could not be offset	6,910	3,031	7,923
Rent of property, plant and equipment and intangible assets	2,309	5,750	5,780
Accrual/(reversal) of expected credit losses for trade receivables (Note 21)	1,892	(1,489)	1,056
Charitable donations and sponsorship	381	1,699	1,225
(Reversal of) /allowance for impairment of long term advances	(11)	—	1,188
(Reversal of) /allowance for obsolete inventories	(80)	4,339	345
(Reversal of) /allowance for fines, penalties and tax provisions	(19,755)	29,836	(4,212)
Other	47,804	44,717	49,634
	213,967	213,485	163,780

The total payroll amounted to 428,717 million tenge (2018: 381,505 million tenge, 2017: 405,648 million tenge) and included in Production expenses, transportation and selling expenses and general and administrative expenses in the consolidated statement of profit or loss.

13. IMPAIRMENT OF PROPERTY, PLANT AND EQUIPMENT, INTANGIBLE ASSETS, EXPLORATION AND EVALUATION ASSETS

In millions of tenge	2019	2018	2017
Property, plant and equipment (Note 15)	144,482	33,603	22,328
Exploration and evaluation assets (Note 16)	57,239	107,745	814
Investment property	(142)	1,538	1,518
Intangible assets (Note 17)	6,240	22,636	—
	207,819	165,522	24,660

FOR THE FOLLOWING CGUS IMPAIRMENT LOSSES WERE RECOGNISED FOR YEARS ENDED:

In millions of tenge	2019	2018	2017
CGUs of KMG International (KMGI)	93,587	43,702	—
Pearls project	38,180	—	—
Drilling jackup rig "Satti" (Satti rig)	24,505	—	—
CGU Batumi Oil Terminal (BNT)	12,583	4,136	—
Self-propelled barges “Sunkar” and “Berkut" (Barges)	11,837	2,659	—
Write-off of brownfields of KMG EP	18,888	—	—
N project	—	67,897	—
Satpayev project	—	34,539	—
Write-off of construction in progress of PNHZ	—	—	15,277
Others	8,239	12,589	9,383
	207,819	165,522	24,660

CGUs of KMGI

As of December 31, 2019, 2018 and 2017 KMGI performed impairment tests of its CGUs, Petrochemical, Bulgaria, Refining and Other. The Group considered forecasted refinery margins and production volumes, among other factors, when reviewing for indicators of impairment.

In 2017, 2018 and 2019, the recoverable amount of the CGUs were determined based on fair value less costs of disposal (FVLC), which is the present value of the free cash flows adjusted by the present value of the residual value. The key assumptions used in the fair value less costs to sell calculations for the above-mentioned CGUs were operating profit, discount rates and growth rate used to extrapolate cash flows beyond the budget period.

The discount rate applied to cash flow projections for Refining and Petrochemical CGUs was at 9.6% (2018: 9.7%, 2017: 9.0%) and cash flows beyond the 5-year period were extrapolated using 1.9% growth rate that is the same as the long-term average growth rate for the industry. The capitalization rate used for residual values is 7.7% (2018: 7.8%, 2017: 7.5%).

As to Bulgaria CGU, the discount rate applied to cash flow projections was at 9.6% (2018: 9.8 %, 2017: 9.1%) and cash flows beyond the 5-year period were extrapolated using growth rate of 1.9% that is the same as the long-term average growth rate for the industry. The capitalization rate used for residual values is 7.6% (2018: 7.9%, 2017: 7.6%).

In 2018, the recoverable values of the CGUs Refining, Petrochemical, Bulgaria and Other were below their book values. As at December 31, 2018 based on the results of analysis performed, KMGI recognized impairment loss of property, plant and equipment and intangible assets of 21,195 million tenge and 22,507 million tenge, respectively.

In 2019, the recoverable values of the CGUs exceeded their respective carrying values, except for Refining CGU. For the purposes of impairment test, KMGI updated projected cash flows to reflect the decrease in forecasted refinery margins and change in post-tax discount rate. As at December 31, 2019 based on the results of the test performed, KMGI recognized impairment loss of property, plant and equipment and intangible assets of 86,946 million tenge and 6,641 million tenge, respectively.

Sensitivity to changes in assumptions:

With regard to the assessment of the FVLC for the CGUs, the Group believes that no reasonably possible change in any of the above key assumptions would cause the carrying value of the unit to materially exceed its recoverable amount, other than for CGU Refinery, for which the breakeven point for the current model is achieved under a decrease of 3.3% of operating profit.

Pearls project

Exploration stage of Pearls project expired on December 14, 2019. To proceed to the next stage, the Development plan was due to be submitted by the partners of the project. However, the partners of the Pearls project decided not to proceed with the Development plan, and agreed to relinquish the contract area under the Pearls PSA to the Government voluntarily, as a result, as at December 31, 2019, the Group recognized impairment loss for 38,180 million tenge. As of December 31, 2019 the Group did not write-off the project’s assets due to the fact that the contract area has not been returned to the Government yet.

Satti rig

The recoverable amount of Satti rig was determined on the basis of value-in-use method. Value-in-use was assessed as the present value of the future cash flows expected to be derived from the rig. The forecasted cash flows were based on financial budget approved by the Group management for the period of 2020-2024, and on estimated forecasts for the period of the useful life of the rig till 2041 extrapolated by inflation rates and discounted at 12.5%. As a result of the impairment test, the Group recognised an impairment loss of 24,505 million tenge as at December 31, 2019.

CGU BNT

For the year ended December 31, 2019, the Group recognized an impairment loss of 12,583 million tenge.

Barges

The recoverable amount of the barges were determined on the basis of value-in-use method. Value-in-use was assessed as the present value of the future cash flows expected to be derived from the barges until the end of the barges contract in 2021 at the discount rate of 10.05%. Due to the fact that the prolongation of the contracts was remote, the Group recognized an impairment loss of 11,837 million tenge for the year ended December 31, 2019.

Write of the brownfields of KMG EP

For year ended December 31, 2019, the Group wrote-off exploration and evaluation assets of 18,888 million tenge related to several KMG EP subsoil use contracts that were terminated with relinquishment of contract territories to the Government.

Satpayev and N projects

As at December 31, 2018, the Group recognized impairment loss for exploration and evaluation assets related to the Satpayev and N projects for 34,539 million tenge and 67,897 million tenge, respectively. These impairments occurred due to the withdrawal from the projects and decisions to relinquish the contract territories to the Government by the Group and the partners of the projects’. The Group did not write-off the projects’ assets due to the fact that the contract areas had not been returned to the Government as of December 31, 2018.

On April 24, 2019, the Group received Satpayev subsoil use contract termination notice from the Government, accordingly the Group relinquished the contract area fully and wrote-off exploration and evaluation assets related to the project.

Write of construction of progress of PNHZ

In 2017, the Group wrote-off construction in progress that became idle due to change in configuration of Pavlodar Refinery modernization project.

14. FINANCE INCOME / FINANCE COST

FINANCE INCOME

In millions of tenge	2019	2018	2017
Interest income on bank deposits, financial assets, loans and bonds	99,274	100,097	119,061
Amortization of discount on issued financial guarantees	1,974	1,861	1,541
Total interest income	**101,248**	**101,958**	**120,602**
Derecognition of loan (Note 25)	111,476	53,263	–
Write-off of guarantee due to significant modification	13,573	–	–
Other	14,583	5,806	1,972
	240,880	161,027	122,574

Finance costs

In millions of tenge	2019	2018	2017
Interest on loans and debt securities issued (Note 25)	225,093	250,055	217,246
Interest under oil supply agreement (Note 27)	19,541	35,868	26,473
Total interest expense	**244,634**	**285,923**	**243,719**
Issued financial guarantees	11,341	2,324	160
Unwinding of discount on asset retirement obligations and provision for environmental obligation	13,819	11,523	9,941
Bonds redemption fee (Note 25)	–	89,612	–
Discount on assets with non-market interest rate	1,705	915	6,155
Impairment of bank deposits and current accounts	1,034	806	18,610
Other	44,900	36,552	27,770
	317,433	427,655	306,355

On May 4 and 11, 2018, the Company made early redemption of Eurobonds for 3,463 million US dollars (equivalent to 1,143,982 million tenge at payment dates), including interest. In order to make these early redemptions, in 2018, the Company recognized fee for the early redemption of 89,612 million tenge (Note 25).

15. PROPERTY, PLANT AND EQUIPMENT

In millions of tenge	Oil and gas assets	Pipelines	Refinery assets	Buildings and improvements	Machinery and equipment	Vehicles	Other	Capital work in progress	Total
Net book value as at December 31, 2016	913,553	682,348	844,277	291,311	317,213	70,860	42,428	538,210	3,700,200
Foreign currency translation	(2,514)	(140)	(1,936)	(660)	264	(109)	175	(442)	(5,362)
Change in estimate	248	(200)	–	(5)	–	–	–	–	43
Additions	27,268	17,102	19,859	8,134	6,466	8,144	2,912	539,998	629,883
Disposals	(17,372)	(1,154)	(2,647)	(5,617)	(4,286)	(2,832)	(7,143)	(1,459)	(42,510)
Depreciation charge	(62,018)	(25,537)	(72,919)	(19,440)	(32,307)	(8,307)	(7,467)	–	(227,995)
Accumulated depreciation and impairment on disposals	14,881	859	2,517	4,973	3,617	2,482	6,867	760	36,956
Impairment, net (Note 13)	–	(1)	–	(1,439)	(1,431)	(1,908)	(947)	(16,602)	(22,328)
Transfers (to)/from inventory, net	(2)	(52)	13,087	1	34	–	1	166	13,235
Transfer to assets held for sale, net	(170)	–	(3,908)	(3,553)	(242)	(124)	(98)	-	(8,095)
Transfers to investment property	–	–	–	(251)	(13)	–	(1)	(355)	(620)
Transfers (to)/from intangible assets, net (Note 17)	(211)	–	–	–	(306)	–	2	(1,608)	(2,123)
Transfer from exploration and evaluation assets (Note 16)	8,881	–	–	–	–	–	–	–	8,881
Transfers and reclassifications	82,278	104,461	194,363	16,688	100,818	5,829	6,032	(510,469)	–
Net book value as at December 31, 2017	**964,822**	**777,686**	**992,693**	**290,142**	**389,827**	**74,035**	**42,761**	**548,199**	**4,080,165**
Foreign currency translation	90,854	5,661	76,744	11,115	6,037	5,129	1,893	2,975	200,408
Change in estimate	(2,105)	7,677	–	(5)	–	–	–	–	5,567
Additions	24,267	5,285	22,149	1,273	9,482	12,958	4,596	497,659	577,669
Disposals	(17,128)	(3,442)	(1,909)	(6,913)	(5,329)	(3,183)	(4,463)	(2,407)	(44,774)
Depreciation charge	(73,553)	(28,114)	(98,975)	(20,840)	(36,372)	(10,603)	(8,750)	–	(277,207)
Accumulated depreciation and impairment on disposals	12,602	3,009	1,905	4,155	4,444	2,985	3,596	569	33,265
Impairment, net (Note 13)	(3,651)	(3)	–	(11,557)	(11,710)	(2,853)	(851)	(2,978)	(33,603)
Transfers (to)/from inventory, net	45	(101)	4,145	(4)	177	25	(11)	3,015	7,291
Transfer to assets held for sale, net	(9,847)	(2)	(354)	(20,348)	(1,846)	(192)	(1,492)	(1,509)	(35,590)
Transfers from/(to) investment property	–	–	–	354	–	–	–	(176)	178
Transfers (to)/from intangible assets, net (Note 17)	(97)	–	–	–	–	–	1	(1,703)	(1,799)
Transfer from exploration and evaluation assets (Note 16)	3,113	–	–	–	–	–	–	487	3,600

In millions of tenge	Oil and gas assets	Pipelines	Refinery assets	Buildings and improvements	Machinery and equipment	Vehicles	Other	Capital work in progress	Total
Transfers and reclassifications	92,354	20,157	554,806	15,832	39,892	38,260	6,844	(768,145)	–
Net book value as at December 31, 2018	**1,081,676**	**787,813**	**1,551,204**	**263,204**	**394,602**	**116,561**	**44,124**	**275,986**	**4,515,170**
Change in accounting policy (Note 3)	–	–	(524)	–	–	–	–	–	(524)
As at January 1, 2019	**1,081,676**	**787,813**	**1,550,680**	**263,204**	**394,602**	**116,561**	**44,124**	**275,986**	**4,514,646**
Foreign currency translation	(2,749)	(173)	(1,115)	(306)	374	(314)	(50)	–	
Additions	48,725	6,370	794	10,615	11,190	5,076	6,400	345,236	434,406
Change in estimate	13,006	12,156	—	27	—	—	19	—	25,208
Disposals	(24,598)	(2,161)	(4,100)	(15,970)	(7,534)	(3,455)	(7,200)	(1,088)	(66,106)
Depreciation charge	(85,565)	(28,859)	(121,306)	(17,969)	(37,832)	(11,608)	(10,601)	–	(313,740)
Accumulated depreciation and impairment on disposals	14,198	1,794	4,039	11,148	7,085	3,141	6,733	325	48,463
Impairment/ (reversal impairment) (Note 13)	(4,911)	228	(86,946)	(5,277)	(31,068)	(13,140)	(1,057)	(2,311)	(144,482)
Transfers (to)/from assets classified as held for sale (Note 5)	18	–	(81)	(10,610)	(18,390)	(6,493)	(65)	–	(35,621)
Transfers from /(to) investment property	215	–	–	16,314	144	–	2,356	(39)	18,990
Transfers (to)/from inventory, net	35	(35)	4,435	1	362	13	666	3,295	8,772
Transfers from exploration and evaluation assets (Note 16)	1,734	–	–	–	–	–	–	1,024	2,767
Transfers (to)/from intangible assets (Note 17)	(145)	–	(64)	–	–	–	97	(4,587)	(4,699)
Transfers and reclassifications	8,115	26,584	35,325	49,478	138,878	7,856	64,864	(331,100)	–
Net book value as at December 31, 2019		**(10,610)**	**(18,390)**	**(6,493)**	**(65)**	**–**	**106,286**	**286,741**	**4,484,271**
At cost	(35,621)	1,028,456	2,408,000	568,723	841,626	226,215	222,426	336,772	7,665,190
Accumulated depreciation and impairment	215	–	(4,699)	(268,068)	(383,815)	(128,578)	(116,140)	(50,031)	(3,180,919)
Net book value as at December 31, 2019	**1,049,763**	**803,717**	**1,381,661**	**300,655**	**457,811**	**97,637**	**106,286**	**286,741**	**4,484,271**
At cost	2,154,422	985,787	2,381,309	526,180	720,221	234,740	121,458	324,851	7,448,968
Accumulated depreciation and impairment	(1,072,746)	(197,974)	(830,105)	(262,976)	(325,619)	(118,179)	(77,334)	(48,865)	(2,933,798)
Net book value as at December 31, 2018	**1,081,676**	**787,813**	**1,551,204**	**263,204**	394,602	**116,561**	**44,124**	**275,986**	**4,515,170**
At cost	1,933,302	948,285	1,647,460	522,194	665,120	179,515	111,072	599,853	6,606,801
Accumulated depreciation and impairment	(968,480)	(170,599)	(654,767)	(232,052)	(275,293)	(105,480)	(68,311)	(51,654)	(2,526,636)
Net book value as at December 31, 2017	**964,822**	**777,686**	**992,693**	**290,142**	**389,827**	**74,035**	**42,761**	**548,199**	**4,080,165**

Additions

In 2019 additions are mainly attributable to development drilling at Ozenmunaigas, Embamunaigas and Karachaganak for 181,050 million tenge, the construction of compressor stations at KTG for 67,998 million tenge within the framework of modernization of gas transportation system, the reconstruction of the water pipeline Astrakhan-Mangyshlak and the reconstruction of the Uzen-Atyrau-Samara oil pipeline for 35,323 million tenge at KTO, overhaul at the Atyrau refinery for 36,972 million tenge and Rompetrol Rafinare for 31,859 million of tenge.

Transfer to assets held for sale

During the year ended December 31, 2019, the Group classified gas compressor station and barges with net book value of 35,621 million tenge as assets held for sale.

Other

For the year ended December 31, 2019, the Group capitalized in the carrying amount of property, plant and equipment borrowing costs of 2,525 million tenge at the average interest rate of 4.3% related to the construction of new assets (for the year ended December 31, 2018: 21,715 million tenge at the weighted average interest rate of 2.75% and for the year ended December 31, 2017: 26,532, million tenge at the weighted average interest rate of 3.36%).

As at December 31, 2019 the cost of fully depreciated but still in use property, plant and equipment was 394,841 million tenge (as at December 31, 2018: 334,533 million tenge and as at December 31, 2017: 290,360 million tenge).

As at December 31, 2019, property, plant and equipment with the net book value of 1,023,146 million tenge (as at December 31, 2018: 1,108,420 million tenge and as at December 31, 2017: 940,437 million tenge) were pledged as collateral to secure borrowings and payables of the Group.

Capital commitments disclosed in Note 34

16. EXPLORATION AND EVALUATION ASSETS

In millions of tenge	Tangible	Intangible	Total
Net book value as at December 31, 2016	**193,835**	**37,719**	**231,554**
Foreign currency translation	(95)	(53)	(148)
Additions	33,075	345	33,420
Change in estimate	(113)	–	(113)
Disposals	(105)	(557)	(662)
Impairment (Note 13)	(803)	(11)	(814)
Transfers to discontinued operations and assets held for sale, net	–	(1,030)	(1,030)
Transfer to property, plant and equipment (Note 15)	(8,881)	–	(8,881)
Transfers and reclassifications	(1,260)	1,260	–
Net book value as at December 31, 2017	**215,653**	**37,673**	**253,326**
Foreign currency translation	1,373	699	2,072
Additions	46,008	180	46,188
Change in estimate	25	–	25
Disposals	(1,314)	(5)	(1,319)
Accumulated impairment on disposals	957	5	962
Impairment (Note 13)	(96,180)	(11,565)	(107,745)
Transfer to assets held for sale	(102)	–	(102)
Transfers to inventory	(7)	–	(7)
Transfer to property, plant and equipment (Note 15)	(3,600)	–	(3,600)

In millions of tenge	Tangible	Intangible	Total
Net book value as at December 31, 2018	**162,813**	**26,987**	**189,800**
Additions	51,385	3,144	54,529
Change in estimate	9	–	9
Disposals (Note 13)	(35,150)	(1,160)	(36,310)
Accumulated impairment on disposals	33,159	507	33,666
Impairment (Note 13)	(51,717)	(5,522)	(57,239)
Transfer to intangible assets (Note 17)	–	(1,800)	(1,800)
Transfers to inventory	9	–	9
Transfer to property, plant and equipment (Note 15)	(2,767)	–	(2,767)
Transfers and reclassifications	(5,449)	5,449	–
Net book value as at December 31, 2019	**152,292**	**27,605**	**179,897**

As at December 31, 2019, 2018 and 2017 the exploration and evaluation assets are represented by the following projects:

In millions of tenge	2019	2018	2017
Zhambyl	58,293	50,178	33,396
Embamunaigas	41,337	20,022	19,078
Urikhtau	35,265	30,469	27,590
KTG projects	13,206	11,840	12,051
Pearls	–	36,486	35,069
Project N	–	–	66,258
Satpayev	–	–	33,791
Others	31,796	40,805	26,093
	179,897	189,800	253,326

Additions

During 2019, the Group capitalized exploration, evaluation, geological and geophysical exploration expenses mainly attributable to Embamunaigas subsoil use contracts in the amount of 32,154 million tenge and 12,135 million tenge attributable to Zhambyl and other new subsoil use contracts of the Company.

