



# 2017

ANNUAL REPORT



**КазМунайГаз**  
NATIONAL COMPANY ҚҰЛТТЫҚ КОМПАНИЯСЫ



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## Letter of the Chairman of the Board of Directors



Dear shareholders, colleagues and partners,

JSC NC KazMunayGas (“KMG” or the “Company”) has prospered and grown stronger during a year of change. International uncertainties and changes in the outlook for energy have resulted in major movements in oil prices and in foreign exchange rates. Whilst these have presented both hurdles and opportunities, KMG has consolidated its position as one of the corner stones of Central Asian oil and gas production. The company has emerged stronger and more resilient.

This improved resilience is not just the result of improved oil prices: KMG is undergoing profound change and is becoming more adaptable and resilient. This mirrors what is happening within the wider Kazakhstan economy. The country is proactively adapting to the challenges of today and is responding in an increasingly smarter way to pre-empt the challenges of the future. As such, KMG is mirroring Kazakhstan’s success.

The year has seen major advances in our upstream sector. Production in the world class Kashagan oil field has been successfully restarted. The upgrade projects in the Tengiz field are on track and Karachaganak remains the envy of the international energy industry. During the year, KMG agreed to transfer 50% of the subsoil use rights in the Isatay project to the Italian company ENI. Joint exploration activities are expected to start soon.

KMG’s wholly owned research Institute continues to provide valuable insights into the improvement of mature fields and the exploration of new reserves. They are a key enabler to increase production, expand reserves and lengthen the life of oil fields.

KMG continues to invest in both established and new oil and gas fields. The company takes a long-term view: investment today is essential for Kazakhstan and KMG to prosper in future decades.

KMG is able to develop its world class reserves because of the quality and depth of skills within Kazakhstan, the quality of our partners and the willingness of the Government to support

sensible and sustainable development. In world terms, this places Kazakhstan amongst the most attractive oil and gas provinces in the world. Our partners understand this and they deserve thanks for the dedication and investment that they have made (and continue to make).

Our oil pipeline and gas pipeline businesses continue to prosper. Whilst they are influenced by supply and demand and by geopolitics, they are well run businesses and they continue to invest for the future. By their nature, these businesses are strategic for the country and crucial for the KMG Group. During 2017, Asia Gas Pipeline capacity was substantially upgraded, the Caspian Pipeline Consortium expansion project was completed and an agreement to supply 5 bcm pa of gas to China was signed.

Downstream, in 2017 we completed the modernisation of the Pavlodar refinery and installed new equipment and commenced commissioning work at the Atyrau refinery. Likewise, phase one of the Shymkent refinery upgrade was completed. These are major investment projects which will ensure that Kazakhstan’s refining capacity is commensurate with international expectations.

Towards the end of the year, KMG reached agreement with the independent directors of KazMunayGas Exploration and Production (“KMG EP”) to support the buy-back of the non-KMG held GDRs and shares, delist the company and consolidate it back into KMG. Shareholder votes have endorsed

this course of action and the process is expected to be completed in May 2018. This will allow KMG to operate its upstream operations as one entity.

This transaction is indicative of KMG's ongoing transition from a group "holding company" to an "operating company". This is a profound change that will take some years to fully complete.

An underpinning aspect of this transformation is the increased focus on occupational health and safety. The Board of Directors and Management Board want all of our employees and contractors to work in safety and to return home safely to their families at the end of the day. Whilst it is early in our programme, we are seeing positive results. This is not only due to improved systems and processes, it is also due to the efforts of individual people. On behalf on the Board of Directors, I would like to thank our employees for embracing this.

Leading the change with KMG is the Chairman of the Management Board, Sauat Mynbayev. He shows leadership, wisdom and patience. Together with his Management Board, he has strengthened the business during a very challenging period. I thank him and his team for their dedication.

I also wish to thank the KMG Board of Directors. In particular, we owe a debt of gratitude to Frank Kuijlaars, our former Chairman, and Peter Lane, our former Audit Chair, both of whom served almost a decade on the Board. Both were change agents and should be congratulated for the transformation which they prompted.

We also saw the retirement of Berik Beisengaliyev and Adamas Ilkevicius who ably represented our shareholder Samruk-Kazyna. I thank them for their support and for acting as ambassadors for KMG.

We also welcomed a new independent director Stephen Whyte, who brings upstream experience and will add to the Board's expertise.

KMG has finished the year much stronger and much more adaptive. This change will accelerate and it will enable us to continue proudly supporting Kazakhstan in its aspirations.

**Ch. J. Walton**



## Letter of the Chairman of the Management Board



### Dear shareholders, investors and partners,

Providing energy security to the country, increasing the value of the Company and ensuring its efficiency and financial stability are all crucial goals, just like they were in previous years.

In 2017, oil production in Kazakhstan hit a record figure of 86.2 mln tonnes, of which KMG's share was 23.4 mln tonnes, which is a 3.2% increase on 2016. Natural and associated gas production increased 8.1% over the same period to reach 8 bcm. The main increase in oil production was achieved at the Kashagan, Tengiz and Karachaganak fields.

Oil pipeline transportation rose 3% over the year to 58.5 mln tonnes. In contrast, oil transported by sea fell 2% to 7.0 mln tonnes. A total of 100.9 bcm of gas was transported, which is a 15% increase on 2016.

For the year, including KMG's operating share, Kazakhstan refined 18.2 mln tonnes of hydrocarbons, including foreign assets, which is a 3% increase on 2016. Domestic plants upped their refining output 2.2% to 12.2 mln tonnes.

2017 saw significant rises in the oil price, which allowed the Group to increase revenue by 32% up to 2,459 bln tenge. Net profit for 2017 increased 44% to 519.5 bln tenge. Total taxes and other budget and National Fund payments exceeded 580 bln tenge.

We also preserved social guarantees and continued our efforts to improve the efficiency of the corporate governance system.

The following areas in the "Exploration and Production" sector deserve special mention.

Firstly, production has stabilised to reveal definite production growth at Tengiz and Kashagan fields.

Secondly, resource base replenishment and growth have been identified as one of KMG's priority objectives. KMG experts and subsoil users are working together to develop new reserves, conduct supplementary exploration, introduce modern geological and technical measures tailored for each field, and introduce modern well construction techniques, all to achieve the best possible financial and economic results.

In the "Refining" sector, modernisation work at the Pavlodar Oil Chemistry Refinery was completed in 2017. Meanwhile, the Atyrau Refinery launched testing and commissioning work towards the end of the year, with the Shymkent Refinery completing the first phase of its modernisation. The second phase is scheduled for completion in the second half of 2018.

Domestic refinery modernisation work, which is currently nearing completion, has been a significant factor both for the country's economy and in stabilising the fuel market. In recent years, to avoid fuel deficits, Kazakhstan has had to import petroleum products from neighbouring countries. However, with the modernisation of the domestic refineries, which cost approximately 6 bln USD, beginning from 2019 the country's three major refineries will be able to refine up to 16.6 mln tonnes of hydrocarbons per year, meeting the country's medium-term demand for basic petroleum products.

In the "Oil Transportation" sector, in 2017, the Caspian Pipeline Consortium completed its project to expand the Tengiz-Novorossiysk oil pipeline, increasing overall capacity to 67 mln tonnes/year, of which Kazakhstan oil will account for up to 53.7 mln tonnes/year. The commissioning of the new system will mean that domestic oil pipelines will meet current export needs.

The "Gas Transportation and Marketing" sector saw a historic agreement in 2017 to start exporting 5 bcm of Kazakhstan gas per year to China, which, according to agreements between the KMG subsidiary KazTransGas and PetroChina International, should increase to 10 bcm.

KMG has also implemented a major gas industry upgrade programme and commissioned a number of production facilities during the year to ensure domestic natural gas can be supplied from the deposits in the west to regions across the country, improving living conditions for the entire population. We have also increased gas transit potential and diversified export routes.

Another key example of what we have achieved over the past year is the implementation of the programme to transition to a new operating model. We are committed to our goals and to that end we have been systematically reducing the number of management levels in KMG. For example, in 2017 KazMunayGas – Refining and Marketing was reorganised and merged into KMG. We have also formed business units for core activities focusing on upstream operations.

In terms of KMG finances, we think it is safe to say that the long period of intensive capital investment has come to an end in 2017. We do not expect further leverage growth. As such, we have developed a number of measures and programmes to increase dividends from subsidiaries, raise loans for joint ventures, optimise organisational structure, and refinance short-term loans to distribute the debt burden evenly. In addition, the option period was extended from 2018–2020 until 2020–2022 under a supplementary agreement between KMG and Samruk-Kazyna to purchase a 50%

interest in KMG Kashagan B.V., a private limited liability company owned by Samruk-Kazyna. Given all of this, and the Group's not inconsiderable work to ensure financial stability, we expect its financial position to stabilise in the short and medium term.

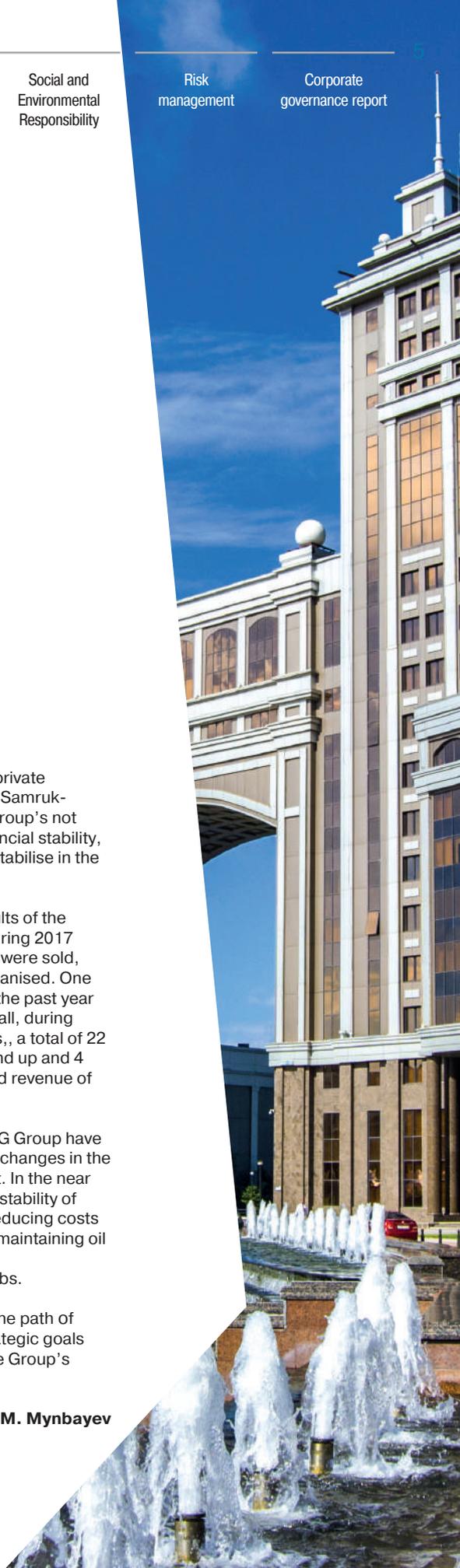
It is also worth mentioning the results of the privatisation programme, which during 2017 covered 11 companies, of which 5 were sold, 4 were wound up and 2 were reorganised. One of KMG's major transactions over the past year was the sale of Euro-Asia Air. Overall, during 2015–2017 covered 34 companies, a total of 22 companies were sold, 8 were wound up and 4 were reorganised, which generated revenue of 28.7 bln. tenge.