17. INTANGIBLE ASSETS

In millions of tenge	Goodwill	Marketing related intangible assets	Software	Other	Total
Net book value as at December 31, 2016	**98,722**	**50,458**	**14,772**	**23,596**	**187,548**
Foreign currency translation	(25)	(169)	(72)	114	(152)
Additions	–	–	2,452	2,885	5,337
Disposals	–	–	(1,003)	(2,416)	(3,419)
Amortization charge	–	(1,226)	(5,517)	(2,682)	(9,425)
Accumulated amortization and impairment on disposals	–	–	526	2,401	2,927
Transfer from property, plant and equipment, net (Note 15)	–	–	1,304	819	2,123
Transfers (to)/from inventory, net	–	–	–	266	266
Transfers and reclassifications	–	–	1,219	(1,219)	–
Net book value as at December 31, 2017	**98,697**	**49,063**	**13,681**	**23,764**	**185,205**
Foreign currency translation	1,357	5,510	586	2,412	9,865
Additions	–	–	2,266	4,096	6,362
Disposals	–	–	(3,290)	(542)	(3,832)
Amortization charge	–	1,659	(6,538)	(2,503)	(7,382)
Accumulated amortization and impairment on disposals	–	–	3,286	540	3,826
Impairment (Note 13)	–	(22,506)	(59)	(71)	(22,636)
Transfers to assets held for sale	–	–	(42)	(88)	(130)
Transfer (to)/from property, plant and equipment, net (Note 15)	–	–	1,822	(23)	1,799
Transfers and reclassifications	–	(362)	1,717	(1,355)	–
Net book value as at December 31, 2018	**100,054**	**33,364**	**13,429**	**26,230**	**173,077**
Foreign currency translation	(1,493)	2,237	(62)	(461)	221
Additions	–	–	5,827	4,599	10,426
Disposals	–	–	(3,725)	(1,678)	(5,403)
Change in estimation	–	–	–	(174)	(174)
Amortization charge	–	–	(5,709)	(5,608)	(11,317)
Accumulated amortization and impairment on disposals	–	–	3,551	527	4,078
(Impairment)/ reversal, net (Note 13)	–	(6,641)	5	396	(6,240)
Transfers from inventory	–	–	–	5	5
Transfers from exploration and evaluation assets (Note 16)	–	–	–	1,800	1,800
Transfer (to)/from property, plant and equipment, net (Note 15)	–	–	4,838	(139)	4,699
Transfers and reclassifications	–	–	1,300	(1,300)	–
Net book value as at December 31, 2019	**98,561**	**28,960**	**19,454**	**24,197**	**171,172**
At cost	209,009	57,921	70,381	93,290	430,601
Accumulated amortization and impairment	(110,448)	(28,961)	(50,927)	(69,093)	(259,429)
Net book value as at December 31, 2019	**98,561**	**28,960**	**19,454**	**24,197**	**171,172**
At cost	169,139	58,164	62,322	81,195	370,820
Accumulated amortization and impairment	(69,085)	(24,800)	(48,893)	(54,965)	(197,743)
Net book value as at December 31, 2018	**100,054**	**33,364**	**13,429**	**26,230**	**173,077**
At cost	167,782	50,312	57,238	71,162	346,494
Accumulated amortization and impairment	(69,085)	(1,249)	(43,557)	(47,398)	(161,289)
Net book value as at December 31, 2017	**98,697**	**49,063**	**13,681**	**23,764**	**185,205**

Carrying amount of goodwill is allocated to each of the group of cash-generating units as follows:

Cash-generating unit	2019	2018	2017
Downstream Romania	1,140	1,145	990
Other	8,868	8,905	7,703
Cash-generating units of KMGI	10,008	10,050	8,693
Cash-generating units of PNHZ	88,553	88,553	88,553
Other	–	1,451	1,451
Total goodwill	**98,561**	**100,054**	**98,697**

In 2019, 2018 and 2017, based on the impairment test results, no impairment of PNHZ and other goodwill was recognized. For the detailed discussion of goodwill impairment test refer to Note 4.

18. BANK DEPOSITS

In millions of tenge	2019	2018	2017
Denominated in US dollar	390,598	414,578	1,656,763
Denominated in tenge	21,940	22,031	28,228
Denominated in other currency	–	2,707	2,473
Less: allowance for expected credit losses	(508)	(560)	–
	412,030	**438,756**	**1,687,464**

As at December 31, 2019, the weighted average interest rate for long-term bank deposits was 1.08% in US dollars and 2.58% in tenge, respectively (2018: 1.05% in US dollars and 3.73% in tenge, respectively and 2017: 1.07% in US dollars and 2.29% in tenge, respectively).

As at December 31, 2019, the weighted average interest rate for short-term bank deposits was 1.57% in US dollars, 8.33% in tenge, respectively (2018: 2.40% in US dollars, 8.20% in tenge and 0.06% in other foreign currencies, respectively and 2017: 1.65% in US dollars, 7.51% in tenge and 0.65% in other foreign currencies, respectively).

In millions of tenge	2019	2018	2017
Maturities under 1 year	359,504	386,459	1,638,941
Maturities between 1 and 2 years	1,029	155	836
Maturities over 2 years	51,497	52,142	47,687
	412,030	**438,756**	**1,687,464**

As at December 31, 2019 bank deposits include cash pledged as collateral of 50,046 million tenge (2018: 51,538 million tenge and 2017: 62,731 million tenge), which are represented mainly by 37,916 million tenge (2018: 37,729 million tenge and 2017: 32,100 million tenge) at restricted bank accounts designated as a liquidation fund per requirements of subsoil use contracts.

19. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES

In millions of tenge	Main activity	Place of business	December 31, 2019 Carrying value	December 31, 2019 Percentage ownership	December 31, 2018 Carrying value	December 31, 2018 Percentage ownership	December 31, 2017 Carrying value	December 31, 2017 Percentage ownership
Joint ventures								
Tengizchevroil LLP	Oil and gas exploration and production	Kazakhstan	2,377,207	20.00%	1,970,533	20.00%	1,353,084	20.00%
Kashagan B.V.	Oil and gas exploration and production	Kazakhstan	2,057,795	50.00%	2,053,621	50.00%	1,743,495	50.00%
Asia Gas Pipeline LLP	Construction and operation of the gas pipeline		168,086	50.00%	–	50.00%	–	50.00%
Mangistau Investments B.V.	Oil and gas development and production	Kazakhstan	158,867	50.00%	138,549	50.00%	135,781	50.00%
Beineu-Shymkent Pipeline LLP	Construction and operation of the gas pipeline	Kazakhstan	101,766	50.00%	34,411	50.00%	17,701	50.00%
KazRosGas LLP	Processing and sale of natural gas and refined gas products	Kazakhstan	79,849	50.00%	65,116	50.00%	33,761	50.00%
Ural Group Limited BVI	Oil and gas exploration and production	Kazakhstan	47,662	50.00%	70,874	50.00%	78,031	50.00%
KazGerMunay LLP	Oil and gas exploration and production	Kazakhstan	25,620	50.00%	38,349	50.00%	47,537	50.00%
Kazakhoil-Aktobe LLP	Production of crude oil	Kazakhstan	21,438	50.00%	25,773	50.00%	22,716	50.00%
Teniz Services LLP	Design, construction and operation of infrastructure facilities, support of offshore oil operations	Kazakhstan	19,277	48.996%	16,945	48.996%	6,134	48.996%
Valsera Holding BV	Oil refining	Kazakhstan	12,776	50.00%	23,790	50.00%	36,737	50.00%
Other			41,014		28,258		22,649	
Associates								
Caspian Pipeline Consortium (CPC)	Transportation of liquid hydrocarbons	Kazakhstan / Russia	359,173	20.75%	289,586	20.75%	195,095	20.75%
PetroKazakhstan Inc. (PKI)	Exploration, production and processing of oil and gas	Kazakhstan	95,320	33.00%	116,577	33.00%	115,920	33.00%
Other			24,534		23,062		14,989	
			5,590,384		4,895,444		3,823,630	

All of the above joint ventures and associates are strategic for the Group's business.

As at December 31, 2019, the Group's share in unrecognized losses of joint ventures and associates was equal to 17,812 million tenge (2018: 77,440 million tenge and 2017: 175,623 million tenge). The Group's change in share of unrecognized losses of joint ventures and associates in 2019 was 59,628 million tenge (2018: 98,182 million tenge and 2017: 182,191 million tenge).

The following table summarizes the movements in the investments in 2019, 2018 and 2017:

In millions of tenge	2019	2018	2017
At January 1	**4,895,444**	**3,823,630**	**3,718,920**
Effect of adoption of IFRS 9 as at January 1, 2018	–	(3,237)	–
Share in profits of joint ventures and associates, net (Note 7)	827,979	697,326	414,950
Other changes in the equity of the joint venture	(3,803)	494	10,630
Acquisition, net	–	3,084	3
Guarantees issued	11,162	–	–
Dividends received	(126,461)	(159,988)	(271,783)
Change in dividends receivable	7,433	3,702	(39,889)
Contribution without change in ownership	5,889	1,467	–
Refund of contribution without change in ownership	–	(93,072)	(1,715)
Eliminations and adjustments[1]	(7,043)	17,071	(20,722)
Reversal of impairment of investments	–	–	14,845
Transfers to assets classified as held for sale	–	–	(67)
Foreign currency translation	(20,216)	604,967	(1,542)
At December 31	**5,590,384**	**4,895,444**	**3,823,630**

[1] Equity method eliminations and adjustments of unrealized income from sale of inventory from a JV to a subsidiary and capitalized borrowing costs of the loans provided by the Company and subsidiaries to JVs.

On October 16, 2015, the Group sold 50% of its shares in KMG Kashagan B.V. to Samruk-Kazyna with a right to buy back all or part of the shares effective from January 1, 2018 to December 31, 2020 (further "Option"). On December 20, 2017, the exercise period for the call option was changed to January 1, 2020 and December 31, 2022. As of December 31, 2019, 2018 and 2017, the price of the option was insignificant.

The Amsterdam Court imposed certain restrictions on 50% of shares in Kashagan B.V. owned by Samruk-Kazyna (further restrictions). During the restriction period, these shares of Kashagan B.V. cannot be sold, transferred or pledged. As of December 31, 2019 the restrictions remained in force and control over the asset was not transferred to the Group.

In 2018, refund of contribution without change in ownership mainly relates to the partial withdrawal of investments in MIBV of 249 million US dollars (equivalent to 92,582 million tenge).

The following tables illustrate summarized financial information of material joint ventures, based on financial statements of these entities for 2019:

In millions of tenge	Tengizchevroil LLP	KMG Kashagan B.V.	Asia Gas Pipeline LLP	Mangistau Investments B.V.	Beineu-Shymkent Pipeline LLP	KazRosGas LLP
Non-current assets	16,276,182	4,087,310	1,395,615	433,950	482,553	10,176
Current assets, including	975,247	273,048	578,072	114,571	171,411	195,666
Cash and cash equivalents	45,128	74,330	136,318	16,091	11,918	83,674
Non-current liabilities, including	(4,137,239)	(499,989)	(1,225,064)	(148,898)	(354,711)	(148)
Non-current financial liabilities	(2,563,353)	(581)	(1,050,532)	(49,553)	(342,836)	–
Current liabilities, including	(1,228,155)	(201,781)	(412,451)	(80,495)	(145,277)	(45,996)
Current financial liabilities	(44,762)	(194)	(379,633)	(400)	(119,557)	–
Equity	**11,886,035**	**3,658,588**	**336,172**	**319,128**	**153,976**	**159,698**
Share of ownership	20%	50%	50%	50%	50%	50%
Goodwill	–	228,501	–	–	–	–
Consolidation adjustments	–	–	–	(697)	24,778	–
Carrying amount of the investments as at December 31, 2019	**2,377,207**	**2,057,795**	**168,086**	**158,867**	**101,766**	**79,849**
Revenue	6,231,720	443,545	785,250	836,474	172,894	306,259
Depreciation, depletion and amortization	(874,694)	(175,119)	(74,734)	(70,250)	(16,028)	(280)
Finance income	9,428	5,377	9,674	159	–	2,384
Finance costs	(39,896)	(41,813)	(90,669)	(8,772)	(26,563)	–
Income tax expense	(889,194)	(57,794)	(113,177)	(51,818)	–	(8,625)
Profit for the year from continuing operations	**2,074,701**	**26,228**	**428,204**	**165,766**	**112,387**	**30,311**
Other comprehensive (loss)/income	(41,327)	(17,880)	–	485	–	(846)
Total comprehensive income	**2,033,374**	**8,348**	**428,204**	**166,251**	**112,387**	**29,465**
Change in unrecognized share of losses	–	–	46,016	–	–	–
Dividends received	–	–	–	61,872	–	–

The following tables illustrate summarized financial information of material joint ventures, based on financial statements of these entities for 2019:

In millions of tenge	Ural Group Limited BVI	KazGerMunay LLP	Kazakhoil-Aktobe LLP	TenizService LLP	Valsera Holding BV
Non-current assets	218,689	118,312	53,020	335,845	564,128
Current assets, including	729	42,245	19,326	51,621	80,995
Cash and cash equivalents	714	37,401	11,947	6,953	41,660
Non-current liabilities, including	(123,902)	(40,343)	(6,533)	(117,580)	(513,735)
Non-current financial liabilities	(94,532)	–	–	–	(507,803)
Current liabilities, including	(192)	(68,975)	(22,937)	(230,542)	(90,320)
Current financial liabilities	–	–	–	(1,360)	(27,035)
Equity	**95,324**	**51,239**	**42,876**	**39,344**	**41,068**
Share of ownership	50%	50%	50%	48.996%	50%
Consolidation adjustments	–	–	–	–	(7,758)
Carrying amount of the investments as at December 31, 2019	**47,662**	**25,620**	**21,438**	**19,277**	**12,776**
Revenue	–	191,297	61,597	257,944	132,246
Depreciation, depletion and amortization	(13)	(50,605)	(11,886)	(194,344)	(25,790)
Finance income	–	227	185	3	21
Finance costs	(27,471)	(1,348)	(91)	(25,434)	(34,425)
Income tax expense	(1,688)	(73,148)	113	–	(22,964)
Profit/(loss) for the year from continuing operations	**(37,790)**	**35,121**	**19,445**	**13,760**	**(12,214)**
Other comprehensive (loss)/income	(627)	(216)	–	–	(85)
Total comprehensive income/(loss)	**(38,417)**	**34,905**	**19,445**	**13,760**	**(12,299)**
Change in unrecognized share of losses	–	–	–	–	–
Dividends received	–	30,183	9,057	4,410	757

The following tables illustrate summarized financial information of material joint ventures, based on financial statements of these entities for 2018:

In millions of tenge	Tengizchevroil LLP	KMG Kashagan B.V.	Asia Gas Pipeline LLP	Mangistau Investments B.V.	Beineu-Shymkent Pipeline LLP	KazRosGas LLP
Non-current assets	12,922,783	4,156,425	1,460,389	407,888	441,704	11,563
Current assets, including	1,057,016	382,203	548,679	72,748	198,892	141,406
Cash and cash equivalents	203,864	111,112	14,907	15,318	139,385	19,910
Non-current liabilities, including	(2,780,571)	(705,486)	(1,710,805)	(125,106)	(496,648)	(133)
Non-current financial liabilities	(1,536,800)	(778)	(1,642,324)	(49,946)	(487,373)	–

In millions of tenge	Tengizchevroil LLP	KMG Kashagan B.V.	Asia Gas Pipeline LLP	Mangistau Investments B.V.	Beineu-Shymkent Pipeline LLP	KazRosGas LLP
Current liabilities, including	(1,346,563)	(184,826)	(390,294)	(77,576)	(104,498)	(22,604)
Current financial liabilities	(36,670)	(194)	(363,250)	(451)	(93,024)	–
Equity	**9,852,665**	**3,648,316**	**(92,031)**	**277,954**	**39,450**	**130,232**
Share of ownership	20%	50%	50%	50%	50%	50%
Accumulated unrecognized share of losses	–	–	46,016	–	–	–
Goodwill	–	229,463	–	–	–	–
Consolidation adjustments	–	–	–	(428)	14,686	–
Carrying amount of the investments as at December 31, 2018	**1,970,533**	**2,053,621**	**–**	**138,549**	**34,411**	**65,116**
Revenue	5,941,474	438,662	766,661	839,356	150,793	244,346
Depreciation, depletion and amortization	(685,434)	(180,246)	(83,523)	(60,373)	(15,540)	(134)
Finance income	19,426	2,954	7,480	857	303	1,255
Finance costs	(136,761)	(42,366)	(100,922)	(8,006)	(28,277)	(377)
Income tax expense	(941,034)	(38,996)	–	(56,904)	–	(13,163)
Profitfor the year from continuing operations	**2,195,746**	**68,067**	**211,332**	**193,707**	**33,420**	**10,509**
Other comprehensive (loss)/ income	1,270,679	552,184	–	(319)	–	17,231
Total comprehensive income	**3,466,425**	**620,251**	**211,332**	**193,388**	**33,420**	**27,740**
Change in unrecognized share of losses	–	–	105,666	–	–	–
Dividends received	64,671	–	–	–	–	14,181

The following tables illustrate summarized financial information of material joint ventures, based on financial statements of these entities for 2018:

In millions of tenge	Ural Group Limited BVI	KazGerMunay LLP	Kazakhoil-Aktobe LLP	TenizService LLP	Valsera Holding BV
Non-current assets	239,908	131,604	58,965	520,242	610,463
Current assets, including	216	75,131	19,332	53,449	56,343
Cash and cash equivalents	183	64,921	5,526	792	25,283
Non-current liabilities, including	(98,145)	(43,798)	(10,744)	(299,007)	(482,303)
Non-current financial liabilities	(73,500)	–	–	(3,836)	(481,398)
Current liabilities, including	(231)	(86,239)	(16,007)	(240,100)	(129,621)
Current financial liabilities	–	–	–	(3,847)	(27,818)
Equity	**141,748**	**76,698**	**51,546**	**34,584**	**54,882**
Share of ownership	50%	50%	50%	48.996%	50%
Consolidation adjustments	–	–	–	–	(3,651)
Carrying amount of the investments as at December 31, 2018	**70,874**	**38,349**	**25,773**	**16,945**	**23,790**
Revenue	1	234,732	61,838	173,006	93,342
Depreciation, depletion and amortization	(14)	(33,376)	(5,037)	(108,005)	(9,280)
Finance income	–	1,119	180	1	108
Finance costs	(9,031)	(1,062)	(740)	(19,468)	(4,105)
Income tax expense	(1,788)	(95,496)	(21,360)	(1,249)	8,630
Profit/(loss) for the year from continuing operations	**(37,645)**	**55,829**	**18,114**	**28,363**	**(15,978)**
Other comprehensive (loss)/ income	22,023	4,809	–	–	–
Total comprehensive income/ (loss)	**(15,622)**	**60,638**	**18,114**	**28,363**	**(15,978)**
Change in unrecognized share of losses	–	–	–	–	–
Dividends received	–	42,706	6,000	2,597	1,306

The following tables illustrate summarized financial information of material joint ventures, based on financial statements of these entities for 2017:

In millions of tenge	Tengizchevroil LLP	KMG Kashagan B.V.	Asia Gas Pipeline LLP	Mangistau Investments B.V.	Beineu-Shymkent Pipeline LLP	KazRosGas LLP
Non-current assets	8,719,902	3,784,723	1,572,551	393,189	442,257	27,019
Current assets, including	1,527,677	172,993	519,333	66,799	139,272	150,968
Cash and cash equivalents	748,523	49,410	9,070	3,090	71,939	30,877
Non-current liabilities, including	(2,507,496)	(563,263)	(2,058,444)	(66,129)	(464,527)	–
Non-current financial liabilities	(1,329,320)	–	(2,015,735)	–	(457,760)	–
Current liabilities, including	(974,662)	(304,431)	(331,506)	(122,297)	(110,972)	(69,021)
Current financial liabilities	(31,719)	(272,148)	(297,654)	–	(91,095)	–
Equity	**6,765,421**	**3,090,022**	**(298,066)**	**271,562**	**6,030**	**108,966**
Share of ownership	20%	50%	50%	50%	50%	50%
Goodwill	–	198,484	–	–	–	–
Accumulated unrecognized share of losses	–	–	149,033	–	–	–
Consolidation adjustments	–	–	–	–	14,686	(20,722)
Carrying amount of the investments as at December 31, 2017	**1,353,084**	**1,743,495**	**–**	**135,781**	**17,701**	**33,761**
Revenue	4,357,947	183,119	587,429	635,903	79,097	243,527
Depreciation, depletion and amortization	(560,817)	(90,258)	(64,333)	(62,190)	(13,235)	(638)
Finance income	22,007	1,025	3,757	126	21	2,489
Finance costs	(127,134)	(36,557)	(86,077)	(5,788)	(24,649)	(13,362)
Income tax expense	(621,385)	(3,750)	(89,287)	(34,036)	–	(11,907)
Profit/(loss) for the year fromcontinuingoperations	**1,449,898**	**(20,417)**	**269,647**	**99,210**	**38,485**	**17,244**
Other comprehensive (loss)/income	7,518	(10,897)	–	(229)	–	(1,939)
Total comprehensive income/(loss)	**1,457,416**	**(31,314)**	**269,647**	**98,981**	**38,485**	**15,305**
Change in unrecognized share of losses	–	–	134,824	–	19,911	–
Dividends received	79,694	–	–	105,523	–	18,647

The following tables illustrate summarized financial information of material joint ventures, based on financial statements of these entities for 2017:

In millions of tenge	Ural Group Limited BVI	KazGerMunay LLP	Kazakhoil-Aktobe LLP	TenizService LLP	Valsera Holding BV
Non-current assets	219,833	131,808	49,854	514,174	417,763
Current assets, including	57	46,381	19,768	72,382	55,449
Cash and cash equivalents	47	37,914	6,004	4,636	17,663
Non-current liabilities, including	(63,640)	(28,691)	(7,431)	(419,764)	(211)
Non-current financial liabilities	(54,733)	–	–	(12,536)	–
Current liabilities, including	(188)	(54,424)	(16,759)	(154,273)	(399,527)
Current financial liabilities	–		(6,847)	(7,290)	(327,332)
Equity	**156,062**	**95,074**	**45,432**	**12,519**	**73,474**
Share of ownership	50%	50%	50%	48.996%	50%
Accumulated unrecognized share of losses	**–**	**–**	**–**	**–**	**–**
Consolidation adjustments	–	–	–	–	–
Carrying amount of the investments as at December 31, 2017	**78,031**	**47,537**	**22,716**	**6,134**	**36,737**
Revenue	8	184,616	56,047	3,467	60,808
Depreciation, depletion and amortization	(20)	(34,072)	(17,062)	(378)	(5,027)
Finance income	17	1,306	212	39	411
Finance costs	**(1,891)**	**(1,014)**	**(2,473)**	**(116)**	**(66)**
Income tax expense	(691)	(53,071)	2,416	(645)	(4,373)
Profit/(loss) for the year from continuing operations	**(3,754)**	**35,427**	**(33,576)**	**3,375**	**19,502**
Other comprehensive (loss)/income	(219)	(664)	–	–	(118)
Total comprehensive income/(loss)	(3,973)	34,763	(33,576)	3,375	19,384
Change in unrecognized share of losses	–	–	–	–	–
Dividends received	–	40,445	–	–	2,377

The following tables illustrate summarized financial information of material associates, based on their financial statements for 2019:

In millions of tenge	2019	
	CPC	PKI
Non-current assets	1,992,524	330,021
Current assets	99,635	55,086
Non-current liabilities	(38,825)	(69,474)
Current liabilities	(499,392)	(26,785)
Equity	**1,553,942**	**288,848**
Share of ownership	20.75%	33%
Goodwill	36,730	–
Carrying amount of the investment as at December 31	**359,173**	**95,320**
Revenue	867,450	131,688
Depreciation, depletion and amortization	(178,032)	(49,236)
Finance income	10,720	425
Finance costs	(52,453)	(2,769)
Income tax expense	(111,797)	(20,904)
Profit for the year	341,537	(55,286)
Other comprehensive income	(6,181)	(1,473)
Total comprehensive income	**335,356**	**(56,759)**
Dividends received	**–**	**15,004**

The following tables illustrate summarized financial information of material associates, based on their financial statements for 2018:

In millions of tenge	2018	
	CPC	PKI
Non-current assets	2,147,362	410,710
Current assets	105,910	91,815
Non-current liabilities	(350,304)	(45,218)
Current liabilities	(685,130)	(104,043)
Equity	**1,217,838**	**353,264**
Share of ownership	20.75%	33%
Goodwill	36,885	–
Carrying amount of the investment as at December 31	**289,586**	**116,577**
Revenue	757,734	163,263
Depreciation, depletion and amortization	(224,968)	(26,267)
Finance income	32,779	387
Finance costs	(96,267)	(2,564)
Income tax expense	(40,715)	(40,085)
Profit for the year	279,348	44,213
Other comprehensive income	176,033	40,886
Total comprehensive income	**455,381**	**85,099**
Dividends received	**–**	**24,914**

The following tables illustrate summarized financial information about a material associates, based on its financial statements for 2017:

In millions of tenge	2017	
	CPC	PKI
Non-current assets	2,042,156	356,152
Current assets	95,627	84,904
Non-current liabilities	(756,148)	(59,123)
Current liabilities	(595,179)	(30,659)
Equity	**786,456**	**351,274**
Share of ownership	20.75%	33%
Goodwill	31,905	–
Carrying amount of the investment as at December 31	**195,095**	**115,920**
Revenue	647,478	137,912
Depreciation, depletion and amortization	(141,191)	(26,442)

In millions of tenge	2017	
	CPC	PKI
Finance income	13,043	246
Finance costs	(78,910)	(3,279)
Income tax expense	(49,237)	(20,965)
Profit for the year	263,450	21,921
Other comprehensive income/(loss)	16,354	(992)
Total comprehensive income	**279,804**	**20,929**
Dividends received	**–**	**20,453**

The following tables illustrate aggregate financial information of individually immaterial joint ventures (the Group's proportional share):

In millions of tenge	2019	2018	2017
Non-current assets	143,772	121,289	125,404
Current assets	52,488	45,979	37,468
Non-current liabilities	(110,096)	(131,980)	(127,415)
Current liabilities	(62,503)	(37,995)	(35,006)
Goodwill	4,050	4,050	172
Impairment	(3,635)	(3,635)	(3,635)
Accumulated unrecognized share of losses	(16,938)	(30,550)	(25,661)
Carrying amount of the investments as at December 31	**41,014**	**28,258**	**22,649**
Profit for the year from continuing operations	25,069	1,999	18,233
Other comprehensive (loss)/income	–	(668)	498
Total comprehensive income	**25,069**	**1,331**	**18,731**
Unrecognized share of (loss)/income	**13,612**	**(4,807)**	**13,600**

The following tables illustrate aggregate financial information of individually immaterial associates (the Group's proportional share):

In millions of tenge	2019	2018	2017
Non-current assets	30,415	29,046	24,818
Current assets	55,185	50,178	36,648
Non-current liabilities	(10,566)	(10,469)	(12,035)
Current liabilities	(51,374)	(46,568)	(35,371)
Accumulated unrecognized share of losses	(875)	(875)	(929)
Carrying amount of the investments as at December 31	**24,534**	**23,062**	**14,989**
Profit/losses for the year from continuing operations	2,457	3,254	436
Other comprehensive income/ (loss)	(398)	3,357	250
Total comprehensive income	2,059	6,611	686
Unrecognized share of income/(loss)	–	4	(199)

20. INVENTORIES

In millions of tenge	2019	2018	2017
Materials and supplies (at cost)	116,327	115,103	98,714
Refined products (at lower of cost and net realizable value)	53,974	99,998	84,841
Gas products (at cost)	52,566	57,762	15,689
Crude oil (at cost)	58,348	39,436	51,125
	281,215	**312,299**	**250,369**

As at December 31, 2019 inventories of 47,863 million tenge are pledged as collateral (2018: 123,973 million tenge and 2017: 111,844 million tenge).

21. TRADE ACCOUNTS RECEIVABLE AND OTHER CURRENT ASSETS

In millions of tenge	2019	2018	2017
Advances paid and prepaid expenses	138,822	96,510	95,623
Taxes receivable, other than VAT	52,642	35,556	29,577
Dividends receivable	7,582	15,848	29,010
Other receivables	15,047	15,321	13,057
Other current assets	87,357	70,016	91,613
Less: allowance for expected credit losses	(39,356)	(28,528)	(62,770)
Total other current assets	**262,094**	**204,723**	**196,110**
Trade accounts receivable	430,125	540,669	525,773
Less: allowance for expected credit losses	(32,368)	(46,692)	(57,906)
Trade accounts receivable	**397,757**	**493,977**	**467,867**

As at December 31, 2019, 2018 and 2017 the above assets were non-interest bearing.

As at December 31, 2019 trade accounts receivable of 71,296 million tenge are pledged as collateral (2018: 72,695 million tenge and 2017: 58,116 million tenge).

In 2017 in connection with revocation of Delta Bank JSC ("Delta Bank") license by National Bank of RK and due to the uncertainty regarding the refund of deposits placement in Delta Bank, the Group accrued 100% provision for impairment of the deposits in the total amount of 36,161 thousand US dollars (equivalent to 13,835 million tenge) and reclassified deposits in other receivables.

Movements in the allowance for expected credit losses of trade accounts receivable and other current assets were as follows:

In millions of tenge	Individually impaired
As at December 31, 2016	**101,519**
Charge for the year, net (Note 12)	936
Written off	(977)
Transfers and reclassifications	11,856
Foreign currency translation	7,342
As at December 31, 2017	**120,676**
Effect of adoption of IFRS 9 as at January 1, 2018	3,658
Recovery for the year, net (Note 12)	(264)
Written off	(59,880)
Transfers and reclassifications	(2)
Foreign currency translation	11,032

In millions of tenge	Individually impaired
As at December 31, 2018	**75,220**
Charge for the year, net (Note 12)	14,138
Written off	(16,659)
Transfers and reclassifications	153
Foreign currency translation	(1,128)
As at December 31, 2019	**71,724**

As at December 31, the ageing analysis of trade accounts receivable is as follows:

In millions of tenge			Past due but not impaired				
	Total	Neither past due nor impaired	<30 days	30-60days	61-90 days	91-120 days	>120 days
2019	**397,757**	**364,443**	**19,633**	**5,130**	**1,808**	**1,199**	**5,544**
2018	493,977	448,671	23,935	5,018	4,504	4,822	7,027
2017	467,867	365,858	17,506	38,832	16,447	2,292	26,932

22. LOANS AND RECEIVABLES DUE FROM RELATED PARTIES

In millions of tenge	2019	2018	2017
Loans due from related parties at amortized cost	509,003	495,869	785,593
Loans due from related parties at fair value through profit or loss	214,395	263,274	–
Bonds receivable from Samruk-Kazyna	16,290	15,364	18,342
Note receivable from a shareholder of a joint venture	13,627	16,599	38,016
Lease receivable from a joint venture	4,458	–	–
Less: allowance for expected credit losses	(3,508)	(3,963)	–
	754,265	**787,143**	**841,951**

In accordance with IFRS 9, the Group reclassified certain loans as measured at fair value through profit or loss. The fair value of these loans was determined by discounting future cash flows.

The table below illustrates loans and receivables due from related parties in currencies their denominated in

In millions of tenge	2019	2018	2017
Loans due from related parties in tenge	510,240	471,541	471,798
Loans due from related parties in US dollars	206,285	280,952	311,341
Bonds receivable from Samruk-Kazyna in tenge	16,241	15,315	18,342
Note receivable from a shareholder of a joint venture in US dollars	13,627	16,599	38,016
Lease receivable from a joint venture in US dollars	4,448	–	–
Loans due from related parties in other foreign currencies	3,424	2,736	2,454
	754,265	**787,143**	**841,951**
Current portion	138,719	148,615	169,502
Non-current portion	615,546	638,528	672,449
	754,265	**787,143**	**841,951**

Movements in the allowance for expected credit losses of loans and receivables due from related parties were as follows:

In millions of tenge	
As at January 1, 2017	**–**
As at December 31, 2017	**–**
Effect of adoption of IFRS 9 as at January 1, 2018	4,611
Recovered, net	(985)
Foreign currency translation	337
As at December 31, 2018	**3,963**
Recovered, net	(447)
Foreign currency translation	(8)
As at December 31, 2019	**3,508**

23. CASH AND CASH EQUIVALENTS

In millions of tenge	2019	2018	2017
Term deposits with banks – US dollars	108,298	743,646	792,428
Term deposits with banks – tenge	210,354	195,093	115,103
Term deposits with banks – other currencies	6,450	3,492	3,279
Current accounts with banks – US dollars	633,231	538,440	306,716
Current accounts with banks – tenge	75,168	39,137	30,398
Current accounts with banks – other currencies	10,220	9,658	8,847
Cash in transit	19,991	8,914	5,538
Cash-on-hand and cheques	1,150	1,204	1,684
Less: allowance for expected credit losses	(410)	(131)	(6)
	1,064,452	**1,539,453**	**1,263,987**
Cash and cash equivalents attributable to discontinued operations	–	6,395	2,618
	1,064,452	**1,545,848**	**1,266,605**

Term deposits with banks are made for various periods of between one day and three months, depending on the immediate cash requirements of the Group.

As at December 31, 2019, the weighted average interest rate for time deposits with banks was 2.02% in US dollars, 8.84% in tenge and 0.12% in other currencies, respectively (2018: 2.84% in US dollars, 7.58% in tenge and 0.07% in other currencies, respectively, 2017: 1.04% in US dollars and 7.85% in tenge, respectively).

As at December 31, 2019, 2018 and 2017 cash and cash equivalents were not pledged as collateral.

24. EQUITY

Total number of outstanding, issued and paid shares comprises:

	December 31, 2017	Issued in 2018	December 31, 2018	Issued in 2019	December 31, 2019
Number of shares issued and paid, including	**589,399,889**	**20,719,604**	**610,119,493**	**–**	**610,119,493**
Par value of 27,726.63 tenge	137,900	–	137,900	–	137,900
Par value of 10,000 tenge	–	20,719,604	20,719,604	–	20,719,604
Par value of 5,000 tenge	59,707,029	–	59,707,029	–	59,707,029
Par value of 2,500 tenge	71,104,187	–	71,104,187	–	71,104,187
Par value of 2,451 tenge	1	–	1	–	1
Par value of 1,000 tenge	1	–	1	–	1
Par value of 921 tenge	1	–	1	–	1
Par value of 858 tenge	1	–	1	–	1
Par value of 838 tenge	1	–	1	–	1
Par value of 704 tenge	1	–	1	–	1
Par value of 592 tenge	1	–	1	–	1
Par value of 500 tenge	458,450,766	–	458,450,766	–	458,450,766
Share capital (thousands of tenge)	**709,344,505**	**207,196,040**	**916,540,545**	**–**	**916,540,545**

SHARE CAPITAL AND ADDITIONAL PAID-IN CAPITAL

As at December 31, 2019, 2018 and 2017, the Company had only one class of issued shares.

As at December 31, 2019 and 2018, common shares in the number of 239,440,103 were authorized, but not issued (2017: 260,159,707 common shares).

In 2018 the Company issued 20,719,604 common shares (2017: 5,187,152 common shares). As consideration the Company received high, medium and low pressure gas pipelines and associated facilities with the fair value of 207,196 million tenge (2017: 12,968 million tenge) that were previously recognized as additional paid-in capital and cash for 7 thousand tenge (2017: 1 thousand tenge). The gas pipelines were recognized as additional paid-in capital based on trust management agreement, which served as a mechanism until the legal title for pipelines transferred to the Group.

Additionally, in 2018 the Group increased additional paid in capital of 4,114 million tenge (2017: 13,189 million tenge), which represents the fair value of gas pipelines contributed by the Government on trust management terms.

TRANSACTIONS WITH SAMRUK-KAZYNA

In 2019 the Company provided to Samruk-Kazyna additional tranches of 54,720 million tenge (2018: 52,293 million tenge and 2017: 47,020 million tenge) under interest-free long-term financial aid agreement signed on December 25, 2015, with a current maturity in 2022. In 2019 the difference between the fair value and nominal value of additional tranches of 14,184 million tenge (2018: 10,188 million tenge and 2017: 5,716 million tenge) was recognized as transactions with Samruk-Kazyna in the consolidated statement of changes in equity.

In 2018 the Company extended the maturity period of the interest-free long-term financial aid agreement and recognized the effect of modification of 78,358 million tenge as transactions with Samruk-Kazyna in the consolidated statement of changes in equity.

In 2017 Samruk-Kazyna changed conditions of the prospectus of the second bond issue, according to which the coupon on the bonds was reduced from 4.00% to 0.50%, and recognized the modification effect of 24,020 million tenge through equity as transactions with Samruk-Kazyna in the consolidated statement of changes in equity.

DISTRIBUTIONS TO SAMRUK-KAZYNA

In 2019, the Company transferred to Samruk-Kazyna the proceeds from sale of its non-core assets of 3,853 million tenge, that were recognized as distribution to Samruk-Kazyna within the framework of Government decrees on transfer of KMG's non-core assets and in accordance with the decision of the Management Board of Samruk-Kazyna. In addition, in 2019 Group accrued and paid off 568 million tenge, distributed by Ozenmunaigas in accordance with the Government decree on housing of the residents, living in Zhana-ozen town.

In 2019, the Group fully settled its commitments of 20,900 million tenge for social facilities construction in Turkestan city recognized within distributions to Samruk-Kazyna in 2018, including additional distribution of 1,773 million tenge recognised in 2019. In addition, the Group transferred cash payments of 9,203 million tenge to fulfill its commitments of constructing the Palace of martial arts in Astana city recognized within distributions to Samruk-Kazyna in 2016-2017.

Additionally, in 2018 distributions to Samruk-Kazyna also included the results of operations of PSA LLP (subsidiary of the Group) in the total amount of 6,473 million tenge and the adjustment of the fair value of cost of gas pipelines received as a payment for the issued common shares of 10 million tenge.

In 2017 distributions to Samruk-Kazyna includes accrual of provision for construction of the Palace of martial arts in Astana city of 5,544 million tenge and the results of operations of PSA LLP in the total amount of 5,793 million tenge.

In 2017 due to transfer of obligations for reconstruction of the trade and exhibition center in Moscow to Corporate Fund "TVC Kazakhstan", the Company reversed previously recognized provision of 4,459 million tenge.

As at December 31, 2017 the Group recognized the discount on purchased bonds of "Special financial company DSFK" LLP through retained earnings of 16,756 million tenge.

DIVIDENDS

In 2019, the Group declared dividends to the non-controlling interests holders in KTO, KMGI and KMG EP (subsidiaries of the Company) in the amount of 4,138 million tenge (December 31, 2018: 6,200 million tenge and as at December 31, 2017: 13,269 million tenge).

In 2019, based on the decision of Samruk-Kazyna and National Bank of RK, the Company declared dividends for 2018 of 60.64 tenge per common share in the total amount of 36,998 million tenge. In 2018, the Company declared and paid dividends for 2017 of 61.54 tenge per common share in the total amount of 36,272 million tenge. In 2017, the Company declared dividends for 2016 of 11.32 tenge per common share in the amount of 6,672 million tenge and dividends for 2013 of 66.52 tenge per common share in the amount of 39,207 million tenge.

SHARE BUYBACK OF SUBSIDIARY – KMG EP

On 22 February 2019, KMG EP completed its preferred shares buyback program. On May 14, 2019, preferred shares were delisted from KASE. In accordance with the buyback program in 2019 KMG EP made a total buyback of outstanding preferred and ordinary shares for 2,464 million tenge (2018: 642,524 million tenge, 2017: nil) as a part of the repurchasing program of all outstanding GDR and common shares quoted on KASE.

BOOK VALUE PER SHARE

In accordance with the decision of KASE dated October 4, 2010 financial statements shall disclose book value per share (ordinary and preferred) as of the reporting date, calculated in accordance with the KASE rules.