All-in-all, the companies in the KMG Group have already adapted to the permanent changes in the oil market and pricing environment. In the near future, our priority is to ensure the stability of the Group's financial position by reducing costs and automating production, while maintaining oil

production rates and preserving jobs.

KMG confirms its commitment to the path of development and achieving its strategic goals set by shareholders to increase the Group's long-term value.

**S. M. Mynbayev**







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# 2 MARKET TRENDS AND CHALLENGES

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# MARKET TRENDS

## The economy and oil industry of Kazakhstan

Since independence, Kazakhstan has achieved stable economic growth, successfully completing several development stages after just over two decades. The country has withstood a period of low oil prices, national currency devaluation and a slowdown in relations with key trading partners, helping the economy gradually adapt to the “new” environment. In 2017, Kazakhstan’s GDP per capita was 7,715 USD.

### GROSS DOMESTIC PRODUCT

In 2017 GDP, created using the production method (according to current data), increased 4.0%<sup>1</sup> in real terms year-on-year to 51,566,764.1 mln. tenge.

The expectation is that GDP growth in 2018 will reach 3.1%–3.5%<sup>2</sup>, helped by higher global oil prices, increased oil production, continued financial stimulation, and improved economic relations with key trading partners.

### INFLATION

In 2017, inflation was at 7.1%, having fallen from 8.5% in 2016. According to preliminary Kazakhstan National Bank forecasts, stable oil and grain prices, and lower inflation expectations

## Economic indicators of Kazakhstan:



### Inflation in 2017:

**7.1%** ▼

The inflation forecast for 2018 budgeting purposes was **6%**



### GDP growth in 2017:

**4.0%** ▲

The GDP forecast for 2018 is **3.1–3.5%**



### Average exchange rate:

**326.1** TENGE PER USD

The exchange rate forecast for 2018 KMG budgeting purposes was **340** tenge per USD

<sup>1</sup> Statistics Committee of the Ministry of the National Economy of the Republic of Kazakhstan

<sup>2</sup> Ministry of the National Economy of the Republic of Kazakhstan

KMG Business Model and Business Geography

Strategy

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due to weak disinflationary pressure from domestic demand will lead to inflation within the target corridor of 5–7% in 2018.

KMG's inflation forecast for 2018 budgeting purposes was 6%.

#### OIL PRICES

The average Brent crude oil price rose 23.5% in 2017 to 54.2 USD/barrel, which is still 4% down on the 2015 price.

KMG used a forecast price of 55 USD/barrel to make budget calculations for 2018.

#### USD-KZT EXCHANGE RATE

2017 saw a 4.5% or 15.66 point drop in the value of the USD against the tenge to 326.1. In 2016, the average exchange rate was 341.7.

KZT used a rate of 340 KZT/USD for 2018 budgeting purposes.

#### GLOBAL TRENDS IN THE OIL AND GAS INDUSTRY

One of the main factors behind global oil demand has been the growth in the global economy. According to the EIA, GDP growth rates will remain positive until 2021. As the global population continues to grow, so will its demand for energy. As oil is expected to remain the most important source of energy in the medium term, no decline in demand is expected. Alongside the growth in demand for oil, there has also been an increase in supply mainly from non-OPEC countries.

After the fall in oil prices in 2014, the global oil and gas industry experienced a general decline in capital exploration and production expenditure from 706 bln USD in 2014 to 495 bln USD in 2015 and 355 bln USD in 2016. In the medium term, a moderate increase in exploration and production costs is expected. However, by 2021 exploration and production investment expenditure in nominal terms will be 19% less than in 2014 (571.86 bln USD)<sup>3</sup>. The current trend of reducing capital investment in additions to reserves influences the medium-term decline in oil production.



Brent oil price in 2017:

**54.2**  
USD PER BARREL

The forecast price for 2018 KMG budgeting purposes was **55** USD per barrel

<sup>3</sup> Source: IHS Market, Global Upstream Spending: Market Analysis, 15 February 2017

#### GLOBAL OIL PRICE PREDICTIONS FOR 2018

IHS

**57** USD/BARREL

ICE

**53** USD/BARREL

WORLD BANK

**56** USD/BARREL

EIA

**60** USD/BARREL

## KAZAKHSTAN'S POSITION IN THE OIL AND GAS INDUSTRY

Kazakhstan has been producing oil since 1911 and is currently the second largest country in hydrocarbon reserves and oil production terms among the former Soviet republics after Russia.

In 2017, oil production in Kazakhstan reached 86.2 mln tonnes, while growth to 2016 levels amounted to 10.5% (78 mln tonnes). Production was highest in Atyrau and Mangistau regions.

Stable growth at the Kashagan (8.2 mln tonnes), Tengiz (28.7 mln tonnes) and Karachaganak (11.2 mln tonnes) fields was the main factor behind production increases in 2017, allowing projections of 87 mln tonnes in 2018, with the main increase expected from Kashagan, which should be responsible for 11.3 mln tonnes.

At the same time, production at the Kyzylorda and Aktobe group fields is expected to decline due to development maturity and natural depletion.

Gas production in 2017 increased 14% of the year to 52.9 bcm. The plan for 2018 is 53.5 bcm.

## SAMRUK-KAZYNA SOVEREIGN WEALTH FUND

Samruk-Kazyna Sovereign Wealth Fund, whose sole shareholder is the Kazakhstan Government, was founded in 2008 by Presidential Decree and is a commercial structure in the form of an investment holding. In 2018, it developed a new 2018–2028 Strategy to increase Kazakhstan national wealth and long-term sustainability for future generations. In this regards, KMG will update its Development Strategy by the end of August, 2018 in line with the Fund's 2018–2028 Development Strategy.

### Role in the Kazakhstan economy

Samruk-Kazyna fulfils its mission by managing portfolio companies to increase their long-term value and sustainable development and by investing in the development of priority sectors of the economy.



Oil production in  
Kazakhstan in 2017:

**86.2**  
MLN TONNES

The oil production plan in Kazakhstan for 2018 is **87** mln tonnes

Gas production in  
Kazakhstan in 2017:

**52.9**  
BLN M<sup>3</sup>

Kazakhstan's gas production plan for 2018 is 53.5 bln m<sup>3</sup>



RANKS **12<sup>TH</sup>**  
PLACE IN GLOBAL  
oil and condensate  
reserves

RANKS **15<sup>TH</sup>**  
PLACE IN GLOBAL  
oil and condensate  
production

RANKS **25<sup>TH</sup>**  
PLACE IN GLOBAL  
natural gas reserves

RANKS **30<sup>TH</sup>**  
PLACE IN GLOBAL  
natural gas production

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Samruk-Kazyna is working gradually towards becoming a world-class fund, and today, according to the Sovereign Wealth Fund Institute, with its assets of 71.2 bln USD<sup>4</sup>, it is one of the 30 largest sovereign wealth funds in the world. According to its Development Plan for 2017–2021, Samruk-Kazyna aims to create an asset pool of 81 bln USD.

#### Major Samruk-Kazyna assets

The Samruk-Kazyna group of companies includes companies with operations in the oil and gas, transportation and logistics, chemical and nuclear, mining and metallurgical, energy, engineering and real estate sectors.

KMG accounts for 63% of the asset structure and 72% of the net profit of Samruk-Kazyna<sup>5</sup>.

#### Samruk-Kazyna expectations

According to the Fund's shareholder expectation letter, Samruk-Kazyna expects that KMG will achieve its strategic efficiency goals in 2018–2022 and increase asset value as measured through a set of strategic key performance indicators.

#### OVERVIEW OF THE KEY CHANGES IN KAZAKHSTAN LAW\*

##### Code On the Subsoil and Subsoil Use (with respect to hydrocarbons)

On 27 December 2017, the President signed the new Code On the Subsoil and Subsoil Use" (the "Subsoil Code") and the related Law On the Introduction of Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on Subsoil Use. The Code enters into force 6 months after its official publication, except for certain provisions.

The Code focuses on attracting investment to exploration, and to that end access to subsoil use has been simplified in both the oil and gas sectors and with respect to solid minerals.

##### Promotion of private investment in exploration

The new Code makes it easier for investors to access geological information, including by making some of it free of charge.

It still retains the tender/auction-based contractual system, but which now far better protects investor interests than the licensing system. Tender procedures have also been simplified, so that all expert reviews of draft contracts have been

\*Kazakhstan Code On the Subsoil and Subsoil Use and Kazakhstan Code On Taxes and Other Budget Payments (Tax Code)

#### KMG RATINGS AT THE END OF 2017

MOODY'S

**BAA3**

S&P

**BB-**

FITCH

**BBB-**

<sup>4</sup> According to Samruk-Kazyna's consolidated financial statements, as at 30 September 2017, exchange rate – 341.19 KZT/USD

<sup>5</sup> As at 30 June 2017, according to Samruk-Kazyna's consolidated financial statements: <https://sk.kz/investors/portfolio-companies/>

eliminated; the competent authority signs standard contracts with tender winners within far shorter timeframes. Regulation of the transfer of subsoil use rights and related facilities has been simplified.

The Code allows combined exploration and production contracts, which guarantee that investors discovering new deposits during exploration will be able to recover their investment during the production stage.

Another advantage has been the elimination of the existing "work programmes" concept, transferring volatile forecasts in project documents to contracts. This significantly reduces the risk of contract forfeit if indicators are impaired and simplifies subsoil user operations. Instead, work programmes have been adapted so that they establish the contractual scope and operations at subsoil sites during the exploration period in accordance with minimum requirements specified in tender notification issued by the competent authority. Work programmes refer only to minimum contractual requirements, thus providing greater flexibility for subsoil users for example, in resolving the existing problem of dependent wells and others.

The new Code also considers the specifics of the exploration of super-deep horizons under the Eurasia project<sup>6</sup>, such as the possibility of obtaining exclusive rights to exploration sites and drilling parametric wells.

For new contracts, the Code abolishes all exploration-stage "non-tax" payments under the 2010 Law, such as subsoil user obligations to finance the training of employees and Kazakhstan nationals, fund regional socio-economic development, as well as research and development activities. At the same time, transitional provisions in the new Code allow subsoil users with current exploration contracts to transition to the new subsoil use conditions it introduces.

The Code's special rules for stimulating investment in geological exploration activities are accompanied by a set of innovations in the new Tax Code (more of which later in the document).