In millions of tenge	2019	2018	2017
Total assets	14,081,915	14,015,280	13,549,958
Less: intangible assets	171,172	173,077	185,205
Less: total liabilities	5,885,259	6,872,211	6,766,353
Net assets	**8,025,484**	**6,969,992**	**6,598,400**
Number of ordinary shares	610,119,493	610,119,493	589,399,889
Book value per ordinary share	**13.154**	**11.424**	**11.195**

EARNINGS PER SHARE

In millions of tenge	2019	2018	2017
Weighted average number of common shares for basic and diluted earnings per share	601,486,325	601,486,325	588,967,626
Basic and diluted share in net profit for the period	1.899	1.137	0.891
Basic and diluted share in net profit for the period from continuing operations	1.899	1.147	0.898

NON-CONTROLLING INTEREST

The following tables illustrate information of subsidiaries in which the Group has significant non-controlling interests:

	Country of incorporation and operation	2019		2018		2017	
		Non-controlling shares	Carryingvalue	Non-controlling shares	Carrying value	Non-controlling shares	Carrying value
KazTransOil JSC	Kazakhstan	10.00%	44,733	10.00%	43,382	10.00%	42,862
KazMunayGas Exploration Production JSC	Kazakhstan	0.30%	9,733	0.50%	9,056	36.99%	779,932
Rompetrol Downstream S.R.L.	Romania	45.37%	51,591	45.37%	49,330	45.37%	46,577
Rompetrol Petrochemicals S.R.L.	Romania	45.37%	5,518	45.37%	(3,316)	45.37%	8,699
Rompetrol Vega	Romania	45.37%	(16,289)	45.37%	(21,181)	45.37%	(19,743)
Rompetrol Rafinare S.A.	Romania	45.37%	(74,441)	45.37%	(9,855)	45.37%	706
Other			17,410		13,064		10,985
			38,255		80,480		870,018

The following tables illustrate summarized financial information of subsidiaries on a stand-alone basis, in which the Group has significant non-controlling interests as at December 31, 2019 and for the year then ended:

In millions of tenge	Rompetrol Downstream S.R.L.	KazTransOil JSC	KazMunayGas Exploration Production JSC	Rompetrol Petrochemicals S.R.L.	Rompetrol Rafinare S.A.	Rompetrol Vega
Summarized statement of financial position						
Non-current assets	114,262	490,914	893,471	3,800	102,697	27,272
Current assets	135,270	104,433	1,235,457	9,024	219,194	9,511
Non-current liabilities	(56,084)	(78,008)	(75,452)	(643)	(93,091)	(24,905)
Current liabilities	(79,741)	(74,699)	(167,393)	(19)	(392,868)	(47,778)
Total equity	**113,707**	**442,640**	**1,886,083**	**12,162**	**(164,068)**	**(35,900)**
Attributable to:						
Equity holder of the Parent Company	62,116	397,907	1,876,350	6,644	(89,627)	(19,611)
Non-controlling interest	51,591	44,733	9,733	5,518	(74,441)	(16,289)
Summarized statement of comprehensive income						
Revenue	**610,232**	**239,626**	**1,119,068**	**—**	**1,316,167**	**85,831**

In millions of tenge	Rompetrol Downstream S.R.L.	KazTransOil JSC	KazMunayGas Exploration Production JSC	Rompetrol Petrochemicals S.R.L.	Rompetrol Rafinare S.A.	Rompetrol Vega
Profit/(loss) for the year from continuing operations	**6,884**	**56,653**	**272,863**	**19,830**	**(143,227)**	**10,657**
Total comprehensive income/(loss) for the year, net of tax	6,511	53,448	267,684	19,471	(141,676)	10,792
Attributable to:						
Equity holder of the Parent Company	3,557	48,045	266,518	10,637	(77,204)	5,895
Non-controlling interest	2,954	5,403	1,166	8,834	(64,472)	4,897
Dividends declared to non-controlling interests	—	(3,999)	(16)	—	—	—
Summarized cash flow information						
Operating activity	11,581	94,060	237,576	1	70,429	3,666
Investing activity	3,183	(57,033)	(368,188)	—	(26,015)	(3,541)
Financing activity	**(14,590)**	**(41,853)**	**(4,457)**	**—**	**(43,941)**	**(46)**
Net increase/(decrease) in cash and cash equivalents	**174**	**(4,630)**	**(139,237)**	**1**	**473**	**79**

The following tables illustrate summarized financial information of subsidiaries on a stand-alone basis, in which the Group has significant non-controlling interests as at December 31, 2018 and for the year then ended:

In millions of tenge	Rompetrol Downstream S.R.L.	KazTransOil JSC	KazMunayGas Exploration Production JSC	Rompetrol Petrochemicals S.R.L.	Rompetrol Rafinare S.A.	Rompetrol Vega
Summarized statement of financial position						
Non-current assets	115,878	474,493	855,098	[illegible]	226,762	25,547
Current assets	130,109	89,618	1,121,114	14,248	208,058	10,486
Non-current liabilities	(51,580)	(65,939)	(59,533)	(660)	(99,909)	(28,237)
Current liabilities	(85,683)	(68,156)	(192,006)	(20,897)	(356,631)	(54,478)
Total equity	**108,724**	**430,016**	**1,724,673**	**(7,309)**	**(21,720)**	**(46,682)**
Attributable to:						
Equity holder of the Parent Company	59,394	386,634	1,715,617	(3,993)	(11,865)	(25,501)
Non-controlling interest	49,330	43,382	9,056	(3,316)	(9,855)	(21,181)
Summarized statement of comprehensive income						
Revenue	552,546	225,400	1,189,393	74,024	1,198,576	78,746
Profit/(loss) for the year from continuing operations	**(10,087)**	**61,168**	**299,917**	**(27,398)**	**(22,771)**	**3,208**
Total comprehensive income/(loss) for the year, net of tax	**6,067**	**67,673**	**334,747**	**(26,480)**	**(23,276)**	**(3,168)**

In millions of tenge	Rompetrol Downstream S.R.L.	KazTransOil JSC	KazMunayGas Exploration Production JSC	Rompetrol Petrochemicals S.R.L.	Rompetrol Rafinare S.A.	Rompetrol Vega
Attributable to:						
Equity holder of the Parent Company	3,314	60,994	314,578	(14,466)	(12,716)	(1,731)
Non-controlling interest	2,753	6,679	20,169	(12,014)	(10,560)	(1,437)
Dividends declared to non-controlling interests	–	(6,153)	(48)	–	–	–
Summarized cash flow information						
Operating activity	8,598	97,453	276,070	(1)	42,428	1,653
Investing activity	(4,442)	(44,854)	164,487	–	(15,532)	(1,667)
Financing activity	(4,304)	(61,540)	(642,760)	(1)	(27,347)	38
Net increase/ (decrease) in cash and cash equivalents	**(148)**	**(7,592)**	**(134,732)**	**(2)**	**(451)**	**24**

The following tables illustrate summarized financial information of subsidiaries on a stand-alone basis, in which the Group has significant non-controlling interests as at December 31, 2017 and for the year then ended:

In millions of tenge	Rompetrol Downstream S.R.L.	KazTransOil JSC	KazMunayGas Exploration Production JSC	Rompetrol Petrochemicals S.R.L.	Rompetrol Rafinare S.A.	Rompetrol Vega
Summarized statement of financial position						
Non-current assets	119,373	450,726	771,619	3,418	219,853	21,455
Current assets	121,461	99,864	1,562,165	25,181	213,573	9,848
Non-current liabilities	(13,368)	(60,819)	(53,790)	(2,680)	(50,695)	(24,447)
Current liabilities	(124,809)	(65,826)	(171,272)	(6,747)	(381,175)	(50,370)
Total equity	**102,657**	**423,945**	**2,108,722**	**19,172**	**1,556**	**(43,514)**
Attributable to:						
Equity holder of the Parent Company	56,080	381,083	1,328,790	10,473	850	(23,771)
Non-controlling interest	46,577	42,862	779,932	8,699	706	(19,743)
Summarized statement of comprehensive income						
Revenue	402,786	222,450	954,506	65,576	868,443	56,964
Profit/(loss) for the year from continuing operations	**10,745**	**65,890**	**195,361**	**(4,905)**	**(1,696)**	**2,060**
Total comprehensive income/(loss) for the year, net of tax	**10,632**	**66,003**	**194,983**	**(5,079)**	**(2,357)**	**2,249**
Attributable to:						
Equity holder of the Parent Company	5,808	59,403	122,876	(2,775)	(1,288)	1,229
Non-controlling interest	4,824	6,600	72,107	(2,304)	(1,069)	1,020
Dividends declared to non-controlling interests	–	(5,961)	(7,309)	–	–	–

In millions of tenge	Rompetrol Downstream S.R.L.	KazTransOil JSC	KazMunayGas Exploration Production JSC	Rompetrol Petrochemicals S.R.L.	Rompetrol Rafinare S.A.	Rompetrol Vega
Summarized cash flow information						
Operating activity	20,967	98,946	234,063	(2)	35,474	1,223
Investing activity	(2,622)	(67,271)	44,736	–	(36,389)	(1,217)
Financing activity	(17,790)	(59,617)	(18,906)	–	(661)	8
Net increase/ (decrease) in cash and cash equivalents	**555**	**(28,424)**	**259,552**	**(2)**	**(1,576)**	**14**

25. BORROWINGS

In millions of tenge	2019	2018	2017
Fixed interest rate borrowings	3,146,477	3,029,688	3,137,182
Weighted average interest rates	5.48%	5.42%	6.30%
Floating interest rate borrowings	691,027	1,123,550	1,164,070
Weighted average interest rates	5.73%	5.70%	4.90%
	3,837,504	**4,153,238**	**4,301,252**
US dollar – denominated borrowings	3,555,347	3,927,512	4,069,683
Tenge – denominated borrowings	271,776	207,276	220,729
Euro-denominated borrowings	2,881	1,866	–
Other currencies – denominated borrowings	7,500	16,584	10,840
	3,837,504	**4,153,238**	**4,301,252**
Current portion	253,428	330,590	884,140
Non-current portion	3,584,076	3,822,648	3,417,112
	3,837,504	**4,153,238**	**4,301,252**

In 2019, the Company derecognized a loan from partners of the Pearls project for the total amount of 110,930 million tenge, including an interest of 3,543 million tenge, since the partners of the project decided to voluntarily relinquish the contract area under the Pearls PSA (Note 13).

In 2018, the Company derecognized a loan from ONGC Videsh, a partner in the Satpayev project, for the total amount of 53,263 million tenge, including an interest of 4,620 million tenge. The derecognition of the loan is related to the planned withdrawal from the project and relinquishment of the contract area to the Government.

As at December 31, 2019, 2018 and 2017, the debt securities issued and loans comprised:

				As at December 31		
Bonds	Issuance amount	Redemption date	Interest	2019	2018	2017
AIX 2019	56 billion KZT	2024	5.00%	52,843	–	–
Bonds LSE 2018	1.5 billion USD	2048	6.375%	574,230	576,571	–
Bonds LSE 2018	1.25 billion USD	2030	5.375%	482,393	484,362	–
Bonds LSE 2018	0.5 billion USD	2025	4.75%	192,764	193,533	–
Bonds LSE 2017	1.25 billion USD	2047	5.75%	468,940	477,347	412,644
Bonds LSE 2017	1 billion USD	2027	4.75%	380,413	384,384	332,128
Bonds ISE 2017	750 million USD	2027	4.375%	289,487	290,607	251,245
Bonds LSE 2017	0.5 billion USD	2022	3.88%	191,694	193,026	166,819
Bonds LSE 2014	1 billion USD	2044	6.00%	–	11,211	9,682
Bonds LSE 2014	0.5 billion USD	2025	4.875%	–	–	40,465
Bonds LSE 2013	1 billion USD	2023	4.40%	154,442	155,214	133,839
Bonds LSE 2013	2 billion USD	2043	5.75%	–	–	166,367
Bonds LSE 2010	1.5 billion USD	2020	7.00%	–	–	454,158
Bonds LSE 2010	1.25 billion USD	2021	6.375%	–	–	374,885
Bonds KASE 2009	120 billion KZT	2019	6M Libor+8.50%	–	42,721	73,637
Bonds LSE 2008	1.6 billion USD	2018	9.125%	–	–	530,055
Others				4,518	4,440	13,276
Total				2,791,724	2,813,416	2,959,200
Loans						
The Export-Import Bank of China (Eximbank)	1.13 billion USD	2027	6M Libor + 4.10%	350,042	398,978	340,200
Development bank of Kazakhstan JSC (DBK)	185 billion KZT	2022-2028	7.00%-10.20%	138,313	120,225	115,480
DBK	1.1 billion USD	2023-2025	6M Libor + 4.00%, 5.00%, 10.99%	131,022	292,594	294,632
The Syndicate of banks (Unicredit, ING Bank, BCR, Raiffeisen Bank)	360 million USD	2022	1M Libor+2.75%, 1M Libor+2.5%,1M Robor+2.00%,1W Libor +2.5%, ON Libor +2.5%, ON Euribor+2.5%	99,554	98,831	82,747
The Syndicate of banks (Citibank, N.A., London Branch, Mizuho Bank, Ltd., MUFG Bank Ltd., Société Générale, ING Bank, and ING Bank N.V.)	200 million USD	2021	3M Libor+1.35%	76,442	76,625	–
Japan Bank for International Cooperation (JBIC)	297.5 million USD	2025	2.19%+CIRR, 6 M Libor+1.10%	65,254	76,452	62,387
Halyk bank JSC (Halyk bank)	150 million USD	2024	5.00%	52,771	–	–
European Bank for Reconstruction and Development (EBRD)	68 billion KZT	2023	3M CPI + 50 basis points + 3.15%	42,940	54,408	65,373
Halyk bank	100 million USD	2020	5.00%	38,323	26,939	23,316
EBRD	39 billion KZT	2026	6M CPI + 100 basis points + 3.15%	24,573	20,359	15,620
Sperbank Russia	50 million USD	2020	COF (2.25%) + 1.50%	13,773	–	–
Loan from partners (Pearls project)	Financing for share of costs in execution of subsoil use contract	From beginning of commercial exploration	6M Libor + 1.00%	–	106,246	87,371
Loan from partners (Satpayev project)	Financing for share of costs in execution of subsoil use contract	From beginning of commercial exploration	12M Libor + 1.50%	–	–	51,214
BNP Paribas	368 million USD	2020	COF (3.18%) + 2.00%	–	25,199	14,118
Club loan (Raiffeisen/BCR/ING/Unicredit)	200 million USD	2019	3M Libor + 2.50%	–	17,684	35,697
Sberbank Russia	400 million USD	2024	12M Libor + 3.5%	–	–	134,039
Other	–	–	–	12,773	25,282	19,858
Total				1,045,780	1,339,822	1,342,052

On January 10, 2019, Atyrau Refinery LLP (ANPZ) placed indexed tenge to US dollars bonds at the Astana International Exchange (AIX) for the total amount of 56,223 million tenge (equivalent to 150 million US dollars) with interest rate of 5% and maturity of 5 years. On January 10, 2019, Samruk-Kazyna purchased these bonds for 56,223 million tenge. On January 11, 2019, ANPZ received long-term loan from Halyk bank of 150 million US dollars (equivalent to 56,195 million tenge), with 5% interest rate for the first year (since the second year the interest year is 5.25%) and maturity of 5 years.

Proceeds from the borrowings above in the total amount of 300 million US dollars (equivalent to 113,016 million tenge) were used to make an early repayment of loan principal of ANPZ borrowings from DBK, raised to fund a strategic investment project – construction of the aromatic hydrocarbons production unit. In December 2019, ANPZ received long-term loan from DBK of 32,938 million tenge with 7.99% nominal interest rate and maturity of 7 years to finance the oil processing plant modernisation.

In 2019, the Group made an additional redemption of borrowings from DBK for 77,182 million tenge and the bonds held by DBK (Bonds KASE 2009 with a number of 16 million bonds) for 43,868 million tenge, including accrued interest.

In 2019, ANPZ has made partial repayment of the loan from Eximbank for 197 million US dollars (equivalent to 74,968 million tenge), including accrued interest.

In 2019, KMG International N.V. made the repayments to BNP Paribas and partly redempt Syndicated loan a number of other banks amounted to 65 million US dollars (equivalent to 24,821 million tenge), including accrued interest, of its short-term loans used to finance working capital and for trading facilities.

[1] 8 revolving credit facility

In May 2019, KMG International N.V. made a full early repayment of its Club loan for 47 million US dollars (equivalent to 17,739 million tenge), including accrued interest.

In April, 2019, the Company made early redemption of Eurobonds with maturity date of 2044 for 31 million US dollars (equivalent to 11,909 million tenge at the date of payment), including premium, coupon payments and consent fee.

On April 24, 2018, the Company completed the placement of the Eurobonds under the 10.5 billion US dollars Global Medium Term Notes Programme established by the Company and KazMunaiGaz Finance Sub B.V. (subsidiary of the Company), in an aggregate principal amount of 3.25 billion US dollars. The Eurobonds were issued in three series, comprising (i) 500 million US dollars 4.750% Notes due 2025 (equivalent to 163,260 million tenge); (ii) 1,250 million US dollars 5.375% Notes due 2030 (equivalent to 408,150 million tenge); and (iii) US 1,500 million US dollars 6.375% Notes due 2048 (equivalent to 489,780 million tenge).

On May 4 and 11, 2018, the Company made early redemption of Eurobonds for total consideration in the total amount of 3,463 million US dollars (equivalent to 1,143,982 million tenge at the date of payment), including interest. On July 2, 2018 the Company made full redemption of debt on issued bonds on the LSE in 2008 in the total amount of 1,673 million US dollars (equivalent 570,627 million tenge), including interest.

On May 17, 2018 in accordance with the loan agreement KTG received a loan from

the Syndicate of banks of 65,832 million tenge (equivalent to: 200 million US dollars) for partial financing of the project "Construction of three compressor stations at MG "Beineu-Bozoy-Shymkent" at the rate of 3 months LIBOR + 1.35%.

In 2018, ANPZ received borrowings from Halyk bank JSC of 44,883 million tenge and fully redeemed borrowings from Halyk bank JSC of 43,665 million tenge, including accrued interest. Additionally, in 2018, ANPZ partially redeemed a loan from Eximbank of 42,448 million tenge.

In 2018, ICA, the subsidiary of KTG, received a short-term loan from Citibank N.A. Jersey Branch of 27,173 million tenge (equivalent to 85 million US dollars) at the rate of 1 month LIBOR + 2% per annum for the purpose of restructuring existing obligations. In 2018, ICA fully repaid principal under the loan agreement of 27,804 million tenge (equivalent to 85 million US dollars). In 2019 ICA partially repaid its borrowing from EBRD for 17,365 million tenge.

In 2018, the Company fully redeemed a loan from Sberbank Russia of 420 million US Dollars (equivalent to 152,989 million tenge), including accrued interest.

In 2018, KMGI made partial repayment of borrowings from Syndicated loan of 20,017 million tenge, including accrued interest.

In 2018 the Group received borrowings from DBK in the total amount of 15,933 million tenge and redeemed borrowings in the total amount of 80,419 million tenge, including interest. Additionally, the Group made a partial scheduled repayment of issued bonds held by DBK of 41,793 million tenge, including interest.

Changes in liabilities arising from financing activities

In millions of tenge	2019	2018	2017
On January 1	4,153,238	4,301,252	3,274,415
Received by cash	271,772	1,248,834	1,506,706
Repayment of debt for purchased property plant and equipment	–	33,216	135,393
Interest paid	(238,354)	(248,341)	(216,528)
Repayment of principal	(444,656)	(2,069,977)	(680,202)
Interest accrued (Note 14)	225,093	250,055	217,246
Interest capitalized (Note 15)	2,525	21,715	26,532
Discount	(7,781)	(6,528)	(15,552)
Derecognition of liabilities (Note 14)	(111,476)	(53,263)	–
Interest accrued for bond redemption (Note 14)	–	89,612	–
Foreign currency translation	(10,953)	385,144	70,415
Foreign exchange loss/gain	(7,366)	189,251	(13,492)
Other	5,462	12,268	(3,681)
On December 31	**3,837,504**	**4,153,238**	**4,301,252**
Current portion	253,428	330,590	884,140
Non-current portion	3,584,076	3,822,648	3,417,112

COVENANTS

The Group is required to ensure execution of the financial and non-financial covenants under the terms of the loan agreements. Failure to comply with financial covenants gives the lenders the right to demand early repayment of loans. As of December 31, 2019, 2018 and 2017, the Group complied with all financial and non-financial covenants.

In 2018 and 2017, the Group had limitations in terms of the acceptance of debt obligations according to the terms and conditions of the Eurobond documentation of international bonds issues. Thus, the debt increase was limited to the need to comply with a financial ratio, which was defined as the ratio of consolidated net debt to the total amount of the consolidated earnings before interest, taxes, depreciation and amortization (EBITDA) with a threshold value of 3.5. As of December 31, 2019, December 31, 2018 and December 31, 2017, the Group complied with this restrictive condition. In 2019 the Company received a consent from the Eurobond holders resulting in revision of the covenant package. Accordingly, the limitation was excluded from the terms of the public debt of KMG.

HEDGE OF NET INVESTMENT IN THE FOREIGN OPERATIONS

As at December 31, 2019 certain borrowings denominated in foreign currency were designated as hedge instrument for the net investment in the foreign operations. These borrowings are being used to hedge the Group's exposure to the US Dollar foreign exchange risk on these investments. In 2019 gain of 10,332 million tenge (2018: losses of 364,168 million tenge; 2017: income of 67,151 million tenge) on the translation of these borrowings were transferred to other comprehensive income and offset translation gains and losses of the net investments in the subsidiaries (foreign operations).

There is an economic relationship between the hedged item and the hedging instrument as the net investment creates a translation risk that will match the foreign exchange risk on the US Dollars borrowings. The Group has established a hedge ratio of 1:1 as the underlying risk of the hedging instrument is identical to the hedged risk component. The hedge ineffectiveness will arise when the amount of the investment in the foreign subsidiary becomes lower than the amount of the fixed rate borrowings.

26. PROVISIONS

In millions of tenge	Asset retirement obligations	Provision for environmen-tal obligation	Provision for taxes	Provision for gas transpor-tation	Employee benefit obligations	Other	Total
As at December 31, 2016	**91,544**	**47,402**	**48,047**	**24,361**	**32,378**	**34,253**	**277,985**
Foreign currency translation	10	(52)	15	–	3,807	(1)	3,779
Change in estimate	(1,248)	(458)	–	(70)	–	62	(1,714)
Unwinding of discount	8,333	1,609	–	–	3,040	68	13,050
Provision for the year	3,488	10,902	7,305	–	4,214	12,946	38,855
Transfer to assets held for sale	–	(33)	–	–	–	(58)	(91)
Recovered	(678)	–	(16,528)	–	–	(5,457)	(22,663)
Use of provision	(903)	(1,164)	(11,162)	–	(3,091)	(10,294)	(26,614)
As at December 31, 2017	**100,546**	**58,206**	**27,677**	**24,291**	**40,348**	**31,519**	**282,587**
Foreign currency translation	1,930	5,491	10	1	41	2,097	9,570
Change in estimate	4,657	344	–	3,791	–	(85)	8,707
Unwinding of discount	9,232	2,291	–	–	3,204	133	14,860
Provision for the year	654	–	18,445	–	7,374	45,173	71,646
Recovered	(133)	(43)	(24,903)	–	–	(6,410)	(31,489)
Use of provision	(650)	(3,319)	(895)	–	(3,488)	(19,219)	(27,571)
Transfers and reclassifications	–	8	–	–	–	(50)	(42)
As at December 31, 2018	**116,236**	**62,978**	**20,334**	**28,083**	**47,479**	**53,158**	**328,268**
Foreign currency translation	(83)	(167)	(13)	(118)	–	69	(312)
Change in estimate	25,990	(7)	–	–	–	50	26,033
Unwinding of discount	10,005	3,670	–	–	3,559	144	17,378
Provision for the year	4,618	2,888	4,393	–	11,568	40,473	63,940
Recovered	(208)	(4,490)	(5,865)	–	–	(18,116)	(28,679)
Use of provision	(2,164)	(4,526)	(1,147)	–	(3,547)	(16,677)	(28,061)
Transfers and reclassifications	–	–	482	–	–	(1,922)	(1,440)
As at December 31, 2019	**154,394**	**60,346**	**18,184**	**27,965**	**59,059**	**57,179**	**377,127**

Provision for gas transportation relates to the Group's commitment on reimbursement of losses incurred by PetroChina International Co.Ltd (PetroChina). Under the agreement on gas borrowing the Group has commitments to PetroChina to reimburse the supported costs and losses incurred by PetroChina due to gas borrowing and its return. Detailed description of significant provisions, including critical estimates and judgments used, is included in Note 4.

Current portion and long-term portion are segregated as follows:

In millions of tenge	Asset retirement obligations	Provision for environmental obligation	Provisionfor taxes	Provision for gas transportation	Employee benefit obligations	Other	Total
As at December 31, 2019							
Current portion	805	7,728	18,184	27,965	6,425	42,431	103,538
Long-term portion	153,589	52,618	–	–	52,634	14,748	273,589
As at December 31, 2019	**154,394**	**60,346**	**18,184**	**27,965**	**59,059**	**57,179**	**377,127**
As at December 31, 2018							
Current portion	1,994	6,103	20,334	28,083	2,830	39,127	98,471
Long-term portion	114,242	56,875	–	–	44,649	14,031	229,797
As at December 31, 2018	**116,236**	**62,978**	**20,334**	**28,083**	**47,479**	**53,158**	**328,268**
As at December 31, 2017							
Current portion	1,543	5,922	27,677	24,291	2,689	16,690	78,812
Long-term portion	99,003	52,284	–	–	37,659	14,829	203,775
As at December 31, 2017	**100,546**	**58,206**	**27,677**	**24,291**	**40,348**	**31,519**	**282,587**

27. OIL SUPPLY AGREEMENT

In 2016, the Group entered into long-term crude oil and liquefied petroleum gas ("LPG") supply agreement, which involves a prepayment. These prepayments for oil represent contract liability and were accounted for in accordance with IFRS 15. The agreement stipulated pricing calculation with reference to market quotes and prepayments were settled through physical deliveries of crude oil and LPG. The total minimum delivery volume approximates 38.4 million tons of crude oil and 1.25 million ton of LPG in the period from the date of the contract to June and August 2021.

The Group accrued interest for 19,541 million tenge (2018: 35,868 million tenge, 2017: 26,473 million tenge) with interest rate of Libor + 1.85% (Note 14).

The Group fully settled the prepayment through oil and LPG delivery on November 29, 2019.

28. TRADE ACCOUNTS PAYABLE AND OTHER CURRENT LIABILITIES

In millions of tenge	2019	2018 (Reclassed)	2017 (Reclassed)
Contract liabilities	184,362	106,385	87,917
Due to employees	51,613	51,362	60,546
Financial guarantees	5,866	1,831	1,171
Dividends payable	354	1,750	1,852
Other	60,821	74,835	50,454
Total other current liabilities	**303,016**	**236,163**	**201,940**
Trade accounts payable	**667,861**	**632,739**	**513,851**

Trade accounts payable is denominated in the following currencies as of December 31:

In millions of tenge	2019	2018	2017
Tenge	328,538	260,094	218,849
US dollars	280,742	301,784	240,165
Romanian Leu	42,740	45,125	42,582
Euro	3,196	7,188	2,789
Other currency	12,645	18,548	9,466
Total	**667,861**	**632,739**	**513,851**

As at December 31, 2019, 2018 and 2017, trade accounts payable and other current liabilities were not interest bearing.

29. OTHER TAXES PAYABLE

In millions of tenge	2019	2018	2017
Rent tax on crude oil export	29,586	33,184	27,365
Mineral extraction tax	19,037	28,039	26,161
VAT	19,376	19,117	19,448
Individual income tax	6,135	6,603	6,581
Social tax	4,639	4,197	5,620
Excise tax	2,163	2,885	2,888
Withholding tax from non-residents	1,873	2,868	4,545
Other	3,857	8,133	8,590
	86,666	**105,026**	**101,198**

30. INCOME TAX EXPENSES

As at December 31, 2019 income taxes prepaid of 54,517 million tenge (2018: 53,143 million tenge, 2017: 36,135 million tenge) are represented by corporate income tax. As at December 31, 2019 income taxes payable of 13,011 million tenge (2018: 13,272 million tenge, 2017: 10,081 million tenge) are represented mainly by excess profit tax and corporate income tax.

Income tax expense comprised the following for the years ended December 31:

In millions of tenge	2019	2018	2017
Current income tax			
Corporate income tax	146,658	160,011	112,227
Excess profit tax	11,291	(1,128)	5,137
Withholding tax on dividends and interest income	12,893	25,517	21,967
Deferred income tax			
Corporate income tax	(1,999)	10,093	22,394
Excess profit tax	(4,904)	(7,850)	(1,275)
Withholding tax on dividends	62,241	92,617	29,835
Income tax expenses	**226,180**	**279,260**	**190,285**

According to the 2006 amendments to the tax legislation, which were effective starting from the fiscal years beginning on January 1, 2007, dividends received from Kazakhstan taxpayers were exempt from income tax withheld at the source of payment. Therefore, in 2006 the Group reversed the deferred tax liability on undistributed profits of subsidiaries, joint ventures and associates registered in the Republic of Kazakhstan, which was recognized in prior years. However, during 2007-2019 the Group was receiving dividends from Tengizchevroil LLP (20% joint venture of the Group, a Kazakhstan taxpayer) net of withholding tax since there is uncertainty whether the withholding tax exemption is applicable for the stable tax regime of Tengizchevroil LLP. The Group was challenging withholding of the tax on those dividends, but has not managed to convince Tengizchevroil LLP and the tax authorities that withholding tax should not be applied. Therefore, Management of the Group recognizes the deferred income tax withholding on its interest in undistributed retained earnings of Tengizchevroil LLP as its current best estimate is that the Group will continue to receive dividends net of withholding tax in future years.

A reconciliation of income tax expenses applicable to profit before income tax at the statutory income tax rate (20% in 2019-2017) to income tax expenses was as follows for the years ended December 31:

In millions of tenge	2019	2018	2017
Profit before income tax from continuing operations	1,384,631	969,318	719,399
Profit/(loss) before income tax from discontinued operations	6	3,493	(3,405)
Statutory tax rate	20%	20%	20%
Income tax expense on accounting profit	**276,927**	**194,562**	**143,199**
Share in profit of joint ventures and associates	(103,138)	(73,593)	(39,493)
Other non-deductible expenses and non-taxable income	36,913	61,618	41,106
Excess profit tax	6,387	(8,978)	3,861
Effect of different corporate income tax rates	13,047	13,149	3,234
Change in unrecognized deferred tax assets	(3,956)	92,542	38,640
	226,180	**279,300**	**190,547**
Income tax expense attributable to continued operations	**226,180**	**279,260**	**190,285**
Income tax expense attributable to discontinued operations	**–**	**40**	**262**
	226,180	279,300	190,547

Deferred tax balances, calculated by applying the statutory tax rates effective at the respective reporting dates to the temporary differences between the tax basis of assets and liabilities and the amounts reported in the consolidated financial statements, are comprised of the following at December 31:

In millions of tenge	2019				2018				2017			
	Corporate income tax	Excess profit tax	Withholding tax	Total	Corporate income tax	Excess profit tax	Withholding tax	Total	Corporate income tax	Excess profit tax	Withholding tax	Total
Deferred tax assets												
Property, plant and equipment	34,880	–	–	34,880	36,803	(1,916)	–	34,887	53,100	(2,214)	–	50,886
Tax loss carryforward	556,446	–	–	556,446	574,356	–	–	574,356	462,368	–	–	462,368
Employee related accruals	5,182	82	–	5,264	6,732	–	–	6,732	7,017	233	–	7,250
Impairment of financial assets	11	–	–	11	8	–	–	8	4	–	–	4
Environmental liability	4,572	256	–	4,828	4,445	–	–	4,445	4,249	217	–	4,466
Other	51,985	3,893	–	55,878	51,583	–	–	51,583	40,470	1,345	–	41,815
Less: unrecognized deferred tax assets	(532,114)	–	–	(532,114)	(536,070)	–	–	(536,070)	(443,528)	–	–	(443,528)
Less: deferred tax assets offset with deferred tax liabilities	(50,721)	(758)	–	(51,479)	(38,060)	–	–	(38,060)	(24,580)	–	–	(24,580)
Deferred tax assets	**70,241**	**3,473**	**–**	**73,714**	**99,797**	**(1,916)**	**–**	**97,881**	**99,100**	**(419)**	**–**	**98,681**
Deferred tax liabilities												
Property, plant and equipment	191,989	7,608	–	199,597	208,108	6,365	–	214,473	153,438	15,712	–	169,150
Undistributed earnings of joint venture	–	–	356,581	356,581	–	–	295,580	295,580	–	–	202,963	202,963
Other	4,763	–	–	4,763	7,605	–	–	7,605	33,205	–	–	33,205
Less: deferred tax assets offset with deferred tax liabilities	(50,721)	(758)	–	(51,479)	(38,060)	–	–	(38,060)	(24,580)	–	–	(24,580)
Deferred tax liabilities	**146,031**	**6,850**	**356,581**	**509,462**	**177,653**	**6,365**	**295,580**	**479,598**	**162,063**	**15,712**	**202,963**	**380,738**
Net deferred tax liability	**75,790**	**3,377**	**356,581**	**435,748**	**77,856**	**8,281**	**295,580**	**381,717**	**62,963**	**16,131**	**202,963**	**282,057**

The movements in the deferred tax liability/ (asset) were as follows:

In millions of tenge	2019				2018				2017			
	Corporate income tax	Excess profit tax	Withhol-ding tax	Total	Corporate income tax	Excess profit tax	Withhol-ding tax	Total	Corporate income tax	Excess profit tax	Withhol-ding tax	Total
Net deferred tax liability as at January 1	**77,856**	**8,281**	**295,580**	**381,717**	**62,963**	**16,131**	**202,963**	**282,057**	**40,547**	**17,407**	**173,127**	**231,081**
Foreign currency translation	1,112	–	(1,240)	(128)	4,714	–	–	4,714	(120)	(1)	1	(120)
Tax expense/(income) during the year recognized in profit and loss	(1,999)	(4,904)	62,241	55,338	10,093	(7,850)	92,617	94,860	22,394	(1,275)	29,835	50,954
Tax (income)/expense during the year recognized in OCI	(1,179)	–	–	(1,179)	86	–	–	86	142	–	–	142
Net deferred tax liability as at December 31	**75,790**	**3,377**	**356,581**	**435,748**	**77,856**	**8,281**	**295,580**	**381,717**	**62,963**	**16,131**	**202,963**	**282,057**

Deferred corporate income tax and excess profit tax are determined with reference to individual subsoil use contracts. Deferred corporate income tax is also determined for activities outside of the scope of subsoil use contracts. A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available against which the asset can be utilized. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realized. Unrecognized deferred tax asset arising mainly from tax losses carry forward amounted to 532,114 million tenge as at December 31, 2019 (2018: 536,070 million tenge, 2017: 443,528 million tenge).

Tax losses carry forward as at December 31, 2019, 2018 and 2017 in the Republic of Kazakhstan expire for tax purposes after ten years from the date they are incurred.

31. RELATED PARTY DISCLOSURES

TERMS AND CONDITIONS OF TRANSACTIONS WITH RELATED PARTIES

Related party transactions were made on terms agreed between the parties that may not necessarily be at market rates, except for certain regulated services, which are provided based on the tariffs available to related and third parties. Outstanding balances at the year-end are mainly unsecured and interest free and settlement occurs in cash, except as indicated below. The Group recognizes allowances for expected credit losses on amounts owed by related parties.

TRANSACTIONS BALANCES

The following table provides the balances of transactions with related parties as at December 31, 2019, 2018 and 2017:

In millions of tenge		Due from related parties	Due to related parties	Cash and deposits placed with related parties	Borrowings payable to related parties
Samruk-Kazyna entities	2019	327,597	6,168	–	52,843
	2018	268,396	3,656	52	–
	2017	289,084	1,703	54	–
Associates	2019	56,331	3,814	–	–
	2018	116,670	2,089	–	–
	2017	154,954	3,748	–	–
Other state-controlled parties	2019	6,381	712	192,548	269,335
	2018	157	8,813	–	455,540
	2017	–	8,753	2,676	489,949
Joint ventures	2019	519,351	217,027	–	–
	2018	508,260	174,042	–	–
	2017	556,564	194,182	–	–

DUE FROM RELATED PARTIES

Samruk-Kazyna entities

As at December 31, 2019 due from Samruk-Kazyna entities is mainly represented by the financial aid provided to Samruk-Kazyna for 307,568 million tenge and bonds of 16,241 million tenge (2018: 244,878 million tenge and 15,315 million tenge, 2017: 259,835 million tenge and 18,342 million tenge) (Note 24).

Associates

As at December 31, 2019 due from associates was mainly represented by the loan to CPC provided by KPV of 8,691 million tenge (2018: 20,682 million tenge, 2017: 27,402 million tenge) and “Kazakhstan Note” of 38,670 million tenge (2018: 89,018 million tenge, 2017: 121,510 million tenge). The “Kazakhstan Note” is the subordinated debt issued by CPC to the Government in exchange for Kazakstani pipeline assets transferred to CPC on May 16, 1997. In 2015, the Government contributed the right to claim payments under "Kazakhstan Note" to the share capital of the Company.

Joint ventures

As at December 31, 2019 due from joint ventures were mainly represented by the loan given to BeineuShymkent Pipelines of 202,669 million tenge (2018: 226,319 million tenge, 2017: 207,557 million tenge), PKOP of 110,172 million tenge (2018: 133,531 million tenge, 2017: 133,676 million tenge), UGL of 48,752 million tenge (2018: 37,669 million tenge, 2017: 28,049 million tenge) and advances paid to TCO for 92,435 million tenge (2018: 56,753 million tenge, 2017: 52,539 million tenge) under crude oil and LPG purchase contract (Note 27).

Joint ventures

As at December 31, 2019 due to joint ventures were mainly represented by accounts payable to BeineuShymkent Pipelines of 95,908 million tenge (2018: 39,429 million tenge, 2017: 55,131 million tenge) and Asia Gas Pipeline for gas transportation of 39,323 million tenge (2018: 23,596 million tenge, 2017: 27,143 million tenge), and accounts payable for gas purchases from KazRosGas for 30,477 million tenge (2018: 50,845 million tenge, 2017: 25,395 million tenge).

CASH AND DEPOSITS PLACED WITH RELATED PARTIES

Other state-controlled parties

As at December 31, 2019 the cash and deposits placed with related parties are mainly attributable placed deposit by the Company for 500 million US dollars (equivalent to 192,547 million tenge) at market rate.

BORROWINGS PAYABLE TO RELATED PARTIES

Other state-controlled parties

As at December 31, 2019 the borrowings payable to related parties are represented by loans received from DBK by ANPZ, PNHZ and KTG of 269,335 million tenge (loans and bonds payable to DBK 2018: 455,540 million tenge, 2017: 483,749 million tenge) (Note 25).

PROCEEDS FROM LOANS GIVEN TO RELATED PARTIES

In 2019 the Group received proceeds from principal and interest redemption of the loan issued to PKOP for 29,949 million tenge (2018: 28,110 million tenge, in 2017: 7,392 million tenge), CPC for 12,656 million tenge (2018: 11,609 million tenge, 2017: 9,077 million tenge), BeineuShymkent Pipelines for 31,988 million tenge (2018: 12,775 million tenge, 2017: nil), and proceeds from interest on the “Kazakhstan Note” for 47,663 million tenge (2018: 44,822 million tenge, 2017: 35,143 million tenge).

TRANSACTIONS TURNOVER

The following table provides the total amount of transactions, which have been entered into with related parties during 2019, 2018 and 2017:

In millions of tenge		Sales to related parties	Purchases from related parties	Interest earned from related parties	Interest incurred to related parties
Samruk-Kazyna entities	2019	42,250	20,030	24,054	2,841
	2018	63,951	25,372	23,370	–
	2017	66,161	29,897	28,365	–
Associates	2019	19,565	40,930	8,892	–
	2018	23,150	22,529	9,800	–
	2017	9,598	38,648	10,414	–
Other state-controlled parties	2019	7,149	3,540	1,300	20,728
	2018	157	48,882	–	29,748
	2017	–	2,942	–	25,694
Joint ventures	2019	307,075	1,511,600	43,324	11,183
	2018	321,806	1,487,044	27,264	3,258
	2017	318,155	1,000,164	25,869	10,769

SALES TO RELATED PARTIES

Joint ventures

In 2019 sales to joint ventures were mainly represented by transportation and cargo servicing provided to TCO for 64,246 million tenge (2018: 43,896 million tenge, 2017: 44,225 million tenge), transportation charges and oil servicing provided to Mangistaumunaigas for 59,235 million tenge (2018: 56,927 million tenge, 2017: 55,615 million tenge) for 79,281 million tenge (2018: 70,255 million tenge, 2017: 66,949 million tenge, respectively), respectively.

PURCHASES FROM RELATED PARTIES

Joint ventures

In 2019 purchases from joint ventures were mainly attributable to purchases of crude oil and LPG from TCO to perform the oil delivery customer contract (Note 27) for 1,131,890 million tenge (2018: 1,132,908 million tenge, 2017: 819,258 million tenge).

KEY MANAGEMENT EMPLOYEE COMPENSATION

Total compensation to key management personnel (members of the Boards of directors and the Management boards) included in general and administrative expenses in the accompanying consolidated statement of comprehensive income was equal to 11,399 million tenge, 8,999 million tenge and 9,022 million tenge for the years ended December 31, 2019, 2018 and 2017, respectively. Compensation to key management personnel mainly consists of contractual salary and performance bonus based on operating results.

32. FINANCIAL RISK MANAGEMENT, OBJECTIVES AND POLICIES

The Group's principal financial instruments mainly consist of borrowings, loans given, financial guarantees, cash and cash equivalents, bank deposits as well as accounts receivable and accounts payable. The Group is exposed to interest rate risk, foreign currency risk, credit risk and liquidity risk. The Group further monitors the market risk and liquidity risk arising from all financial instruments.

Market risk

The Group takes on exposure to market risks. Market risks arise from open positions in interest rate, currency, and securities, all of which are exposed to general and specific market movements. The Group manages market risk through periodic estimation of potential losses that could arise from adverse changes in market conditions and establishing appropriate margin and collateral requirements. The sensitivity analyses in the following sections relate to the position as of December 31, 2019, 2018 and 2017.

Foreign currency risk

As a result of significant borrowings and accounts payable denominated in the US dollars, the Group's consolidated statement of financial position can be affected significantly by movement in the US dollar / tenge exchange rates. The Group also has transactional currency exposures. Such exposure arises from revenues in the US dollars. The Group has a policy on managing its foreign currency risk in US dollar by matching US dollar denominated financial assets with US dollar denominated financial liabilities. The following table demonstrates the sensitivity to a reasonably possible change in the US dollar exchange rate, with all other variables held constant, of the Group's profit before income tax (due to changes in the cash flows of monetary assets and liabilities). The sensitivity of possible the changes in exchange rates for other currencies are not considered due to its insignificance to the consolidated financial results of Group's operations.

In millions of tenge	Increase/ (decrease) in tenge to US dollar exchange rate	Effect on profit before tax
2019	+12%	(291,448)
	(9%)	218,586
2018	+14%	(260,693)
	(10%)	186,209
2017	+10%	(96,953)
	(10%)	96,953

Interest rate risk

Interest rate risk is the risk that the value of a financial instrument will fluctuate due to changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's long-term borrowings with floating interest rates. The Group's policy is to manage its interest rate cost using a mix of fixed and variable rate borrowings. The following table demonstrates the sensitivity to a reasonably possible change in interest rates, with all other variables held constant, of the Group's profit before income tax (through the impact on floating rate borrowings) and equity. There is no significant impact on the Group's equity.