#### **Preservation of the balance of interests of subsoil users and the State**

To establish longer exploration periods, the Code has introduced a new concept of "complex hydrocarbon exploration projects."

It also stipulates contractual penalties for violating procurement regulations and requirements for major projects, such as production sharing agreements. A number of issues around subsoil user and contractor liability for violating procurement regulations under previously concluded contracts, including production sharing agreements, are now covered.

Subsoil users are now legally obliged to guarantee local light hydrocarbon fraction processing. They are also obliged by law to ensure local market security



#### **To investors:**

The Code allows combined exploration and production contracts, which guarantee that investors discovering new deposits during exploration will be able to recover their investment during the production stage.

<sup>6</sup> Detailed information on the Eurasia project is provided in the "Reserves and Geological Exploration Operations" section

KMG Business Model and Business Geography	Strategy	Transition to a New Operating Model	Group performance	Technology: Research and Development Institute of Production and Drilling Technology	Social and Environmental Responsibility	Risk Management	Corporate Governance report
through compliance with schedules established by an authorised body.	The Code strengthens government positions with respect to ensuring subsoil users respond to the consequences of subsoil use.	Finally, it also establishes basic requirements for potential subsoil users, such as for solvency and offshore experience.	All exploration-stage “non-tax” payments due under the 2010 Subsoil and Subsoil Use Law, such as the obligation to finance the training of employees and Kazakhstan nationals, regional social and economic development and fund research and development, have been removed from new contracts.	To avoid punishing subsoil users for geological exploration results, commercial discovery bonuses will be abolished from 2019.	For corporate income tax on contractual activities, revenue from the sale of hydrocarbons produced is based on their sales price, but should not be lower than their production cost, except for oil export sales. If at the date of sale, the global oil price is lower than the production cost, revenue should be based on the actual selling price (previously, this exception did not exist).	Since 1 January 2018, revenue from gas sales is based on the selling price without reference to prices approved by an authorised body.	The Code has also introduced a step-by-step procedure for calculating excess profit tax.
<b>Tax Code (key developments in subsoil user taxation)</b>	The President signed a new Code of the Republic of Kazakhstan On Taxes and Other Compulsory Budget Payments (Tax Code) (the “Tax Code”) into law on 25 December 2017.	The new Tax Code prioritises active geological exploration and with its introduction, subsoil users with simultaneous exploration and production contracts in place are entitled to compensate geological exploration expenses incurred after January 2018 through production contract revenue by deducting depreciable assets at a rate of up to 25%. The new provision helps redistribute the tax burden, reducing it at the exploration stage and increasing it after transition to production.	The Code introduces an alternative tax for subsoil users with offshore or super-deep operations. Eligible subsoil users are now entitled to choose to pay the alternative tax instead of having to reimburse historical costs, and pay mineral extraction tax, rent export tax and excess profit tax. The transfer to the alternative tax is made once and is irrevocable.	The mineral extract tax in a single subsoil use contract should correspond to total annual production volume reported under the subsoil use contract, irrespective of whether subsoil use rights have been transferred (transitioned).			

All “non-tax” payments have been removed from new contracts during the exploration stage. Commercial discovery bonuses will be abolished from 2019.

# KEY EVENTS OF 2017

## EXPLORATION AND PRODUCTION



- Production at Kashagan (one of the largest oil fields in the world) was resumed in 2016. In 2017, it produced 686 thous. tonnes of oil, of which KMG's share was 8.44%.
- In December 2017, Eni and KMG signed an agreement to transfer a 50% interest in Isatay exploration block subsoil use rights to Eni.

## GAS TRANSPORTATION AND MARKETING



- Asian Gas Pipeline expansion increased capacity from 30 bcm to 52 bcm per year. In 2017.
- Beineu-Shymkent gas pipeline capacity reached 10 bcm per year.
- In October 2017, the project to expand CPC throughput capacity in the Kazakhstan segment to 53.7 mln tonnes per year was completed.
- In October 2017, KTG exported the first Kazakhstan gas to China under a purchase and sale agreement between KTG and PetroChina International to supply up to 5 bcm of Kazakhstan gas per calendar year.
- In September 2017, the Governments of Uzbekistan and Kazakhstan signed a Framework Agreement allowing the transportation to Uzbekistan through Kazakhstan of up to 5 mln tonnes of oil per year and to create the required pipeline capacity.



## REFINING AND MARKETING



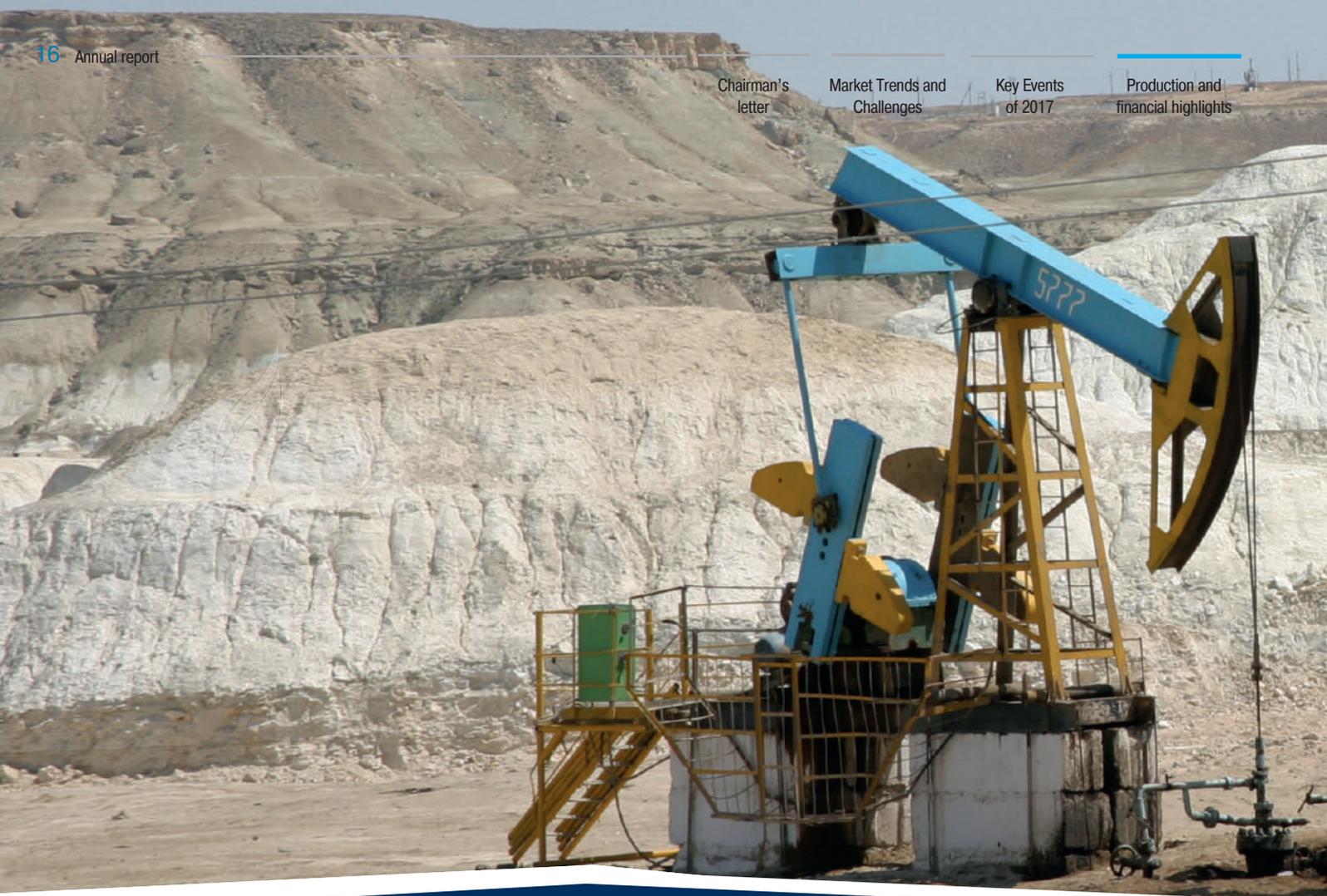
- Modernisation work at the Pavlodar Oil Chemistry Refinery was completed.
- The Atyrau Refinery began trial commissioning at the end of the year.
- The first phase of the Shymkent Refinery modernisation project was completed. Completion of the second phase is planned for the second half of 2018.
- Total capacity of the three main Kazakhstan refineries is due to be raised from 15.4 mln tonnes to 16.6 mln tonnes per year.



## FINANCIAL AND GENERAL CORPORATE EVENTS

- In April 2017, KMG issued 5, 10 and 30-year Eurobonds for a total of 2.75 bln USD.
- In August 2017, KMG Kashagan B.V. received an additional prepayment of 600 mln USD to repay the second tranche of its deferred obligation under the 2008 PSA.
- In September 2017, KTG issued Eurobonds of 750 mln USD. The funds were used to partially repay the Beineu-Shymkent Gas Pipeline loan of 400 mln USD and repay an intra-group loan in favour of NC KMG.
- In October 2017, KMG obtained permission to amend certain terms in its 2023 Bonds and 2044 Bonds to bring them into line with bonds issued in April 2017.
- In December 2017, KMG amended its supply agreement for TCO crude oil by extending the delivery date until March 2021 and increasing the prepayment amount by 1 bln USD.
- In December 2017, KMG and Samruk-Kazyna signed the first addendum to the option agreement to purchase a 50% interest in KMG Kashagan B.V. from Samruk-Kazyna. The option deadline under the supplementary agreement was extended from 2018–2020 until 2020–2022.