In millions of tenge	Increase/ decrease in basis points	Effect on profit before tax
2019	+0.35	(2,419)
LIBOR	**(0.35)**	**2,419**
2018	+0.50	(5,618)
LIBOR	**(0.15)**	**1,685**
2017	+0.70	(6,776)
LIBOR	**(0.08)**	**763**

CREDIT RISK

The Group trades only with recognized, creditworthy parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. In addition, receivable balances are monitored on an ongoing basis with the result that the Group's exposure to bad debts is not significant. The maximum exposure is the carrying amount as disclosed in Note 14. There are no significant concentrations of credit risk within the Group.

With respect to credit risks arising on other financial assets of the Group, which comprise cash and cash equivalents, bank deposits, trade accounts receivable, bonds receivable, loans and notes receivable and other financial assets, the Group's exposure to credit risks arises from default of the counterparty, with a maximum exposure equal to the carrying amount of these instruments.

The table below shows the balances of major subsidiaries' cash and cash equivalents, short-term and long-term deposits (Notes 23 and 18) held in banks at the reporting date using the Standard and Poor's credit ratings.

In millions of tenge		Rating[1]					
Banks	Location	2019	2018	2017	2019	2018	2017
Halyk Bank	Kazakhstan	BB (stable)	BB (stable)	BB (stable)	566,642	666,844	622,931
Rabobank	the Netherlands	A+ (stable)	A+ (positive)	A+ (positive)	210,252	70,462	81,923
National Bank RK	Kazakhstan	BBB- (stable)	-	-	192,548	–	–
Credit Agricole Corporate	the United Kingdom	A+ (stable)	A+(stable)	A+ (positive)	86,993	123,199	–
Mizuho Bank Ltd	the United Kingdom	A (positive)	A (stable)	A (stable)	61,014	149,381	373,030
Deutsche Bank	the Netherlands	BBB+ (stable)	BBB+ (stable)	A- (negative)	55,880	124,145	88,991
Citibank	Kazakhstan	A+(stable)	A+(stable)	A+(stable)	44,080	7,031	2,032
MUFG Bank (Bank of Tokyo-Mitsubishi UFJ)	the United Kingdom	A (positive)	A (positive)	A (stable)	33,998	218,600	464,530
ING Bank	the Netherlands	A+(stable)	A+ (stable)	A+ (stable)	10,331	23,690	170,385
HSBC	United Kingdom	AA- (negative)	AA- (stable)	AA- (stable)	2,991	2,450	113,090
Societe Generale	Switzerland	A (positive)	A (positive)	A (stable)	52	189	164,779
Societe Generale	the United Kingdom	–	A (positive)	A (stable)	–	149,326	314,734
Citibank	the United Arab Emirates	–	A+(stable)	A+(stable)	–	149,293	50,034
Sumitomo Mitsui Banking Corporation	the United Kingdom	–	A (positive)	A (positive)	–	149,290	–

1. The Group excludes from the maturity profile table the loans payable to project partners under the carry-in financing agreements (Note 25), due to the uncertainty of maturity of these loans.

In millions of tenge		Rating[1]					
Banks	Location	2019	2018	2017	2019	2018	2017
BNP Paribas	the United Kingdom	–	A (positive)	BB+ (stable)	–	22	162,829
	Kazakhstan	–	–	B+ (negative)	–	2	78,657
Other banks					190,560	134,167	256,284
					1,455,341	1,968,091	2,944,229

Continued support by the state bodies of the Republic of Kazakhstan is a key assumption in management's conclusions that no additional recognition of expected credit losses are required, and is based on management's review of all available information at the date of approval of the consolidated financial statements.

LIQUIDITY RISK

Liquidity risk is the risk that the Group will encounter difficulty in raising funds to meet commitments associated with its financial liabilities. Liquidity risk may result from an inability to sell a financial asset quickly at close to its fair value.

Liquidity requirements are monitored on a regular basis and management ensures that sufficient funds are available to meet any commitments as they arise.

The table below summarises the maturity profile of the Group's financial liabilities at December 31, 2019, 2018 and 2017 based on contractual undiscounted payments.

In millions of tenge	On demand	Due later than one month but not later than three months	Due later than three month but not later than one year	Due later than one year but not later than five years	Due after 5 years[1]	Total
As at December 31, 2019						
Borrowings[1]	68,135	15,905	325,822	1,750,799	4,358,675	6,519,336
Trade accounts payable	255,550	368,492	43,819	–	–	667,861
Financial guarantees[2]	–	22,082	65,337	318,978	626	407,023
Lease liabilities	4,922	204	5,795	26,026	10,419	47,366
Other financial liabilities	13,249	8,391	8,570	8,207	1,901	40,318
	341,856	**415,074**	**449,343**	**2,104,010**	**4,371,621**	**7,681,904**
As at December 31, 2018						
Borrowings[1]	121,164	49,988	335,828	1,837,612	4,624,005	6,968,597
Trade accounts payable	269,538	352,008	11,193	–	–	632,739
Financial guarantees[2]	–	4,205	11,655	168,548	183,076	367,484
Lease liabilities	1,157	194	1,530	6,866	35	9,782
Other financial liabilities	11,012	14,530	17,772	–	–	43,314
	402,871	**420,925**	**377,978**	**2,013,026**	**4,807,116**	**8,021,916**

1. The Group excludes from the maturity profile table the loans payable to project partners under the carry-in financing agreements (Note 25), due to the uncertainty of maturity of these loans.
2. The Group includes financial guarantees to the maturity profile table, however, the cash outflow in relation to financial guarantees is subject to certain conditions. Financial guarantee is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because of specified debtor fails to make payment when due in accordance with the original or modified terms of debt instrument. In 2017, 2018 and 2019 there was no instances of financial guarantees execution.

In millions of tenge	On demand	Due later than one month but not later than three months	Due later than three month but not later than one year	Due later than one year but not later than five years	Due after 5 years[1]	Total
As at December 31, 2017						
Borrowings[1]	78,839	51,491	942,639	2,218,917	2,649,616	5,941,502
Trade accounts payable	249,845	177,151	86,855	–	–	513,851
Financial guarantees[2]	–	4,488	13,465	105,156	190,656	313,765
Lease liabilities	176	101	1,641	5,597	142	7,657
Other financial liabilities	5,260	20,201	4,183	–	–	29,644
	334,120	**253,432**	**1,048,783**	**2,329,670**	**2,840,414**	**6,806,419**

CAPITAL MANAGEMENT

The primary objective of the Group's capital management is to maximise the shareholder value. The Group manages its capital to ensure that Group will be able to continue as a going concern while maximising the return to stakeholders through the optimisation of the debt and equity balance.

The Company seeks to maintain a prudent capital structure to support its capital investment plans and maintain investment grade credit rating through the cycle. Maintaining sufficient financial flexibility is considered strategically important to mitigate industry cyclicality while also enabling the pursuit of organic and inorganic investment opportunities.

The Company has a comprehensive and disciplined internal approval process for capital expenditures, new projects and debt incurrence.

For the purpose of the Group's capital management, the capital structure of the Group consists of borrowings disclosed in Note 25 less cash and short-term deposits and equity, comprising share capital, additional paid-in capital, other reserves and retained earnings as disclosed in Note 24.

The Group's management regularly reviews the capital structure. As part of this review, management considers the cost of capital and the risks associated with each class of capital. Also to achieve this overall objective, the Group's capital management, among other things, aims to ensure that it meets financial covenants attached to borrowings that define capital structure requirements. There have been no breaches of the financial covenants of any borrowing in the years ended December 31, 2017, 2018 and 2019 (Note 25).

In millions of tenge	2019	2018	2017
Borrowings	3,837,504	4,153,238	4,301,252
less: cash and short term bank deposits	1,423,956	1,925,912	2,902,928
Net debt	2,413,548	2,227,326	1,398,324
Equity	8,196,656	7,143,069	6,783,605
Capital and net debt	10,610,204	9,370,395	8,181,929

No changes were made in the overall strategy, objectives, policies or processes for managing capital during the years ended December 31, 2017, 2018 and 2019.

FAIR VALUES OF FINANCIAL INSTRUMENTS AND INVESTMENT PROPERTY

The fair value of bonds receivable from the Samruk-Kazyna and other debt instruments have been calculated by discounting the expected future cash flows at market interest rates.

All financial instruments for which fair value is recognized or disclosed are categorized within the fair value hierarchy, based on the lowest level input that is significant to the fair value measurement as a whole, as follows:

Level 1 – quoted (unadjusted) market prices in active markets for identical assets or liabilities;

Level 2 – valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable;

Level 3 – valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

There were no transfers between Level 1 and Level 2 during the reporting period, and no transfers into or out of Level 3 the fair value measurement.

For assets and liabilities that are recognized at fair value on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period. There were no changes in the Group's valuation processes, valuation techniques, and types of inputs used in the fair value measurements during the year.

The carrying amount of the Group financial instruments as at December 31, 2019, 2018 and 2017 are reasonable approximation of their fair value, except for the financial instruments disclosed below:

In millions of tenge	2019					2018					2017				
	Carrying amount	Fair value	Fair value by level of assessment			Carrying amount	Fair value	Fair value by level of assessment			Carrying amount	Fair value	Fair value by level of assessment		
			Level 1	Level 2	Level 3			Level 1	Level 2	Level 3			Level 1	Level 2	Level 3
Bonds receivable from Samruk-Kazyna	16,241	18,835	–	18,835	–	15,315	20,444	–	20,444	–	18,342	21,807	–	21,807	–
Debts issued to related parties at amortised cost and lease receivable from a joint venture	510,002	506,868	–	304,422	202,446	491,955	484,657	–	245,278	239,379	785,593	791,667	–	264,078	527,589
Fixed interest rate borrowings	3,146,477	3,576,082	3,172,400	403,682	–	3,029,688	2,972,627	2,726,332	246,295	–	3,137,182	3,230,352	2,996,478	233,874	–
Floating interest rate borrowings	691,027	714,271	–	714,271	–	1,123,550	1,153,454	–	1,153,454	–	1,164,070	1,186,192	–	1,186,192	–

1. The Group excludes from the maturity profile table the loans payable to project partners under the carry-in financing agreements (Note 25), due to the uncertainty of maturity of these loans.
2. The Group includes financial guarantees to the maturity profile table, however, the cash outflow in relation to financial guarantees is subject to certain conditions. Financial guarantee is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because of specified debtor fails to make payment when due in accordance with the original or modified terms of debt instrument. In 2017, 2018 and 2019 there was no instances of financial guarantees execution.

33. CONSOLIDATION

The following direct significant subsidiaries have been included in these consolidated financial statements:

Significant entities	Main activity	Country of	Percentage ownership		
				2018	2017
KazMunayGas Exploration Production JSC	Exploration and production	Kazakhstan	99.70%	99.50%	63.01%
KazMunayTeniz LLP	Exploration and production	Kazakhstan	100.00%	100.00%	100.00%
KMG Karachaganak LLP	Exploration and production	Kazakhstan	100.00%	100.00%	100.00%
KazTransOil JSC	Oil transportation	Kazakhstan	90.00%	90.00%	90.00%
KazMorTransFlot LLP	Oil transportation and construction	Kazakhstan	100.00%	100.00%	100.00%
KazTransGas JSC	Gas transportation	Kazakhstan	100.00%	100.00%	100.00%
Cooperative KazMunayGas PKI U.A.	Переработка и реализация нефтепродуктов	Нидерланды	100,00 %	100,00 %	100,00 %
	Refinery and marketing of oil products	Netherlands	100.00%	100.00%	100.00%
Atyrau Refinery LLP	Refinery	Kazakhstan	99.53%	99.53%	99.53%
Pavlodar oil chemistry refinery LLP	Refinery	Kazakhstan	100.00%	100.00%	100.00%
KMG International N.V.	Refinery and marketing of oil products	Romania	100.00%	100.00%	100.00%
KazMunayGas Onimdery LLP	Marketing of oil products	Kazakhstan	100.00%	100.00%	100.00%
KazMunayGas-Service LLP	Service projects	Kazakhstan	100.00%	100.00%	100.00%

34. CONTINGENT LIABILITIES AND COMMITMENTS

OPERATING ENVIRONMENT

Kazakhstan continues economic reforms and development of its legal, tax and regulatory frameworks as required by a market economy. The future stability of the Kazakhstan economy is largely dependent upon these reforms and developments and the effectiveness of economic, financial and monetary measures undertaken by the government.

COMMODITY PRICE RISK

The Group generates most of its revenue from the sale of commodities, primarily crude oil and oil products. Historically, the prices of these products have been volatile and have fluctuated widely in response to changes in supply and demand, market uncertainty, the performance of the global or regional economies and cyclicality in industries.

Prices may also be affected by government actions, including the imposition of tariffs and import duties, speculative trades, an increase in capacity or an oversupply of the Group's products in its main markets. These external factors and the volatility of the commodity markets make it difficult to estimate future prices.

A substantial or extended decline in commodity prices would materially and adversely affect the Group's business and the consolidated financial results and cash flows of operations. The Group does not hedge significantly its exposure to the risk of fluctuations in the price of its products.

TAXATION

Kazakhstan's tax legislation and regulations are subject to ongoing changes and varying interpretations. Instances of inconsistent opinions between local, regional and national tax authorities are not unusual, including opinions with respect to IFRS treatment of revenues, expenses and other items in the financial statements. The current regime of penalties and interest related to reported and discovered violations of Kazakhstan's tax laws are severe. Due to uncertainties associated with Kazakhstan's tax system, the ultimate amount of taxes, penalties and interest, if any, may be in excess of the amount expensed to date and accrued at December 31, 2019.

As at December 31, 2019, Management believes that its interpretation of the relevant legislation is appropriate and that it is probable that the Group's tax positions will be sustained, except as provided for or otherwise disclosed in these consolidated financial statements.

TRANSFER PRICING CONTROL

Transfer pricing control in Kazakhstan has a very wide scope and applies to many transactions that directly or indirectly relate to international business regardless of whether the transaction participants are related or not. The transfer pricing legislation requires that all taxes applicable to transaction participants are related or not. The transfer pricing legislation requires that all taxes applicable to a transaction should be calculated based on market price determined in accordance with the arm's length principle. The law on transfer pricing came into force in Kazakhstan from January 1, 2009. The law is not explicit and there is little precedence with some of its provisions. Moreover, the law is not supported by detailed guidance, which is still under development. As a result, application of transfer pricing control to various types of transactions is not clearly regulated. Because of the uncertainties associated with the Kazakhstan transfer pricing legislation, there is a risk that the tax authorities may take a position that differs from the Group's position, which could result in additional taxes, fines and interest at December 31, 2019. As at December 31, 2019 management believes that its interpretation of the transfer pricing legislation is appropriate and that it is probable that the Group's positions with regard to transfer pricing will be sustained.

ENVIRONMENTAL AUDIT AT JSC "EMBAMUNAIGAS" (EMBAMUNAIGAS)

Since 2018 Embamunaigas, the Group subsidiary, has been subject to three ecological audits for the periods from November 2017 to December 2018. During 2018 Embamunaigas accrued 34,213 million and paid-off in total 8,143 million tenge. As a result, the provision as of December 31, 2018 amounted to 26,070 million tenge in the consolidated financial statements for 2018.

During 2019 to avoid late payment penalties, Embamunaigas paid-off 6,472 million tenge. In the meantime, in 2019, the court ruled to decrease the amount of fines, and accordingly Embamunaigas reversed 25,433 million tenge, net, and filed tax return to offset earlier recognized provision of 10,420 million tenge as prepayment for other taxes. As a result, the provision amounted to 4,585 million tenge as at December 31, 2019.

LEGAL ISSUES AND CLAIMS

KMG DRILLING & SERVICES LLP (KMG DS) LITIGATIONS WITH CONSORTIUM OF COMPANIES ERSAI CASPIAN CONTRACTOR LLP AND CASPIAN OFFSHORE AND MARINE CONSTRUCTION LLP

KMG DS, the subsidiary of the Group, was involved in arbitration proceedings with the Consortium of Ersai Caspian Contractor LLP and Caspian Offshore & Marine Construction Kazakhstan LLP (further - "Consortium" or "Plaintiff") on the issues arising from the contract for the purchase of integrated works on construction of a jack-up floating drilling rig dated 5 July 2012. The initial claim amounted to 192 million US dollars (equivalent to 73,501 million tenge) and was under arbitration of the London Court of International Arbitration (LCIA). The claim components were as follows:

- Compensation related to the increase in the cost of the contract (deficiencies in the project documentation and changes in the design solution) of 140,118 thousand US dollars (equivalent to 53,833 million tenge);
- A penalty of 1,383 thousand US dollars (equivalent to 531 million tenge);
- The amount of claims for currency adjustment of 50,613 thousand US dollars (equivalent to 19,446 million tenge).

The Plaintiffs indicated a possible change in this amount at the date of payment of the claim.

On April 11, 2018, after negotiations the Consortium reduced the initial claim amount and reduced it to 140 million dollars (equivalent to 54.3 billion tenge). There was uncertainty regarding the result of the resolution, as such, as at December 31, 2018 and 2017 the Group did not recognize any provision on this case. During 2019, KMG DS has filed a counter claim against the Consortium.

On November 8, 2019, the Group sent a notification to LCIA to suspend the proceedings as parties decided to resolve the dispute by peaceful means.

As of December 31, 2019 in accordance with the legal advice and existing international practices, the Group accrued a provision of 90,000 thousand US dollars (equivalent to 34,132 million tenge at the exchange rate for December 31, 2019) in the general and administrative expenses (Note 12) in the statement of comprehensive income. As of the date of the issue of the consolidated financial statements the negotiations were under way with the Consortium.

CIVIL LITIGATION (KMG I)

According to a Decree issued April 22, 2016, Prosecutor's Office of Romania with the General Headquarters of the Department for Fight Against Organized Crime and Terrorism (DIICOT) investigated the case against 26 suspects under charges of organized crime (14 of them were employees of KMGI).

On July 22, 2016 the Company and KMG I submitted to the Romanian authorities the Notice of Investment Dispute based on the Agreement between the Government of Romania and the Government of the Republic of Kazakhstan, the Agreement between the Government of the Kingdom of the Netherlands and the Government of Romania and the Energy Charter Treaty. Based on the results of the negotiations, in February 2013, a Memorandum of Understanding was signed between the Government of Romania and KMG I.

On December 5, 2019 Prosecutor's Office of Romania issued another Ordinance according to which the criminal charges were dismissed because the statute of limitations expired. The same decree lifted all seizures on Rompetrol Rafinare S.A. assets imposed in 2016, with the exception of a number of production facilities at Petromidia Refinery to provide for potential claims of US Dollars 106.5 million US dollars.

On December 27, 2019 KMG I challenged the Ordinance and requires the case to be dismissed on merits, but statute of limitations expired.

A complaint was filed by 3 plaintiffs on the decision of the Romanian Prosecutor's Office: 1) The Romanian Privatization Agency regarding the improper fulfillment by KMGI of the post-privatization requirements for the obligations of Petromidia Refinery and Vega Refinery in 2013-2014 in the amount of 30 million US dollars; 2) Faber Invest & Trade Inc., the non-controlling shareholder of KMG I subsidiaries, in challenging a number of decisions of KMGI as a shareholder of Rompetrol Rafinare S.A. at that time, in the amount of 55 million US dollars in criminal and civil cases; 3) Mr. Stephenson George Philip, the former director of KMG I, in criminal and civil matters. As of the date of these consolidated financial statements for the year ended 31 December 2019, the Group did not receive any communication from the court.

DISPUTES REGARDING THE CALCULATION OF THE PROPORTION OF PROFIT OIL SHARING WITH THE REPUBLIC OF KAZAKHSTAN (KMG KARACHAGANAK LLP)

According to the Karachaganak Final Production Sharing Agreement (FPSA), the Karachaganak project profit oil sharing is regulated by the Fairness Index. In the second quarter of 2014, the economics of the Karachaganak project reached a level where the trigger on the Fairness Index "worked" and the proportion in the profit oil sharing changed in favour of the Republic of Kazakhstan.

In addition, from August 20, 2014 to the present, the Ministry of Energy of the Republic of Kazakhstan (MinEnergy) quarterly notifies the Contracting Companies, participants of FPSA, (Contracting Companies) of disagreement regarding the presented calculation of the proportion of the profit oil sharing.

On December 30, 2016, a legally non-binding Memorandum of Understanding was signed between the Republic of Kazakhstan and the Contracting Companies.

On September 29, 2017 the competent authority represented by PSA LLP, filed a request for arbitration in the name of the Contracting Companies (with the exception of KMG Karachaganak LLP) on the improper calculation of the Fairness Index. KMG Karachaganak LLP (KMG Karachaganak) was not involved in the arbitration process due to a conflict of interest.

On October 1, 2018, the Contracting Companies entered into a non-legally binding Agreement on Principles (hereinafter referred to as the "AOP"). On June 17, 2019 the MinEnergy sent a letter to the Contracting Companies that the regulations based on AOP is not acceptable to the MinEnergy. Also MinEnergy promulgated that it is open for new discussions that are to be based on revised mechanisms of the objectivity Index.

In September 2019 in Arbitrage (Paris) the hearings took place, and the final decision is expected in 2020.