# 2017



# 2017

## KazMunayGas in figures



### Macro-environment:

Brent, average price

**\$54.2/BARREL**

↑ **up 23.5%**  
on the average value for 2016

USD/KZT average exchange rate

**326.1**

↑ **the tenge strengthened 4.6%**  
on the 2016 average  
exchange rate

Inflation:

**7.1%**

↓ **as opposed**  
to 8.5% in 2016

### Operating results\*:

Oil and condensate  
production:

**23,362** THOUS. TONNES

or **486** thous. barrels/day\*

Natural and  
associated gas  
production:

**7,997** THOUS. M<sup>3</sup>





Reserves at the  
end of 2017

**683** MLN TONNES

of oil and gas condensate and

**418.8** BLN M<sup>3</sup>

of gas

– 8 bln  
barrels of oil  
equivalent\*\*

Oil  
transportation:

**65,489** THOUS. TONNES



Gas  
transportation:

**100,857** MLN M<sup>3</sup>



Oil refining, factoring in the  
operating share:

**18,207** THOUS. TONNES



of hydrocarbons

Reserve  
replenishment ratio:

**-24%**

\* Production indicators taking into account the KMG operating share

\*\* For information purposes only, the applicable conversion factor is 7.6 barrels of oil and gas condensate per tonne of oil and condensate and 6.6 barrels per thous. m<sup>3</sup> of gas. The actual number of barrels can vary from the crude oil barrel equivalents presented here

# 2017

## KazMunayGas in figures



### Financial results:

Total  
assets:

**13,389** BLN TENGE

or 40.3 bln USD

Equity:

**6,622** BLN TENGE

or 19.9 bln USD



Net debt\*:

**1,344** BLN TENGE

or 4.0 bln USD

Revenue\*\*:

**2,459** BLN TENGE

or 7.5 bln USD

Net  
profit:

**520** BLN TENGE

or 1.6 bln USD

\*Defined as debt less cash and deposits

\*\*Excluding revenue from discontinued operations

KMG Business  
Model and Business  
Geography

Strategy

Transition to a New  
Operating Model

Group  
performance

Technology: Research  
and Development  
Institute of Production  
and Drilling Technology

Social and  
Environmental  
Responsibility

Risk  
Management

Corporate  
Governance report



Operating cash flows:

**399.9** BLN TENGE

or 1.2 bln USD

Share in the net profit  
of subsidiaries and associates:

**415** BLN TENGE

or 1.3 bln USD

EBITDA:

**1,268** BLN TENGE

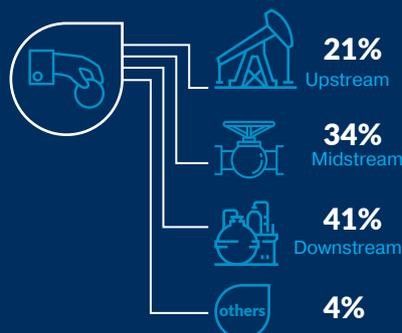
or 3.7 bln USD

Capital expenditures (CAPEX):

**637** BLN TENGE (\$1.9 BLN)

including monetary capital  
costs – **464 bln tenge**  
(**\$1.4 bln**)

CAPEX allocation:



Total taxes and  
payments:

**1,027** BLN TENGE (\$3.2 BLN)

of which funds paid to the Kazakhstan  
budget and National Fund  
**584 bln tenge (\$1.8 bln)**

Dividends paid to the  
shareholder in 2017:

**58** BLN TENGE 

or 176 mln USD

# OPERATING RESULTS

In 2017, KMG's consolidated production increased 3% to 23,362 thous. tonnes, which equates to approximately 468 thous. barrels/day\*. TCO, JSC Ozenmunaigas, JSC Mangistaumunaigaz and JSC Embamunaygas were responsible for 74% of oil and gas condensate production. Oil exports amounted to 17.2 mln tonnes, with domestic oil supplies reaching 6.1 mln tonnes.

NCOC, TCO and Kazakhturkmunay LLP demonstrated the greatest production increases in 2017 compared to 2016 in absolute terms, with KMG's share in those companies growing by +607 thous. tonnes in NCOC (+768% from 2016), +228 thous. tonnes in TCO (+4.1% from 2016) and +95 thous. tonnes in Kazakhturkmunay LLP (+33% from 2016).

Gas production increased 8% to 7,997 mln m<sup>3</sup>. In 2017, Tengizchevroil, KPO and Amangeldy Gas LLP (a KTG subsidiary) accounted for the greatest share of gas production. The largest increase in KMG's share of gas production was seen in NCOC – + 349 mln m<sup>3</sup> and KPO – +127 mln m<sup>3</sup> (+7.2% from 2016).

## GAS SALES

KMG's gas sales exceed production, because it purchases gas to be sold on. Total gas purchased from Kazakhstan subsoil users amounted to 13,421 mln m<sup>3</sup>, while total gas sales amounted to 17,742 mln m<sup>3</sup>, including 28% for export and 72% for domestic sales.

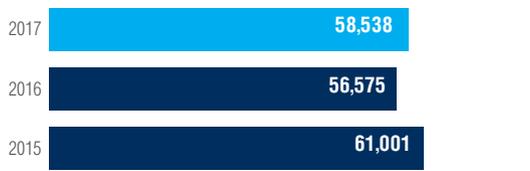
## OIL AND GAS CONDENSATE PRODUCTION, THOUS. TONNES, +3%



## NATURAL AND ASSOCIATED GAS PRODUCTION, MLN M<sup>3</sup> + 8%



## OIL TRANSPORTATION BY PIPELINE, THOUS. TONNES, +3.5%



\* Assuming 7.6 barrels equals one tonne of oil

## OIL AND GAS TRANSPORTATION

In 2017, 58,538 thous. tonnes of oil were transported by pipeline and 6,951 thous. tonnes by sea. KMG's main pipeline transportation asset is KTO. Of the total oil transported, exports accounted for 47%, domestic supplies – 32% and transit oil – 21%.

Oil transportation by marine fleet was mainly carried out across the Black and Caspian Seas.

The volume of oil transported by marine fleet fell insignificantly by 1.8% in 2017 compared to 2016 due to the redirection of oil supplies to different routes.

Consolidated gas transportation amounted to 100,857 mln m<sup>3</sup>, with international transit accounting for about 65%, exports – 18% and domestic supplies – 17%. The areas demonstrating the greatest increase in gas supplies compared to 2016 were in international gas transit and exports.

## HYDROCARBON REFINING

Hydrocarbon refining output at Kazakhstan plants, taking into account the operating share, increased by 3% in 2017 to 12,172 thous. tonnes. Of these, the KMG net share amounts to 12,173 thous. tonnes, which includes 4,724 thous. tonnes at the Atyrau Refinery; 4,747 thous. tonnes at the Pavlodar Oil Chemistry Refinery; KMG's 50% share of the processing volume at the Shymkent Refinery amounts to 2,343 thous. tonnes; while its 50% share in the processing volume at the Caspi Bitum plant amounts to 359 thous. tonnes.

The KMG I (Petromidia and Vega) refining volume amounted to 6,035 thous. tonnes of hydrocarbons.

## OIL TRANSPORTATION BY MARINE FLEET, THOUS. TONNES, –1.8%



## GAS TRANSPORTATION, MLN M<sup>3</sup>, +15%



## HYDROCARBON REFINING TAKING INTO ACCOUNT THE OPERATING SHARE<sup>7</sup>, THOUS. TONNES, +3%



<sup>7</sup> The calculation methodology uses 100% of the processing volume to determine the Atyrau Refinery, Pavlodar Oil Chemistry Refinery and Romanian refinery operating shares and 50% for PKOP and Caspi Bitum.





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# 5 KMG BUSINESS MODEL AND BUSINESS GEOGRAPHY

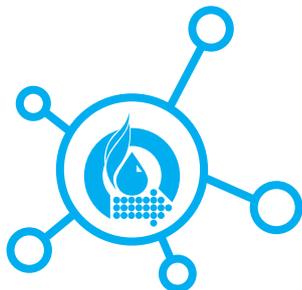
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# KMG BUSINESS MODEL AND BUSINESS GEOGRAPHY

## VERTICALLY INTEGRATED HOLDING COMPANY

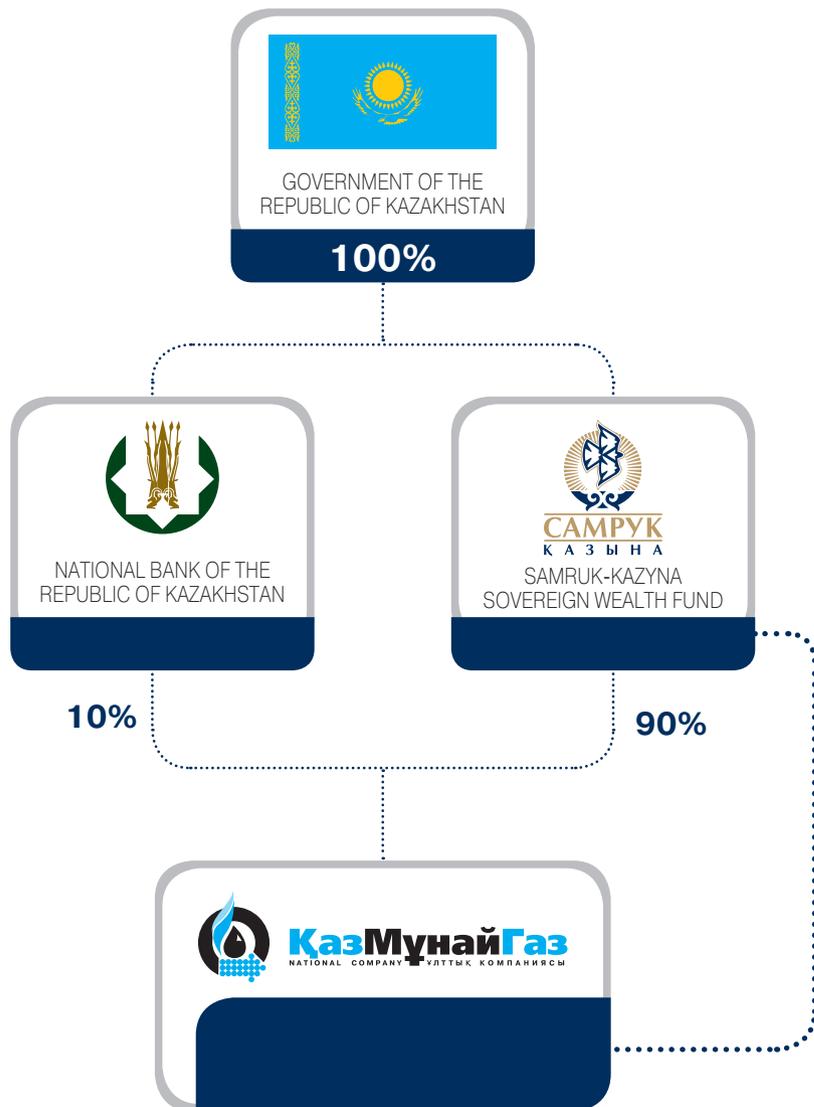
**National Company KazMunayGas** is the Kazakhstan operator in hydrocarbon exploration, production, refining and transportation, representing the state's interests in the oil and gas industry in Kazakhstan. At the end of 2017, the KMG Group incorporated 191 organisations.

The founder of KMG is the Kazakhstan Government, represented by the State Property and Privatisation Committee of the Kazakhstan Ministry of Finance, KMG shareholders – Samruk-Kazyna Sovereign Wealth Fund (90%) and Kazakhstan National Bank (10% + 1 share).