Currently, the Republic of Kazakhstan and the Contracting Companies are negotiating the conclusion of a legally binding Settlement Agreement.

KMG Karachaganak, together with the KMG and the competent authority represented by PSA LLP, prepared comments on the draft AOP between the Contracting Companies and the Republic of Kazakhstan, relating to exclusion of KMG Karachaganak from participating in the payment of compensation. In the opinion of the Group's Management, it is highly probable that KMG Karachaganak will be excluded from participation in the payment of compensation. Accordingly, no provisions have been made under the terms of the AOP in these consolidated financial statements.

COST RECOVERY AUDITS

Under the base principles of the production sharing agreements, the Government transferred to contractors the exclusive rights to conduct activities in the subsurface use area, but did not transfer rights to this subsurface use area either to ownership or lease. Thus, all extracted and processed oil (i.e. the hydrocarbons produced) are the property of the Government. Works are carried out on the basis of compensation and the Government pays to the contractors not in cash but in the form of the portion of oil production, thereby allowing the contractors to recover their costs and earn profit.

In accordance with the production sharing agreements not all costs incurred by the contractors could be reimbursed. Certain expenditures need to be approved by the authorized bodies. The authorized bodies conduct the cost recovery audits. In accordance with the costs recovery audits completed prior to December 31, 2019 certain amounts of the costs incurred by contractors were assessed as non-recoverable. The parties to the production sharing agreements are in negotiations with respect to the recoverability of those costs.

As of December 31, 2019 the Group's share in the total disputed amounts of costs is 402,474 million tenge (2018: 382,594 million tenge, 2017: 242,915 million tenge). The Group and its partners under the production sharing agreements are in negotiation with the Government with respect to the recoverability of these costs.

KAZAKHSTAN LOCAL MARKET OBLIGATION

The Government requires oil companies in the Republic of Kazakhstan to supply a portion of the products to meet the Kazakhstan domestic energy requirement on an annual basis, mainly to maintain oil products supply balance on the local market and to support agricultural producers during the spring and autumn sowing and harvest campaigns.

Kazakhstan local market oil prices are significantly lower than export prices and even lower than the normal domestic market prices determined in an arm-length transaction. If the Government does require additional crude oil to be delivered over and above the quantities currently supplied by the Group, such supplies will take precedence over market sales and will generate substantially less revenue than crude oil sold on the export market, which may materially and adversely affect the Group's business, prospects, consolidated financial position and results of operations.

In 2019, in accordance with its obligations, the Group delivered 6,223,752 tons of crude oil (2018: 6,224,344 tons, 2017: 5,407,526 tons), including joint ventures, to the Kazakhstan market.

COMMITMENTS UNDER SUBSOIL USE CONTRACTS

As at December 31, 2019 the Group had the following commitments related to minimal working program in accordance with terms of licenses, production sharing agreements and subsoil use contracts, signed with the Government:

Year	Capital expenditures	Operational expenditures
2020	212,288	42,733
2021	10,829	3,693
2022	9,389	3,410
2023-2048	8,697	25,762
Total	**241,203**	**75,598**

OIL SUPPLY COMMITMENTS

As of December 31, 2019 the Group had commitments under the oil supply agreements in the total amount of 12.8 million ton (as at December 31, 2018: 22.6 million ton and December 31, 2017: 28.7 million ton), including commitments of joint venture.

OTHER CONTRACTUAL COMMITMENTS

As at December 31, 2019, the Group, including joint ventures, had other capital commitments of approximately 335,609 million tenge (as at December 31, 2018: 620,057 million tenge and 2017: 501,752 million tenge), related to acquisition and construction of property, plant and equipment.

As at December 31, 2019, the Group had commitments in the total amount of 78,677 million tenge (as at December 31, 2018: 114,380 million tenge and 2017: 142,406 million tenge) under the investment programs approved by the joint order of Ministry of Energy of RK and Committee on Regulation of Natural Monopolies and Protection of Competition of the Ministry of National Economy of RK and aimed at capital construction/reconstruction/overhaul/diagnostic of production facilities.

NON-FINANCIAL GUARANTEES

As of December 31, 2019, 2018 and 2017, the Group has outstanding performance guarantees issued in favour of third parties whereas it provides guarantee should its subsidiary, joint venture or associate fail to perform their obligations under the natural gas purchase-sale, transportation and other agreements.

As of the reporting date the management of the Group believes that there were no cases of non-performance from the guaranteed parties and, accordingly, no obligations related to the above stated non-financial contingencies were recognized.

35. SEGMENT REPORTING

The Group's operating segments have their own structure and management according to the type of the produced goods and services provided. Moreover, all segments are strategic directions of the business which offer different types of the goods and services in different markets. The functions have been defined as the operating segments of the Group because they are segments a) that engages in business activities from which revenues are generated and expenses incurred; b) whose operating results are regularly reviewed by the Group's chief operating decision makers to make decisions. The Group's activity consists of four main operating segments: exploration and production of oil and gas, oil transportation, gas trading and transportation, refining and trading of crude oil and refined products. The Group presents KMG's activities separately, since KMG performs not only the functions of the parent company, but also carries out operational activities. The remaining operating segments have been aggregated and presented as other operating segment due to their insignificance.

Disaggregation of revenue by types of goods and services is presented in Note 6 to the financial statements.

Disaggregated revenue type Sales of crude oil and gas mainly represents sales made by the following operating segments: Gas trading and transportation of 874,505 million tenge (2018: 769,549 million tenge, 2017: 360,510 million tenge) and Refining and trading of crude oil and refined products of 3,092,437 million tenge (2018: 3,324,462 million tenge, 2017: 2,316,592 million tenge).

Disaggregated revenue type Sales of refined products mainly includes revenue of operating segments such as Refining and trading of crude oil and refined products of 1,665,356 million tenge (2018: 2,023,166 million tenge, 2017: 1,305,148 million tenge), Sales of crude oil and gas of 4,166 million tenge (2018: 87,344 million tenge, 2017: 116,392 million tenge) and Corporate of 352,056 million tenge (2018: 64,516 million tenge, 2017: nil).

Segment performance is evaluated based on revenues, net profit and EBITDA, which are measure on the same basis as in the consolidated financial statements.

EBITDA is a supplemental non-IFRS financial measure used by management to evaluate segments performance, and is defined as earnings before depreciation, depletion and amortization, finance income and expense, income tax expense.

EBITDA, % is calculated as EBITDA of each reporting segment divided by the total EBITDA.

Eliminations represent the exclusion of intra-group turnovers. Inter-segment transactions were made on terms agreed to between the segments that may not necessarily be at market rates, except for certain regulated services, which are provided based on the tariffs available to related and third parties.

The Group's property, plant and equipment are located in the following countries:

In millions of tenge	2019	2018	2017
Kazakhstan	3,751,128	3,644,969	3,276,567
Other countries	733,143	870,201	803,598
	4,484,271	**4,515,170**	**4,080,165**

The following represents information about profit and loss, and assets and liabilities of operating segments of the Group for 2019:

In millions of tenge	Exploration and production of oil and gas	Oil transportation	Gas trading and transportation	Refining and trading of crude oil and refined products	Corporate	Other	Elimination	Total
Revenues from sales to external customers	7,592	236,485	1,102,110	5,035,188	352,056	125,425	–	6,858,856
Revenues from sales to other segments	1,302,744	100,253	965	540,947	78,121	87,505	(2,110,535)	–
Total revenue	**1,310,336**	**336,738**	**1,103,075**	**5,576,135**	**430,177**	**212,930**	**(2,110,535)**	**6,858,856**
Cost of purchased oil, gas, petroleum products and other materials	(33,719)	(13,666)	(490,142)	(4,972,915)	(212,655)	(33,252)	1,842,605	(3,913,744)
Production expenses	(295,687)	(149,033)	(71,978)	(203,864)	(110,379)	(145,595)	254,843	(721,693)
Taxes other than income tax	(379,725)	(13,287)	(17,388)	(13,584)	(22,417)	(7,894)	–	(454,295)
Transportation and selling expenses	(123,725)	(1,145)	(272,174)	(69,264)	(7,137)	(3)	53,046	(420,402)
General and administrative expenses	(15,439)	(15,877)	(35,900)	(45,247)	(35,244)	(71,175)	4,915	(213,967)
Share in profit of joint ventures and associates, net	500,737	75,474	242,336	(3,248)	–	12,680	–	827,979
EBITDA	962,778	219,204	457,829	268,013	42,345	(32,309)	44,874	1,962,734
EBITDA, %	49%	11%	23%	14%	2%	-2%	2%	
Depreciation, depletion and amortization	(94,432)	(39,257)	(41,567)	(143,875)	(4,177)	(14,116)	–	(337,424)
Finance income	202,592	7,298	29,589	43,975	130,878	10,729	(184,181)	240,880
Finance costs	(21,460)	(7,095)	(43,443)	(127,391)	(264,841)	(8,333)	155,130	(317,433)
Impairment of property, plant and equipment, intangible assets, exploration and evaluation assets	(63,618)	(24,783)	816	(93,161)	(11)	(27,062)	–	(207,819)
Income tax expenses	(138,762)	(20,825)	(39,917)	(12,241)	(12,923)	(1,512)	–	(226,180)
Net profit for the year	**842,496**	**136,906**	**362,344**	**(36,553)**	**(119,657)**	**(68,083)**	**41,004**	**1,158,457**

In millions of tenge	Exploration and production of oil and gas	Oil transportation	Gas trading and transportation	Refining and trading of crude oil and refined products	Corporate	Other	Elimination	Total
Other segment information								
Investments in joint ventures and associates	4,788,314	384,173	350,732	40,304	–	26,861	–	5,590,384
Capital expenditures	256,725	44,926	91,744	79,492	14,323	18,098	–	505,308
Allowances for obsolete inventories, expected credit losses on accounts receivable, impairment of advances paid and other assets	(3,146)	(5,173)	(9,991)	(46,020)	(22,297)	(9,903)	–	(96,530)
Assets of the segment	**7,504,518**	**1,080,046**	**2,195,386**	**2,854,018**	**1,480,009**	**454,084**	**(1,486,146)**	**14,081,915**
Liabilities of the segment	**748,226**	**204,540**	**956,917**	**1,771,290**	**3,453,634**	**117,899**	**(1,367,247)**	**5,885,259**

The following represents information about profit and loss, and assets and liabilities of operating segments of the Group for 2018:

In millions of tenge	Exploration and production of oil and gas	Oil transportation	Gas trading and transportation	Refining and trading of crude oil and refined products	Corporate	Other	Elimination	Total
Revenues from sales to external customers	172,462	213,175	920,096	5,599,857	64,516	18,858	–	6,988,964
Revenues from sales to other segments	1,293,946	55,229	1,083	1,295,002	117,561	14,642	(2,777,463)	–
Total revenue	**1,466,408**	**268,404**	**921,179**	**6,894,859**	**182,077**	**33,500**	**(2,777,463)**	**6,988,964**
Cost of purchased oil, gas, petroleum products and other materials	(44,174)	(13,989)	(323,205)	(6,357,110)	(88,546)	(969)	2,515,035	(4,312,958)
Production expenses	(400,495)	(100,404)	(67,197)	(142,099)	(46,179)	(14,999)	166,898	(604,475)
Taxes other than income tax	(427,838)	(12,592)	(16,069)	(6,922)	(12,772)	(1,539)	–	(477,732)
Transportation and selling expenses	(112,798)	(194)	(220,792)	(80,500)	(3,491)	(4)	47,002	(370,777)
General and administrative expenses	(97,234)	(17,300)	(17,296)	(50,465)	(24,051)	(5,111)	(2,028)	(213,485)
Share in profit of joint ventures and associates, net	616,607	60,099	22,003	(3,113)	–	1,730	–	697,326
EBITDA	1,000,476	184,024	298,623	254,650	7,038	12,608	(50,556)	1,706,863

In millions of tenge	Exploration and production of oil and gas	Oil transportation	Gas trading and transportation	Refining and trading of crude oil and refined products	Corporate	Other	Elimination	Total
EBITDA, %	59%	11%	17%	15%	0%	1%	-3%	
Depreciation, depletion and amortization	(82,193)	(36,844)	(35,290)	(121,863)	(2,314)	(6,682)	–	(285,186)
Finance income	40,896	4,712	15,351	49,318	222,092	787	(172,129)	161,027
Finance costs	(53,296)	(5,366)	(41,938)	(115,805)	(345,705)	(7,356)	141,811	(427,655)
Impairment of property, plant and equipment, intangible assets, exploration and evaluation assets	(41,371)	(6,754)	(4,091)	(45,183)	(67,120)	(1,003)	–	(165,522)
Income tax expenses	(200,787)	(22,361)	(47,039)	8,652	(17,239)	(486)	–	(279,260)
Net profit for the year	**721,376**	**122,986**	**183,548**	**(91,735)**	**(175,820)**	**(1,161)**	**(65,683)**	**693,511**
Other segment information								
Investments in joint ventures and associates	4,421,783	304,880	100,631	65,341	2	2,807	–	4,895,444
Capital expenditures	180,033	65,106	156,897	203,702	18,337	4,000	–	628,075
Allowances for obsolete inventories, expected credit losses on accounts receivable, impairment of advances paid and other assets	(5,465)	(4,240)	(8,805)	(64,773)	(20,330)	162	–	(103,451)
Assets of the segment	**7,295,234**	**1,021,946**	**1,820,133**	**3,995,798**	**1,913,427**	**157,461**	**(2,188,719)**	**14,015,280**
Liabilities of the segment	**804,279**	**210,930**	**950,954**	**2,761,676**	**4,121,330**	**73,125**	**(2,050,083)**	**6,872,211**

Inter-segment transactions were made on terms agreed to between the segments that may not necessarily be at market rates, except for certain regulated services, which are provided based on the tariffs available to related and third parties. The following represents information about profit and loss, and assets and liabilities of operating segments of the Group for 2017:

In millions of tenge	Exploration and production of oil and gas	Oil transportation	Gas trading and transportation	Refining and trading of crude oil and refined products	Corporate	Other	Elimination	Total
Revenues from sales to external customers	195,262	194,815	522,205	3,860,502	–	20,979	–	4,793,763
Revenues from sales to other segments	1,007,989	50,140	30,383	767,364	–	18,051	(1,873,927)	–
Total revenue	**1,203,251**	**244,955**	**552,588**	**4,627,866**	**–**	**39,030**	**(1,873,927)**	**4,793,763**
Cost of purchased oil, gas, petroleum products and other materials	(40,632)	(12,746)	(237,794)	(4,161,621)	–	(3,179)	1,726,458	(2,729,514)
Production expenses	(394,524)	(91,671)	(57,113)	(143,663)	–	(18,341)	80,966	(624,346)
Taxes other than income tax	(320,646)	(11,993)	(12,763)	(6,174)	(981)	(1,890)	–	(354,447)
Transportation and selling expenses	(115,636)	(40)	(91,632)	(73,385)	–	(8)	42,638	(238,063)
General and administrative expenses	(50,236)	(15,900)	(17,996)	(55,681)	(56,471)	(6,226)	38,730	(163,780)
Share in profit of joint ventures and associates, net	338,262	56,664	7,989	10,724	–	1,311	–	414,950
EBITDA	619,839	169,269	143,279	198,066	(57,452)	10,697	14,865	1,098,563
EBITDA, %	56%	15%	13%	18%	-5%	1%	1%	
Depreciation, depletion and amortization	(71,871)	(31,047)	(30,457)	(94,116)	(1,926)	(8,604)	–	(238,021)
Finance income	31,641	6,892	15,710	53,196	115,879	953	(101,697)	122,574
Finance costs	(17,035)	(5,242)	(35,846)	(99,973)	(216,856)	(6,770)	75,367	(306,355)
Impairment of property, plant and equipment, intangible assets, exploration and evaluation assets	(8,679)	(52)	(327)	(14,357)	41	(1,286)	–	(24,660)
Income tax expenses	(108,415)	(18,928)	(24,678)	(16,182)	(22,001)	(81)	–	(190,285)
Net profit for the year	**441,202**	**121,923**	**79,625**	**26,066**	**(125,952)**	**(8,474)**	**(8,942)**	**525,448**

In millions of tenge	Exploration and production of oil and gas	Oil transportation	Gas trading and transportation	Refining and trading of crude oil and refined products	Corporate	Other	Elimination	Total
Other segment information								
Investments in joint ventures and associates	3,503,951	208,107	52,562	54,660	1	4,349	–	3,823,630
Capital expenditures	145,761	74,817	140,487	291,487	12,638	3,451	–	668,641
Allowances for obsolete inventories, expected credit losses on accounts receivable, impairment of advances paid and other assets	(5,919)	(3,557)	(9,232)	(106,994)	(15,765)	3,360	–	(138,107)
Assets of the segment	**6,654,733**	**890,320**	**1,444,620**	**3,845,701**	**2,146,055**	**167,501**	**(1,598,972)**	**13,549,958**
Liabilities of the segment	**661,481**	**184,961**	**760,480**	**2,751,116**	**3,828,741**	**83,827**	**(1,504,253)**	**6,766,353**

36. SUBSEQUENT EVENTS

Receipt of residual of proceeds from sale of the subsidiary

On January 14, 2020, the Public Foundation "Nursultan Nazarbayev Education Fund", the purchaser, paid the second tranche of 4,659 million tenge for 35% out of remaining 70% stake in KBTU (Note 5).

Dividends received from joint ventures

On January 8, 2020, the Company received dividends from Kazakhoil-Aktobe LLP, the JV, of 5,000 million tenge.

Non-adjusting event after the reporting period

The outbreak of novel coronavirus continues to spread throughout China and to countries across the world. The Group will closely monitor the evolving coronavirus situation, yet an estimate of its financial effect cannot be made at this stage.

Proceeds and repayment of borrowings:

ANPZ, the subsidiary of the Group:

On January 15, 2020, received a borrowing from DBK for the total amount of 46,062 million tenge with the interest rate of 7.99% p.a. to finance the project on construction of the Deep oil refining complex. The borrowing repayment starts in June 2020 on semi-annual basis.

On January 16, 2020, performed planned and early redemption of principal, interest and early redemption commission of the borrowings obtained from Eximbank for the total of 205 million US Dollars (equivalent 77,911 million tenge at repayment dates).

On January 21, 2020, redeemed principal and interest of the borrowings obtained from DBK for 17,998 million tenge.

In January and February 2020 partly redeemed principal and interest of the borrowings obtained from Halyk Bank for 57 million US Dollars (equivalent 21,650 million tenge at repayment dates).

APPENDIX 1

REPORT ON COMPLIANCE OF THE CORPORATE GOVERNANCE CODE 2019

This Report on compliance / non-compliance with the principles and provisions of the Corporate Governance Code (the "Code") of KMG (approved by resolution of the Sole Shareholder of KMG on 27 May 2015) has been developed in furtherance of item 6 of the Code, and covers information on KMG's compliance / non-compliance with the principles and provisions of the Code.
In general, at year-end 2019, KMG was in compliance with most of the provisions and principles of the Code, except for the following aspects:

	REFERENCE TO THE CODE	PROVISIONS OF THE CODE	EXTENT OF COMPLIANCE	COMMENTS
GOVERNMENT				
1	Item 2 of Chapter 1 of Section 2	It is recommended to make sure the optimal asset structure is in place for Organizations within the Fund. In a Holding Company, a parent company may be established in the form of a stock company. Other organizations are recommended to be established in the form of a limited liability partnership. Those organizations that have already been established in the form of a stock company, it is recommend to consider reorganizing them into limited liability partnerships with account for economic, legal and other aspects and in the best interests of the Fund's group. When creating a new organization the most preferrable business structure would be a limited liability partnership. New organizations may only be established in the form of a stock company in exceptional cases when as Organization's shares are going to be traded on a stock exchange in the future.	complies partially	In December 2015, the Kazakhstan Government approved a Comprehensive Privatisation Plan for 2016-2020 incorporating 73 KMG Group companies. Under the privatisation and divestment programmes, the number of legal entities in the KMG Group is being reduced. Also, work is underway to simplify the asset structure of the KMG Group, including through the liquidation/reorganization of subholdings. In 2019, measures were taken to merge a KMG's subholding KazMunaiGas Exploration Production into KMG. KMG assets sold/liquidated in 2019: one company was sold, four companies were liquidated. Assets of the KMG Group will be optimized further as per the approved plans/programs. When creating new Organisations, KMG would be giving preference to limited liability partnerships. In 2019, no legal entities in the form of stock company were created.
2	Item 14 of Chapter 1 of Section 2	Boards of Directors of the Fund and Organizations should make sure that business ethics standards are implemented and observed. All officers and employees of the Fund and the Organizations must acknowledge that they have read and understood the Code of Business Ethics by signing the acknowledgement form and by regularly reaffirming their knowledge of the Code.	complies partially	As per recommendations made by the independent consultant following the diagnostics of corporate governance of KMG, a revised Code of Business Ethics has been developed and approved (resolution of the Board of Directors adopted on 29 November 2018). A statement has been disseminated among all officers and employees of KMG for them to look through the Code of Business Ethics and sign off a statement to acknowledge that they have read and understood the Code. Training on the new Code of Business Ethics started in 4Q2019 to further clarify the provisions of the Code. Six internal trainers of KMG, including the KMG Ombudsman, were trained for further training of KMG employees. Further training by internal trainers of KMG is planned for 2020. To date, KMG has not implemented the practice of employees regularly confirming their knowledge of this Code.
THE FUND AND ITS ORGANISATIONS				
3	Item 3 of Chapter 2 of Section 2	Boards of Directors of the Companies shall be fully independent in decision-making within their remit as established by the charters of the Companies.	complies partially	Pursuant to item 4 of the KMG Charter, KMG's financial and production activities are carried out based on economic independence; pursuant to item 13 of the KMG Charter, KMG's objective is to generate net income from independent economic activity; pursuant to item 24 of the KMG Charter, KMG resolves all issues related to the planning of production activities, salaries, logistics, social development, income distribution, recruitment, placement and staff retraining independently. At the same time, the Kazakh Act on National Wealth Fund and certain Samruk-Kazyna JSC documents (Corporate Standard on Investment for Samruk-Kazyna JSC and legal entities with fifty or more per cent of their voting shares/stake directly or indirectly held by Samruk-Kazyna JSC dated 9 July 2018; Guidelines for approving the appointment and early termination of the authority of the heads of executive bodies of companies of Samruk-Kazyna JSC as approved by resolution of the Fund's Management Board on 26 December 2019. The list of organizations in the Samruk-Kazyna JSC whose 100 per cent of voting shares/stake is directly or indirectly owned by the companies of Samruk-Kazyna JSC, in which the heads of executive bodies of those companies are appointed and removed by the Boards of Directors of the companies in agreement with the Management Board of Samruk-Kazyna JSC (approved by resolution of the Management Board of Samruk-Kazyna JSC on 12 December 2012), stipulate procedures that restrict the KMG Board of Directors' full independence in the decision-making process (including the conclusion of M&A transactions and the appointment of heads of KMG subsidiary executive bodies).