**191** ORGANISATIONS

incorporated the KMG  
Group at the end of  
2017





## Exploration and production

Increase in oil and gas reserves and the development of resource potential through onshore and offshore geological exploration

### GEOLOGICAL EXPLORATION

Liquid hydrocarbon reserves – **683** mln tonnes (**5.19** bln barrels)

KMG's share – **20%** of Kazakhstan's total oil reserves as at the end of 2016

Development of onshore and offshore deposits and hydrocarbon production

### OIL AND GAS PRODUCTION

Oil and condensate production – **23.4** mln tonnes or **27%** of total oil and condensate production in Kazakhstan (2017)

Natural and associated gas production – **8.0** bln m<sup>3</sup> or **15%** of total natural and associated gas production in Kazakhstan (2017)

Detailed information is provided in the "Reserves and exploration" section

Detailed information is provided in the "Production" section



## Transportation and storage

### OIL TRANSPORTATION

Total length of main oil pipelines – **7,585** km

**66.7\*** mln tonnes or **57%** of oil transported in Kazakhstan in 2017 was transported by KMG oil pipelines

Eight oil tankers (vessels) are used to transport oil by sea. Sea transportation – **7.0** mln tonnes

\*KMG operating share incl. 100% KTO, 50% KCP, 51% MT, 20.75% CPC

### GAS TRANSPORTATION AND STORAGE

Total length of gas pipelines – **18,960** km and gas distribution networks – over **45,000** km

The 3 largest underground gas storage facilities in Kazakhstan with a total active storage capacity of **4.6** bcm

**100.9\*** bcm or **82%\*\*** of gas transported by Kazakhstan in 2017 was transported by KMG main gas pipelines

\*The KMG operating share includes transported gas – 100% ICA, 100% KTGA, 50% AGP, 50% BSGP.

\*\* KMG partners AGP and BSGP accounted for 18%

Detailed information is provided in the "Transportation" section

## Sales

### SALES: RETAIL AND WHOLESALE

KMG-branded filling stations in Kazakhstan and Rompetrol-branded filling stations in Europe

**14%** of retail petroleum product sales in Kazakhstan in 2016

Total petroleum product sales of **3.6** mln tonnes, wholesale – **2.4** mln tonnes, and retail – **1.2** mln tonnes

In 2017, a new vehicle compressed gas filling station was put into operation in Aktobe

Detailed information is provided in the "Refining" section



## Refining

### HYDROCARBON REFINING

Oil refining depth is up to **80%** tonnes or **82%** of oil refined in Kazakhstan

Total hydrocarbon refining volume, inclusive of the operating share, and including international assets – **18.2** mln tonnes

Total hydrocarbon refining volume at the Kazakhstan refineries, inclusive of the operating share – **12.2** mln

Total product output, inclusive of KMG's operating share, and including foreign assets – **17.2** mln tonnes

Total Kazakhstan refinery output – **11.3** mln tonnes

Detailed information is provided in the "Refining" section



## Structure of the KMG Group



### Exploration and production

Organisation	Relationship to the parent company (subsidiary, dependent entity or jointly controlled organisation)	Ownership interest, %
JSC EP KazMunayGas	Subsidiary	63.00%
Offshore Oil Company KazMunayTeniz LLP	Subsidiary	100%
Kazakhoil-Aktobe LLP	Subsidiary	50%
Kazakhturkmunay LLP	Subsidiary	100%
Cooperative KazMunaiGaz U.A.	Subsidiary	100%
Caspian Oil and Gas Company LLC	Joint venture	50%
Tengizchevroil LLP	Joint venture	20%
N Block B.V.	Subsidiary	100%
N Operating Company LLP	Subsidiary	100%
Urikhtau Operating LLP	Subsidiary	100%
PSA LLP	Subsidiary	100%
Satpayev Operating LLP	Subsidiary	100%
KMG Karachaganak LLP	Subsidiary	100%
Central Oil and Gas Company LLC	Joint venture	50%
KMG-Eurasia LLP	Subsidiary	100%
KMG – Ustyurt LLP	Subsidiary	100%
Bekturly Energy Operating LLP	Subsidiary	50%



### Transportation and storage

Organisation	Relationship to the parent company (subsidiary, dependent entity or jointly controlled organisation)	Ownership interest, %
National Maritime Shipping Company Kazmortransflot	Subsidiary	100%
JSC KazTransGas	Subsidiary	100%
JSC KazTransOil	Subsidiary	90%
Kazakhstan Pipeline Ventures LLP	Joint venture	49.90%
JSC CPC-K	Joint stock company	19%
CJSC CPC-R	Joint stock company	19%
KazRosGas LLP	Jointly controlled organisation	50%



## Refining and marketing

Organisation	Relationship to the parent company (subsidiary, dependent entity or jointly controlled organisation)	Ownership interest, %
KazMunayGas Onimderi LLP	Subsidiary	100%
Ayrau Refinery LLP	Subsidiary	99.53%
TH KazMunayGas N.V.	Subsidiary	100%
KazMunayGas – Aero LLP	Subsidiary	100%
POCR LLP	Subsidiary	100%
JV Caspi Bitum LLP	Jointly controlled organisation	50%
Karagandy CCI LLP	Subsidiary	25%
Air Liquid Munay Tech Gazy LLP	Dependent entity	25%
KMG International N.V.	Subsidiary	100%
KMG-Retail LLP	Subsidiary	100%



## Services

Organisation	Relationship to the parent company (subsidiary, dependent entity or jointly controlled organisation)	Ownership interest, %
JSC Kaskor-Transservice	Joint stock company	12.87%
JSC Kazakhstan British Technical University	Subsidiary	100%
KazMunayGas-Service LLP	Subsidiary	95.30%
KMG – Security LLP	Subsidiary	100%
Teniz Service LLP	Jointly controlled organisation	49.00%
KMG Kumkol LLP	Subsidiary	100%
KMG Systems & Services LLP	Subsidiary	100%
KMG Drilling and Services LLP	Subsidiary	100%
KazMunayGas Production and Drilling Technology Research and Development Institute LLP	Subsidiary	100%
AktauOilMash LLP	Subsidiary	25%
KazOilMash LLP	Subsidiary	100%
Professional Geo Solutions Kazakhstan LLP	Joint venture	50%
Oil Transport Corporation LLP	Subsidiary	100%
Munaitelcom LLP	Subsidiary	100%
Mangistauenergomonai LLP	Subsidiary	100%
Oil Construction Company LLP	Subsidiary	100%
Oil Service Company LLP	Subsidiary	100%

# GEOGRAPHY OF KMG ASSETS





Oil pipelines

Gas pipelines

Upstream assets

1 Atyrau-Samara Pipeline (KTO)

2 Kazakhstan China Pipeline

3 CPC oil-pipeleine

4 KTO oil-pipeline

5 MunaiTas oil-pipeline

1 Intergas Central Asia gas pipeline

2 Beineu-Bozoi-Shymkent Gas Pipeline

3 Asia Gas Pipeline



PAVLODAR REFINERY

AMANGELDYGAS

SHYMKENT REFINERY (PKOP)



EXPLORATION AND PRODUCTION



REFINING AND MARKETING



## Контроль качества материалов при проведении количественной сейсмической инверсии

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Проект разведки, ТОО «Научно-исследовательский институт геологической разведки»

### АБСТРАКТ

Данная работа описывает применение сейсмической инверсии с целью получения достоверных результатов при расчленении разреза и оценке литологии. Потеря и снижение качества скважинных и сейсмических данных в процессе регистрации кривых, полевых работ и/или в процессе обработки, отсутствие или плохое качество данных геофизических методов ведут к ограничению использования разных алгоритмов сейсмической инверсии. Проведена сейсмическая инверсия на двух месторождениях нефти и газа. Для проведения инверсии использованы разные пакеты скважинных и сейсмических данных. Результат сейсмической инверсии зависит от качества входных данных. Поэтому, до тех пор, пока не будет должным образом уделяться внимание к качеству регистрируемой аппаратуры и сейсморазведочных работ, количеству и полноте необходимых методов, особенно важным, является проведение контроля качества данных для количественной интерпретации.

### ВХОДНЫЕ ДАННЫЕ



# 6 STRATEGY

# STRATEGY

## KMG mission

As the oil and gas operator in Kazakhstan, KMG confirms its commitment to the development and achievement of its goals to increase the long-term value of KMG assets and promote the modernisation and diversification of the economy of Kazakhstan.

KMG's mission is to ensure maximum benefit for Kazakhstan from participating in the development of the national oil and gas industry by:

- ◆ increasing KMG's value and ensuring returns on its investments;
- ◆ focusing on the activities of the oil and gas market in Kazakhstan with due consideration of the potential opportunities for business expansion in neighbouring countries;
- ◆ ensuring a high level of financial sustainability
- ◆ ensuring sustainable development.

## Strategic priorities

To realise its mission and ensure sustainable development, KMG will focus on three key strategic priorities:

- ◆ strengthening its financial position in the short and medium term through capital constraints and improving operational efficiency;
- ◆ creating a target business model that takes into account the privatisation programme;
- ◆ strengthening its role as a key player in the oil and gas industry in Kazakhstan.

## Strategic objectives

In accordance with the key priorities, the Group's main objectives are to:

- ◆ increase production volumes and reserve levels;
- ◆ ensure investment returns;

- ◆ create value and improve financial sustainability.

Achieving its objectives within the framework of its priorities will increase overall business efficiency and improve KMG's operating and financial performance.

## Key strategical results

In 2017, KMG demonstrated the following results for its key strategical results:

### Oil and condensate production

**23.4**  
MLN TONNES

### Reserves (A+B+C1)

**683**  
MLN TONNES

### ROACE<sup>8</sup>:

**9.1%**

<sup>8</sup> ROACE = (profit for the year + interest expenses adjusted for tax payments)/average capital employed excluding cash and bank deposits

## Strategy implementation measures

KMG holds periodic strategic sessions with top management to review strategy implementation status and update strategic initiatives, taking into account the challenges of global trends and external environmental changes.

To ensure effective implementation of the strategy and achieve strategic objectives, the Group focuses on the following strategic initiatives:



### EXPLORATION AND PRODUCTION

- ◆ Developing the resource base to ensure sustainable medium-term development (until 2025) and long-term development (after 2025).
- ◆ Ensuring hydrocarbon production growth to a greater extent through organic growth
- ◆ Increasing production operating efficiency:
  - ◆ increasing the period between overhauls;
  - ◆ increasing the efficiency of water injection systems;
  - ◆ improving drilling programmes;
  - ◆ increasing the efficiency of geological and technical measures;
  - ◆ increasing employee productivity.



### GAS TRANSPORTATION AND MARKETING

- ◆ Improving the profitability of gas transportation and marketing.
- ◆ Developing transit potential and developing export potential to China.
- ◆ Using liquefied hydrocarbon gas to supply gas to small population centres.



### REFINING

- ◆ The modernisation of Kazakhstan refineries, which is due to be completed shortly, will ensure the domestic supply of petroleum products by the end of 2018. It will also ensure the transition to the production of K4 and K5 standard vehicle fuel in accordance with EurAsEC Customs Union Technical Regulations.
- ◆ Another important factor has been the increase in added value on account of comprehensive oil refining into light oil and petrochemical products.



### OIL TRANSPORTATION

- ◆ Increasing pipeline transportation efficiency.
- ◆ Increasing oil transportation using existing domestic capacity.
- ◆ Increasing the loading capacity of oil tankers.



### OILFIELD SERVICES

- ◆ Improving and developing a target portfolio of oilfield services.





# 7 TRANSITION TO A NEW OPERATING MODEL

## Transition to a new operating model:

# TRANSFORMATION AND PRIVATISATION

In the current market conditions of low hydrocarbon prices and rapidly changing conditions, KMG is facing new business development challenges. Its task is to move to a new business management operating model – from a strategic holding company to operational involvement in the management of its subsidiaries. The model aims to improve operational efficiency, increase productivity and focus on the profile business, strategic assets and the disposal of non-core assets. To solve its challenges, KMG is implementing business programmes to transform and privatise its non-core assets.

### BUSINESS TRANSFORMATION

KMG transformation involves a series of systemic measures, initiatives and processes that affect the whole vertically integrated holding company, covering processes from production to retail sales. Emphasis is placed on improving business process efficiency, eliminating duplication and bureaucracy; simplifying and automating processes; speeding up decision-making processes; and helping the Group adapt to difficult market conditions. The Group analyses and implements advanced global best business practices, including best IT practices.

### RESULTS OF THE KMG TRANSFORMATION PROGRAMME IN 2017

In 2017, the Transformation Programme entered Stage 3 – “Implementation,” during which the objective was to introduce previously developed initiatives

that take into account the production, financial and organisational specifics of each KMG Group company. Business process owners were involved to ensure the successful implementation of the various transformation projects, and who introduced a transformation team to the corporate centre. Project managers were chosen from function leaders in all business areas. Transformation initiatives were implemented under the supervision of parent company and subsidiary senior managers. Another objective was to ensure transformation block experts at the KMG enterprises transfer their accumulated experience and knowledge.

In 2017, KMG continued implementing its new operating model, allowing it to transition from the holding company system to the more active management of production assets. Under the new operating model, a single corporate centre remains at the first level, and subsidiaries and dependent entities are at the second level. The corporate centre is responsible for developing strategy, planning and providing full innovative support, while the subsidiaries focus exclusively on implementing production plans, all of which allows the Group to make effective decisions, minimise bureaucracy and simplify procedures. In 2017, KMG completed the process to wind up the sub-holding JSC KazMunayGas – Refining and Marketing, which was part of the corporate centre as the Oil Transportation, Refining and Marketing (TRM) division.

**New operating model:**  
Active management of  
production assets

#### LEVEL 1

Integrated  
corporate centre



#### LEVEL 2

Subsidiaries and  
dependent entities

## TRANSFORMATION PROGRAMME PROJECT PORTFOLIO

The Transformation Programme portfolio includes 21 so-called “quick wins” to improve KMG production activity and 12 projects introducing system and methodological changes in management and support processes, with subsequent automation.

Specifically, 2017 saw the launch of the “Transformation of Core Business Functions and ERP Introduction” project covering the corporate centre and 13 KMG subsidiaries and dependent entities. The first project stage covers key business processes in detail such as bookkeeping and tax accounting, management accounting, project management, treasury and corporate finance, production management, maintenance and

repair (MRO) management, as well as support management for goods, work and services. The second stage involves automation of the above business functions based on the ERP system<sup>10</sup>. Project deliverables include integrated standards and methodologies; detailed processes in specific areas and effective internal control mechanisms. Extensive automation will help reduce costs, improve staff productivity and performance.

Last year, “quick wins” led to the:

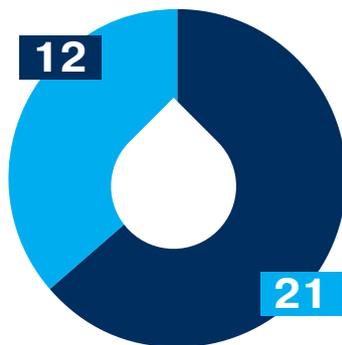
- ◆ increased periods between refinery overhauls (including MRO system automation)
- ◆ introduction of Lean 6 Sigma/Lean Production Programmes in TRM division companies and others

Implementation of the above projects is continuing and the plan is to replicate (if it has not already been started) the most successful initiatives to improve production processes at other KMG core assets.

### ESTABLISHMENT OF COMMON SERVICE CENTRES (CSS)

In 2017, KMG launched its IT and HR (HR Qyzmet) CSS. The IT CSS, which is a separate legal entity, employs a number of IT specialists taken from several KMG subsidiaries to perform

## TRANSFORMATION PROGRAMME PROJECT PORTFOLIO



- System and methodological change projects
- Quick wins

<sup>10</sup> ERP – enterprise resource planning system

routine IT service operations. It already serves the KMG corporate centre, TRM division, and the KazMunayGas Production and Drilling Technology Research and Development Institute LLP as a “one-stop-shop”. In 2018, the IT CSS operational model will be replicated for the remaining subsidiaries of the TRM division.

HR Qyzmet, which is based on the Samruk-Kazyna Corporate University, is responsible for personnel management issues and serves 3.5 thous. employees from 9 Samruk-Kazyna group companies. By the end of 2018, it is expected to cover 28 thous. people.

The creation of a financial function CSS will involve the relocation of routine bookkeeping, tax accounting and treasury operation personnel from companies in the pilot TRM division to a separate legal entity. Work on the initiative continues, incorporating the preparation of a methodology in line with the related “Transformation of Core Business Functions and ERP Introduction” project. Overall, CSS offer a number of benefits for KMG subsidiaries. For example, they reduce the cost of maintaining non-core support functions, improve service quality, help implement business processes based on integrated standards and methodologies, and increase access to the

information needed to improve decision-making processes.

### TRANSFORMATION OF PROCUREMENT ACTIVITIES

The methodological part of improving procurement systems and introducing category management was completed in 2017, which led to the creation of a Competence Centre for category management, whose objective is to reduce procurement function costs and procurement periods, and improve the quality of procured goods, work and services.

In 2017, KMG developed and approved six procurement strategies in “Production and Drilling Pipes”, “Oil Pumps”, “Procurement of Vehicle Services for the KMG Group”, “Diesel”, “Catalytic Cracking Catalysts” and “Technical Gases”. Agreements in the “Procurement of Vehicle Services” category were concluded for a group of companies in Astana, resulting in a saving of 546 mln. tenge. Work is being carried out in collaboration with Samruk-Kazyna for the new “Electricity” and “Medical Insurance” procurement category strategies.



**Economic effect from the implementation of procurement category strategies:**

**546**  
MLN TENGE

**Proceeds from the sale of subsidiaries under privatisation programme is**

**28.7**  
BLN TENGE

### FINANCIAL BENEFITS FROM TRANSFORMATION PROGRAMME IMPLEMENTATION

Since the launch of the Transformation Programme in 2015–2017, the Group expects net savings of 62.8 bln tenge.

### PRIVATISATION PROGRAMME

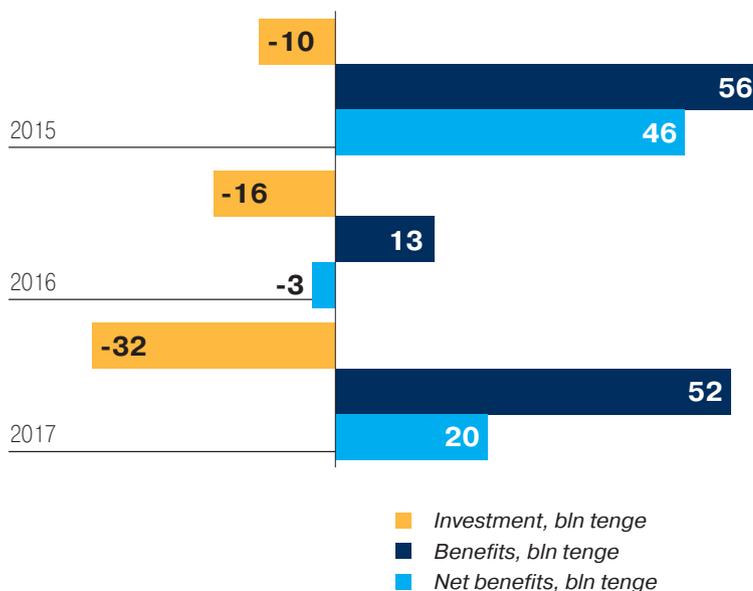
Another equally important process within the framework of the Business Transformation and Structure Optimisation programmes has been asset privatisation, primarily non-core assets. As early as 2014, the Group began to implement a comprehensive privatisation plan, which at that time included only 27 assets for sale.

In December 2015, the Kazakhstan Government approved a comprehensive privatisation plan for 2016–2020, which included 73 KazMunayGas companies, many of which were recognised as priority sales. An independent consultant was engaged, resulting in 64 companies being put up for sale, closure or reorganisation. In an effort to increase the efficiency of its operating model, KMG has started to work on this initiative in earnest, and to date has disposed of a number of assets.

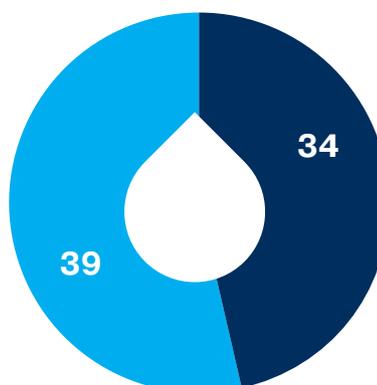
By the end of 2017, a total of 34 assets worth approximately 28.7 bln tenge had either been sold (22) or restructured or closed (12). 11.9 bln tenge of the proceeds came from the sale of JSC Euro-Asia Air.

All assets included in the privatisation plan are subject to pre-sales preparation work and evaluation by independent appraisers. After this has been completed, the appropriate sale method is identified.

### FINANCIAL BENEFITS FROM TRANSFORMATION PROGRAMME IMPLEMENTATION



### PRIVATISATION PROGRAMME



- Assets sold, reorganised or closed
- Assets planned for privatisation in 2018-2019





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# 8 GROUP PERFORMANCE

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# RESERVES AND EXPLORATION

## RESERVES

In recent years, KMG has significantly reduced its exploration expenses. However, its portfolio consists mainly of mature oil fields, which results in a gradual depletion of the resource base, triggering new challenges, improving work quality and efficiency, prioritising the search for approaches to replenishing resources, preparing new reserves and developing them both at new and mature fields based on the results of supplementary exploration. The Group is actively searching for promising geological exploration ideas.

KMG is also working with KazMunayGas Production and Drilling Technology Research and Development Institute LLP to study the Caspian, Ustyurt-Bozashin and Mangyshlak basins at a regional level to help it prepare a portfolio of promising blocks for subsoil use.

As at 31 December 2017, according to the Kazakhstan State Commission for Mineral Reserves, KMG's liquid hydrocarbon

reserves (taking into account participatory shares) amounted to 683 mln tonnes (5,190 mln barrels) or including natural gas 1,047 mln tonnes of oil equivalent (7,954 mln barrels of oil equivalent).