	REFERENCE TO THE CODE	PROVISIONS OF THE CODE	EXTENT OF COMPLIANCE	COMMENTS
SUSTAINABLE DEVELOPMENT				
4	Item 5 of Chapter 3 of Section 2	The Fund and its Organizations should have a sustainability corporate governance system in place	complies partially	In December 2019, the KMG Management Board approved Guidelines for the Sustainable Development Management System in the KMG Group and the document is expected to be approved in early 2020 at a meeting of the KMG Board of Directors. This document has been developed in accordance with the Code and the Reference Model for Sustainable Development for the Fund's portfolio companies and includes a description of the organization of the stakeholder engagement process, integration of sustainable development principles into key processes and monitoring, development of annual sustainability reporting, implementation of priority areas (initiatives) in the field of sustainable development, development and maintenance of sustainable development culture, identification and assessment of risks, document management. Also in 2019, KMG established a Sustainable Development Project Office and issued an order on the establishment of the Sustainable Development Management Working Group. In addition, the position of Managing Director for Sustainable Development was introduced.
5	Item 5 of Chapter 3 of Section 2	Sustainable development should be integrated into: 1) management system; 2) development strategy; 3) key processes including risk management, planning (long-term (strategy), mid-term (5-year development plan) and short-term (annual budget) periods), reporting, risk management, human resource management, investments, operations, etc., and decision-making at all stages from bodies (general meeting of shareholders (sole shareholder), Board of Directors, executive body) to ordinary employees.	complies partially	In 2018 sustainable development was integrated the KMG Development Strategy until 2028. In order to integrate sustainable development into KMG's management system and key processes, a Sustainability Management System Manual was developed for the KMG Group in 2019. The requirements and provisions of this document will be put into practice in 2020 after its approval by the KMG Board of Directors.
6	Item 5 of Chapter 3 of Section 2	The sustainability management system should have clearly defined roles, competencies and responsibilities assigned to each body and all employees for implementation of principles, standards and respective sustainability policies and plans.	complies partially	Board of Directors has a specific responsibility to promote the principles of sustainable development while: - keeping track of the implementation of the Company's Strategy based on analysis of short-term and long-term KPI; - defining the meaning of the sustainable development principles for the Company, and makes sure they are effectively communicated to all parties concerned; HSE&SD Com is responsible for: - control over the implementation of sustainable development in the Company; Managing Director for Sustainable Development is responsible for: - developing and implementing a sustainable development management system - integrating the sustainable development management system into key processes, the Development Strategy and decision-making processes of KMG. Managing Director for Health, Safety and Environment is responsible for health, safety and environment and for: - taking part in establishing a sustainable development management system; - assisting in the integration of the sustainable development management system into key processes insofar as it pertains to his/her business line. Managing Director for Human Resources has social responsibility while: - taking part in establishing a sustainable development management system; - assisting in the integration of the sustainable development management system into key processes insofar as it pertains to his/her business line. Chief Financial Officer is responsible for business direction and for assisting in the integration of the sustainable development management system into key processes insofar as it pertains to his/her business line. Also in 2019, KMG established the Sustainable Development Project Office and the Sustainability Management Working Group. The roles, competencies, responsibilities of all employees of the Company have not been fully set.

	REFERENCE TO THE CODE	PROVISIONS OF THE CODE	EXTENT OF COMPLIANCE	COMMENTS
SHAREHOLDERS RIGHTS				
7	Item 2 of Chapter 4 of Section 2	Each Organization must have a transparent procedure for electing and setting fees for its Board of Directors (Supervisory Board and/or Executive Body) approved by general meeting of shareholders (the Sole Shareholder)/ Member (the Sole Member). The election to the Board of Directors (Supervisory Board and/or Executive Body) should be conducted in the manner specified by Kazakh laws, the Charter and internal documents of the Organization and by this Code.	complies partially	The election of members to the Board of Directors and their remunerations are regulated by the Guidelines for the compositing Boards of Directors of Samruk-Kazyna JSC companies as approved by the resolution of the Fund's Management Board dated 26 September 2016. Setting up a Board of Directors or a Supervisory Board and setting fees to their members in legal entities where KMG holds shares/ stake are regulated by the Rules for Setting Up Boards of Directors / Supervisory Boards of Legal Entities whose shares / stake are owned by KMG approved by resolution of the KMG Management Board on 30 April 2013. The Rules are to be updated in 2020. In 2019, KMG developed model Regulations of the Supervisory Board for organizations with more than fifty per cent of shares in the charter capital owned directly or by KMG, which was sent to its subsidiaries by letter on 2 July 2019 as a recommendation document for updating the existing regulations, if necessary.
BOARD OF DIRECTORS AND EXECUTIVE BODY				
8	Item 6 of Chapter 5 of Section 2	The Fund and its Organizations must have succession plans for members of the Board of Directors in order to maintain business continuity of operations and any changes in the composition of the Board of Directors that may be made in the future.	does not comply	The item on the Succession Policy for members of the Board of Directors of KMG was brought to the meeting of the Nomination and Remuneration Committee of the Board of Directors of KMG in November 2019. This was the first step in the development of the succession plan for members of the KMG Board of Directors. At present, there is no formalized succession plan for members of the Board of Directors. The relevant work is planned to be completed in 2020 based on the results of the external evaluation of the Board of Directors and its Committees. At present, there is no formalized succession plan for members of the Board of Directors. The corresponding work is expected to be completed in 2020 based on the results of the external evaluation of the Board of Directors and its Committees.
9	Item 12 of Chapter 5 of Section 2	It is recommended that meetings of the Board of Directors take place 8 to 12 times a year.	complies partially	In 2019, the Board of Directors held 18 meetings, of which: seven regular physical meetings attended by all member of the Board of Directors including one strategy session of the Board of Directors and one sustainability session of the Board of Directors; seven meetings held by conference call; and four extraordinary meetings held by conference call. As compared to 2018, the total number of meetings has reduced from 20 to 18 which indicates a positive trend.
10	Item 13 of Chapter 5 of Section 2	The Board of Directors, its committees and members of the Board of Directors should be evaluated every year as part of a structured process approved by the Board of Directors of the Organization. That process should be consistent with the Fund's methodology.	complies partially	The Regulations on the Evaluation of the Performance of the Board of Directors, its Committees, Chairperson, members of the Board of Directors and Corporate Secretary of KMG that approved by a resolution of the KMG Board of Directors on 4 October 2018 provide for a structured evaluation process. This document was developed in accordance with the Methodological Recommendations of the Fund on the evaluation of performance of the Board of Directors, its Committees Chairman, members of the Board of Directors and Corporate Secretary that were approved by a resolution of the Management Board of the Fund on 26 September 2018. By resolution of the KMG Board of Directors of 23 December 2019, it was resolved was made to evaluate the performance of the KMG Board of Directors by way of self-evaluation as well as an external evaluation by engaging an independent consultant. As part of that process, the work has commenced on self-evaluation of the Chairman and of members of the Board of Directors through questionnaires and other procedures established by KMG's internal documents. The self-evaluation process is expected to be completed in the 1st quarter of 2020, based on 2019 year-end results. The independent performance evaluation of the BoD is also planned for 2020 in accordance with the Code requirements, which will be done after the independent organization has been selected in accordance with the established procedure to be providing the corresponding services.
11	Item 14 of Chapter 5 of Section 2	Evaluation of the Board of Directors, its committees and members of the Board of Directors, feedback to members of the Board of Directors and the development of follow-up improvements should all be carried out under the direction of Chairman of the Board of Directors. The outcome of the assessment should be discussed at a separate meeting of the Board of Directors followed by a training program developed for the Board of Directors and for each of its members individually.	complies partially	By resolution of the Board of Directors of KMG of 23 December 2019, a decision was made to conduct an evaluation of the performance of the KMG Board of Directors through a self-evaluation as well as an external evaluation involving an independent consultant. Upon completion of the work, the results of the evaluation will be submitted to the Board of Directors of the Company in accordance with the requirements of the Regulations on the Evaluation of the Board of Directors, Committees of the Board of Directors, the Chairman, members of the Board of Directors and the Corporate Secretary of KMG, which provides for the management of the Chairman of the Board of Directors of the entire evaluation process of the Board of Directors. The development of development programs for members of the Board of Directors is provided for in the Detailed Plan on Improvement of Corporate Governance in KMG for 2020.
12	Item 12 of Chapter 5 of Section 2	The Board of Directors should review resolutions that had been adopted earlier. It should analyze both the resolution and the decision-making process. Resolutions that had been adopted earlier should be reviewed if the Board of Directors assesses its own performance.	complies partially	By resolution of the Board of Directors of KMG of 23 December 2019, a decision was made to conduct an evaluation of the performance of the KMG Board of Directors through a self-evaluation as well as an external evaluation involving an independent consultant. As part of these processes, in 2020, after 2019 year-end results, it is planned to conduct an audit of the resolutions that were adopted by the Board of Directors earlier.

	REFERENCE TO THE CODE	PROVISIONS OF THE CODE	EXTENT OF COMPLIANCE	COMMENTS
13	Item 15 of Chapter 5 of Section 2	An induction and succession planning programme must be developed within an organization for the Corporate Secretary.	does not comply	A draft succession plan has been developed for the Corporate Secretary to ensure continuity of knowledge about the activities of the KMG Board of Directors. The approval is scheduled to be submitted to the Board of Directors and the Nomination and Remuneration Committee of the Board of Directors in the first half of 2020.
RISK MANAGEMENT AND INTERNAL CONTROLS				
14	Item 7 of Chapter 6 of Section 2	The Board of Directors together with the Audit Committee are responsible for annual assessments of the efficiency of risk management and internal controls.	complies partially	In accordance with clause 6.2.7 of Section 6 of the Policy on the Corporate Risk Management System of KMG and its subsidiaries and affiliates approved by resolution of the Board of Directors of KMG dated 13 December 2016, the KMG Board of Directors ensures an annual assessment of the effectiveness of the risk management system and the Internal Audit Service of KMG assesses the effectiveness of the risk management process, notifies the Board of Directors of KMG of significant deficiencies in the corporate risk management system of KMG, and develops recommendations for improving the risk management process. In 2018, the independent consultant tested the level of KMG's corporate governance through five components including Risk Management, Internal Control and Audit. Based on that diagnostics, the Board of Directors of KMG approved a detailed plan on improvement of corporate governance in KMG for 2019-2020 which contains a number of measures for further improvement of the corporate risk management system and internal control system of KMG including consideration by the Audit Committee of the KMG BoD of an assessment of the level of confidence in the risk management and internal control system on an annual basis starting from 2020. In 2019, KMG was focused on the implementation of measures provided for in the above Plan as part of preparation for an independent diagnostics of KMG's corporate governance which is scheduled to take place in 2020. The scope of that diagnostics, among other components, will include a risk management system. For that reason, the effectiveness of the risk management and internal control system was not assessed in 2019.

WHOLESALE SALES OF KMG'S OIL PRODUCTS PRODUCED IN KAZAKHSTAN, THOUSAND TONNES

Product	2018			2019		
	Domestic	Export	Total	Domestic	Export	Total
Gasoline	701	0	701	789	37	826
Diesel	954	0	954	1,028	0	1,028
Jet fuel	34	0	34	85	0	85
Fuel oil	192	414	606	188	469	658
Vacuum gas oil	0	200	200	0	167	167
Bitumen	53	0	53	65	0	65
Coke	44	33	77	40	51	91
Sulfur	9	4	13	2	13	14
Benzene	0	5	5	0	12	12
Paraxylene	0	2	2	0	55	55
LPG	128	0	128	114	0	114
Heating oil	43	23	66	7	0	7
Others	4	0	4	14	0	14
Total	2,162	707	2,868	2,333	804	3,136

WHOLESALE SALES OF OIL PRODUCTS OF KMGI, THOUSAND TONNES

Product	2018	2019
Diesel	3,062	2,154
Fuel oil	2,273	399
Gasoline	1,336	1,057
Others	483	508
Jet fuel	316	395
LPG	314	152
Naphtha	121	90
Bitumen	102	120
Polypropylene	91	92
Hexane	84	87
LDPE	49	38
Environmental solvents	43	41
Heating oil	35	9
Propylene	21	28
White Spirit	7	5
Vacuum gas oil	7	0
HDPE	3	3
Plastic bottles	0	1
Total	**8,345**	5,181

GLOSSARY

1P reserves - Proved reserves
2P reserves - Proved plus Probable reserves
3P reserves - Proved plus Probable plus Possible reserves
4ICP - Fourth Injection Compressor Project
5TL - 5th Trunkline
A&M - Agriculture & Mechanical
AC- Audit Committee
AG - Amangeldy Gas LLP
AGP - Asia Gas Pipeline
AIFC - Astana International Financial Centre
APG - Associated petroleum gas
APC - The Automated Process Control
BSc - Bachelor of Science
BCMS - business continuity management system
BATNEEC - Best Available Techniques not Entailing Excessive Costs
BTUs - quadrillion
BP - British Petroleum
bln - billion
bcf - billion cubic feet
bln m3 - billion cubic meters
BGR-TBA - Bukhara gas-bearing region - Tashkent-Bishkek-Almaty
BSGP - Beineu-Shymkent Gas Pipeline
BTUs - quadrillion
Code - KMG Corporate Governance Code
CFO - Chief Financial Officer
CDP - Carbon Disclosure Project
CPC - Caspian Pipeline Consortium
CFO - Cash flow from operating activities
CJSC - Closed joint-stock company
CNODC - China National Oil and Gas Exploration and Development Company
CFO - Chief Financial Officer
CNG - compressed natural gas
CNPC - China National Petroleum Corporation
CRMS - the corporate risk management system
CFA - Chartered Financial Analyst
Code - KMG Corporate Governance Code
COVINA - Companhia Vidreira Nacional
CDP - Carbon Disclosure Project(pyc)
CNG - Compressed natural gas
Capex - Capital expenditures
CITIC - China International Trust and Investment Corporation
DBK - Development Bank of Kazakhstan
DTP - Digital Transformation Program
D&O - Directors and Officers
EP - Exploration & Production
ENPF - JSC Unified Accumulative Pension Fund
ESG - Environmental, social and corporate governance (pyc)
ECB - European Central Bank
EIA - Environmental Impact Assessment Exporting Countries
EBITDA - Earnings before interest, taxes, depreciation and amortization
EIA - Electronic Industries Alliance
ESG - Environmental Social Governance
EDP - Electricidade de Portugal
E&E - exloration and evaluation
EY - Ernst & Young
FCF - Free cash flow
FDI - Foreign direct investment
FAR - Fatality Accident Rate(pyc)
FGP - the Future Growth Project
FPSA - the Final Production Sharing Agreement
FC - Finance Committee
GJ - gigajoule
Gcal - gigacalorie
GHG - Greenhouse gas (pyc. n/a)
GPS - Global Positioning System(pyc)
GGFR - Global Gas Flaring Reduction Partnership
GRI - Global Reporting Initiative
GDP - Gross Domestic Product
GRI - Global Reporting Initiative's
G&A - General and administrative
GTU - Gas Treatment Unit
GHG - Greenhouse Gas
HDPE - high-density polyethylene
HSE - Health, safety and environment
HSE & SD Com - Health, Safety, Environment and Sustainable Development Committee
ICA - Intergas Central Asia
IPO - Initial public offering
IMF - International Monetary Fund
IT - Information Technology
IOGP - International Association of Oil & Gas Producers
ISO - International Organization for Standardization
IPIECA - International Petroleum Industry Environmental Conservation Association
IFRS - International Financial Reporting Standards
ICS - internal control system
IAS - Internal Audit Service
INED - Independent Non-Executive Director
JSC - Joint stock company
JV - Joint venture
JM - Jerónimo Martins
KMG - Joint stock company National company KazMunaiGas
KTO - KazTransOil
KCP - Kazakhstan-China Pipeline
KMG EP - KazMunaiGas Exploration Production
KMGI - Kazmunaigas International
KPI - Key performance indicator
KMTF - Kazmortransflot
KZT - Kazakhstan tenge
KTG - KazTransGas
KTGA - KazTransGas Aimak
kWh - Kilowatt-hour
KPI - Key Performance Indicators
KTL - Complex Technology Lines
KRI - key risk indicator
KASE- Kazakhstan Stock Exchange JSC
KGDBN - KPC Gas Debottlenecking Project
LNG - liquefied natural gas
LDPE - low-density polyethylene
LPG - Liquefied petroleum gas
LLP - limited liability Partnership
LTIR - Lost Time Incident Rate
LLB - Bachelor of laws
MMboe - million barrels of oil equivalent
mln - million
MBA - Master in Business Administration MMtoe= million tonnes of oil equivalent
MIT - Massachusetts Institute of Technology
thous. - thousand
MS - Management system
MRM - Maintenance and repair management
MVP - The Minimum Viable Product
MT - MunaiTas
MNC - Offshore Oil Company
M&A - Mergers and Acquisitions
mln tonnes - million tonnes
NBK - the National Bank of Kazakhstan
NC - National company
NCOT - National oil transportation company
NED - Non-Executive Director
NCS PSA - The North Caspian Sea Production Sharing Agreement
NMC - National Mining Company
NOGC - National Oil and Gas Company
NMSC - National Maritime Shipping Company
NYSE - New York Stock Exchange
NRC - Nomination and Remuneration Committee
NCOC - North Caspian Operating Company
OHSAS - Occupational Health and Safety Assessment Series
OECD - Organisation for Economic Co-operation and Development
OPEC - The Organization of the Petroleum
OGPP - Orenburg Gas Processing Plant
OJSC - Open joint stock company
plc- Public limited company
PRMS - Petroleum Resources Management System
PJSC - Public joint-stock company
PKOP - PetroKazakhstan Oil Products LLP
PSA - Production Sharing Agreement
ROACE - Return on Avarage Capital Employed
R&D - Research and Development
SJSC - State joint stock company
SPE - Society of Petroleum Engineers
SSI - Social Stability Index
SACP - stand-alone credit profile
Samruk-Kazyna JSC, the Fund - Sovereign Wealth, Fund Samruk-Kazyna Joint-Stock Company
SDG - Sustainable Development Goals
SEP - Stanford Executive Program
S&P - Standard & Poor's
SACP - Stand-alone credit profile
SPMC - Strategy and Portfolio Management Committee
TCO - Tengizchevroil
UN - United Nations
UNGC - UN Global Compact
UGS - underground gas storage
USD - United States dollar
UK - United Kingdom
WWF - World Wide Fund for Nature(pyc)
WPMP - the Wellhead Pressure Management Project
WEC - World Energy Council

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Hot line of the Samruk-Kazyna group of companies

In accordance with the Information Sharing Policy, you can report any incidents or potential incidents of theft, fraud, corruption and other violations of basic business principles or the Samruk-Kazyna Business Code.

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E-mail: sk.hotline@deloitte.kz