Liquid hydrocarbon reserves should last for about another 30 years and natural gas reserves – about 40 years.

KMG's proved hydrocarbon reserves decreased by 4% or 29.2 mln tonnes (222 mln barrels) or including natural gas 39.5 mln tonnes of oil equivalent (300 mln barrels of oil equivalent) from the previous year mainly due to annual production and the revaluation of Karachaganak field reserves (–9.8 mln tonnes). The revaluation recorded gains of 4 mln tonnes at the mature JSC Embamunaygas (Novobogatinsk SE, Zaburunye, Akingen and Gran), JSC PetroKazakhstan Inc. (Kumkol, SW Karabulak, Western Tuzkol and North Ketekazgan) and JV Kazgermunai LLP (Akshabulak) fields. With that in mind, the overall decrease in reserves for all companies amounted to 5.8 mln tonnes

<sup>10</sup> KMG Kashagan B.V. reserves were recorded inclusive of 8.44% share in KMG consolidated reserves volume. NC KMG share of KMG Kashagan B.V. reserves in consolidated reserves was accounted for 16.88% (incl. Samruk-Kazyna share) in previous KMG annual reports for 2015–2016.

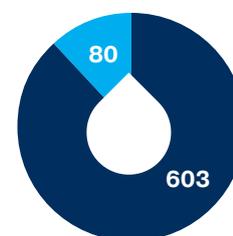
For reference: In October 2015, the Fund acquired a 50% stake in KMG Kashagan B.V. from NC KMG, leaving NC KMG with the right to buy back the above shares in accordance with the terms of the Share Option Agreement. NC KMG and the JSC Samruk-Kazyna own 8.44% in North Caspian Operating Company (NCOC), which comprise 16.88% in total. In December 2017, the Option to buy back 50% in the project Kashagan was extended from period 2018–2020 until 2020–2022.

<sup>11</sup> On the assumption that 1 thous.m<sup>3</sup> of gas = 6.6 barrels of oil equivalent, 1 tonne = 7.6 barrels.

## KMG'S PROVED A, B AND C-1 CATEGORY HYDROCARBON RESERVES<sup>10</sup>

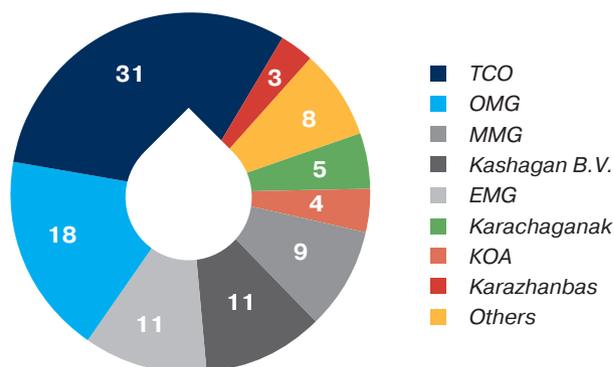
	31 December 2016	31 December 2017	Increase / decrease (-)
Gas condensate, mln tonnes	44.9	43.2	–1.7
Oil, mln tonnes	667.2	639.7	–27.5
Total (oil and gas condensate), mln tonnes	712.1	682.9	–29.2
Natural gas, bcm	430.7	418.8	–11.9
Total, mln barrels of oil equivalent <sup>11</sup>	8,255	7,954	–300

## STRUCTURE OF ONSHORE AND OFFSHORE RESERVES



- Onshore reserves, mln tonnes
- Offshore reserves, mln tonnes

### STRUCTURE OF KMG PROVED A, B AND C1 CATEGORY HYDROCARBON RESERVES (INCLUSIVE OF KMG'S OPERATING SHARE) AS AT 31 DECEMBER 2017 IN %



### RECOVERY OF OIL AND CONDENSATE RESERVES (INCLUSIVE OF KMG'S SHARE), MLN TONNES



Oil and condensate reserves replacement ratio:

**32%**  
IN 2016

**-24%**  
IN 2017

**24%**  
IN 2018 (PLAN)

In 2017, exploration results showed no increase in reserves, while revaluation of the Karachaganak field revealed a reduction in reserves, which is why the Group's oil and condensate reserve replacement ratio as a whole is negative.

#### EXPLORATION

In 2015, JSC Embamunaygas opened its Central Novobogatinsk deposit, whose recoverable oil reserves amount to 1,435 thous. tonnes, of which 391 thous. tonnes are C1 category and 1,044 thous. tonnes – C2. The exploration/production contract for the deposit is valid until 2030.

#### Overview of exploration projects

In 2017, KMG capital exploration costs increased to cover expanding exploration activities in all of the main subsoil use regions, such as exploration sites in Atyrau, Mangistau and Kyzylorda regions at Urikhtau Operating LLP, JSC Mangistaumunaigaz, Kazakhoil Aktobe LLP, Bekturly Energy LLP, Amangeldy Gas LLP, JSC Ozenmunaigas, JSC Embamunaygas and PetroKazakhstan, and also at the Satpayev Operating and Dzhambul Petroleum offshore facilities.

KMG has introduced new exploration technology at many of its facilities, such as new low-frequency vibrators and high-resolution wide-azimuth seismic survey data in 2017. The technology was tested at the Zhetybai, Bekturly East and Ozen-Karamandybas facilities and returned impressive results, allowing KMG to better locate exploratory drilling locations, in the long term, significantly improving exploration and production drilling success ratios.

Since 2016, KMG has been performing geological and geophysical analyses and preparing portfolios for promising blocks in the Caspian, Ustyurt-Bozashin and Mangyshlak basins.

In 2016–2017, this involved interpreting primary reflecting horizons, creating structural-tectonic models, analysing borehole data and then identifying tectonic traps. 2017 also saw a chronostratigraphic analysis, a sedimentation model, and 1D, 2D and 3D basin models at the Mangyshlak basin, enabling a portfolio of 5 and 7 sites to be prepared for further study and subsequent inclusion in the KMG investment portfolio.

In 2018, similar work will be carried out at the Caspian and Ustyurt-Bozashin sedimentary basins.

3D-CDPM seismic operations were carried out at the Ozen-Karamandybas (exploration block) and Bekturly East onshore sites and the Zhetybai-Bekturly-Pridorozhnoye fields, including seismic data processing and interpretation to better understand subsoil use prospects (block N, Amangeldy, Dzhambul and Bekturly East).

In 2017, JSC EMG drilled a well at the Satpayev block along with 27 exploratory wells, 12 of which revealed indications of hydrocarbons and influx, with the remainder still in the drilling/testing stage.

KMG also introduced a resource, hydrocarbon reserve and cost monitoring database as well as a centralised bank of geological, geophysical and field data, which should allow the Group to monitor the movement of reserves and resources within the KMG Group and analyse and forecast reserve growth.

### CAPITAL EXPLORATION COSTS, BLN. TENGE



	2016	2017	2018
Geologic exploration			
Number of exploration wells, pcs.	28	50	46
2D seismic survey, thous. linear km	2,000	–	1,620
3D seismic survey, thous. km <sup>2</sup>	2,097	4,299	1,850
Operational fields	–	–	–

\* 2D seismic survey was not conducted in 2017

In 2016, KMG developed a detailed supplementary exploration programme for 2017–2021, which involved preparing type, scope and timing proposals for supplementary field exploration identified by the programme, including 3D seismic surveying and drilling new wells to assess the possibility of recommissioning wells previously decommissioned due to water cut, accidents, low yields and for other reasons. The expected increment under the programme is 60.7 mln tonnes of oil.

The most important exploration areas for KMG are to:

- ◆ Develop existing projects in accordance with subsoil use contract obligations
- ◆ Identify additional potential in existing fields to increase reserves
- ◆ Acquire new assets based on the results of regional studies and identify promising areas

KMG Business Model and Business Geography

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As part of its risk-sharing (carry financing) policy, in December 2017, KMG and Eni (Italy) entered into a transaction to transfer a 50% interest in the Isatay project, an offshore block of the Kazakhstan sector of

the Caspian Sea. In early 2018, both companies will start exploratory work on the contract territory through a joint operating company.

KMG continues to implement procedures to select a strategic partner for the Abai project, which is an offshore block in the Kazakhstan sector of the Caspian Sea, from ENI, Exxon Mobil and Shell.

EURASIA PROJECT

21.06.2017	OBJECTIVE 1	OBJECTIVE 2	OBJECTIVE 3
 <p>On 21 June 2017, a memorandum of understanding was signed between the Ministry of Energy, the Ministry of Investment and Development’s Geology and Subsoil Use Committee as one party, and a group interested in working on the Eurasia international project represented of KMG-Eurasia LLP, Agip Caspian Sea B.V., CNPC International Ltd., SOCAR, NEOS Geosolutions and RN Exploration LLC.</p>	 <p>The Eurasia project’s main objectives are to study deep geological structures in the Caspian region with the aim of discovering new major hydrocarbon deposits and establishing regularity in their distribution at great depths</p>	 <p>studying the tectonics, stratigraphy and sedimentology, paleogeography, paleoclimate and geochemistry of the earth’s crust in the region</p>	 <p>obtaining a spatial-time model of the Caspian region to target oil exploration operations and assess potential hydrocarbon resources in the Caspian basin.</p>
			

The parties to the memorandum discussed geophysical and drilling studies of the Caspian depression, the procedure for obtaining geological and physical data, the project work

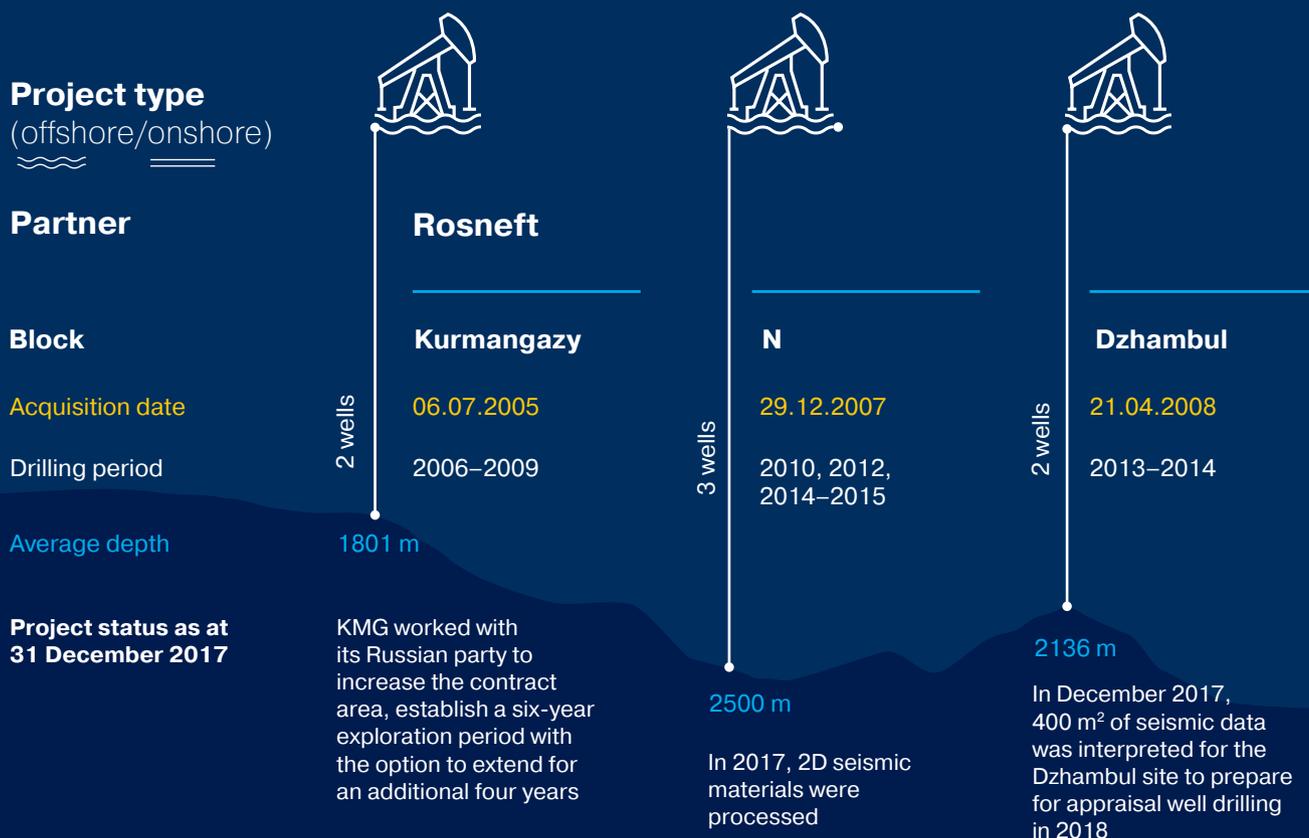
programme, and basic state geological exploration contract provisions.

The creation of the international consortium will promote exploration,

including drilling deep subsoil horizons in the Caspian depression, some of which up to 15 km.



## Exploration activities of major projects in 2017





### ONGC Videsh Limited

#### Satpayev

15.06.2010

2015–2017

On 1 July 2017, an addendum to the Contract between the Ministry of Energy, KMG and ONGC Videsh Limited was signed. In 2017, a 3,505 m exploratory well was drilled

2 wells

3210 m



### Kokel Munai LLP

#### Bekturly East area

17.06.2015

3D seismic exploration operations were performed using the common depth point method at the Bekturly East area, together with the processing and integrated interpretation of 354 m<sup>2</sup> of 3D seismic data



### Eni S.p.A.

#### Isatay

26.06.2015

On 21 December 2017, the Ministry of Energy, KMG and Eni Isatay B.V. concluded a transaction to transfer a 50% interest in the Isatay project and operating company to Eni Isatay B.V.



### Union Field Group

#### Ustyurt

26.06.2015

On 27 October 2017, KMG and the UnionField Group signed a contract to sell a 50% interest in KMG Ustyurt LLP to the UnionField Group



# OIL AND GAS PRODUCTION

## OIL PRODUCTION

### KMG oil and condensate production

KMG produces oil and gas condensate through operating assets in which it directly manages production processes, and non-operating assets in which KMG has a share but is not directly involved in production processes

KMG operating assets include:

- ◆ JSC Ozenmunaigas (100%)
- ◆ JSC Mangistaumunaigas (50%)
- ◆ JSC Embamunaygas (100%)

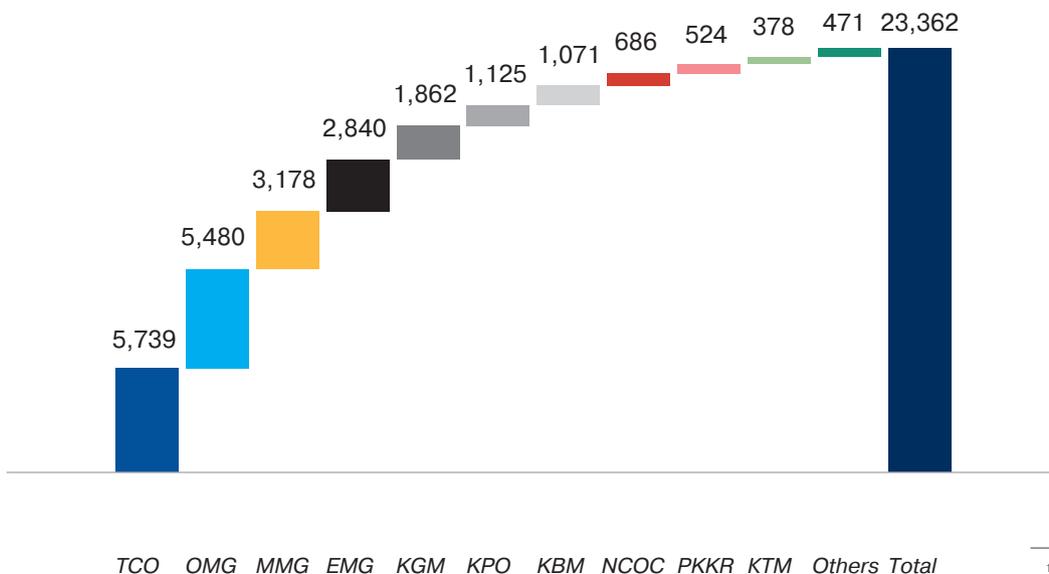
- ◆ Kazgermunai (66.5%)
- ◆ Kazakhturkmunay LLP (100%)
- ◆ Other operating subsoil users

KMG has non-operating shares in the three largest oil production enterprises in Kazakhstan – Tengiz, Karachaganak and Kashagan, amounting to 20%, 10% and 8.44%, respectively. KMG partners some of the world's largest oil companies such as Chevron, ExxonMobil, Shell, Eni, Total, Inpex, China National Petroleum Corporation (CNPC) and Lukoil in its non-operating activities.

KMG met its consolidated oil and condensate production targets in 2017, producing 23.4 mln tonnes (178 mln barrels) or 486 thous. barrels/day. At the same time, operating assets accounted for 15.8 mln tonnes (120 mln barrels) or 68% of total oil and condensate produced. Accordingly, non-operating assets produced 7.6 mln tonnes of oil (57 mln barrels) or 32% of the total. In 2018, oil and condensate production is expected to remain at the 2017 level.

KMG oil and condensate production increased by 724 thous. tonnes or 3.2% from 22.6 mln tonnes in 2016. The main growth drivers were mainly major non-operational projects, which

## OIL AND GAS CONDENSATE PRODUCTION, INCLUSIVE OF THE KMG SHARE (THOUS. TONNES)<sup>12</sup>



<sup>12</sup> KMG production assets

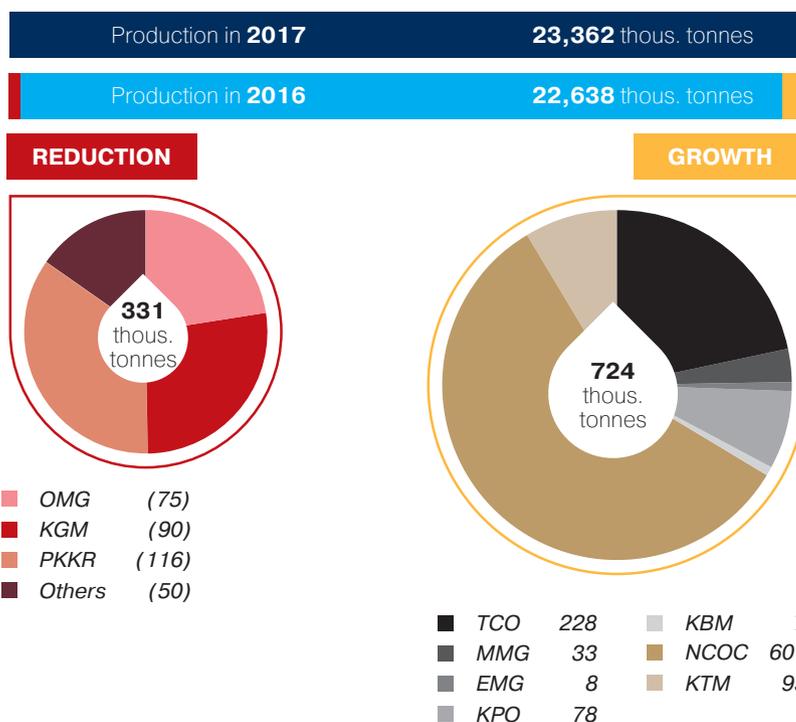
increased cumulative production, inclusive of the KMG share, by 913 thous. tonnes as follows:

- ◆ NCOC (KMG share – 8.44%): +607 thous. tonnes due to a gradual increase in production levels during 2017
- ◆ TCO (KMG share – 20%): +4% or +228 thous. tonnes due to smooth production plant operations and successful planned overhaul
- ◆ KTM (KMG share – 100%): + 33% or 95 thous. tonnes due to the introduction of improved geological and technical measures at the various fields
- ◆ KPO (KMG share – –10%): + 7% or 78 thous. tonnes due to stable and reliable process unit operations and successful overhaul, and the commissioning of new production wells ahead of schedule

At the same time, oil and condensate production decreased for specific assets:

- ◆ PKKR (KMG share – 33%), KGM (KMG share – 66.5%): –8% or 206 thous. tonnes due to the natural decline in field production. In particular, KMG's share in production at PKKR decreased by 18% or 116 thous. tonnes
- ◆ OMG (KMG share – 100%): –1% or 75 thous. tonnes due to a decrease in the number of newly introduced wells along with a decrease in production at current wells

## COMPARISON OF OIL AND CONDENSATE PRODUCTION IN 2016 AND 2017 (THOUS. TONNES)<sup>12</sup>



Short name	Full name
TCO	Tengizchevroil LLP (20%)
OMG	JSC Ozenmunaigas
MMG	JSC Mangistaumunaigaz (50%)
EMG	JSC Embamunaygas
KGM	JV Kazgermunai LLP (66.5%)
KPO	Karachaganak Petroleum Operating B.V. (10%)
KBM	JSC Karazhanbasmunai (50%)
NCOC	North Caspian Operating Company N.V. (8.44%)
PKKR	JSC PetroKazakhstan Kumkol Resources (33%)
KTM	Kazakhturkmunay LLP (100%)
Others:	
AG	Amangeldy Gas LLP (100%) (condensate)
KOA	Kazakhoil Aktobe LLP (50%)
TP	JSC Turgai Petroleum (16.5%)
KazGPZ	KazGPZ LLP (condensate) (100%)

### Characteristics of operating assets

KMG's operating production assets are mainly represented by mature fields where industrial operations began decades ago. In 2017, total well stock under operational management amounted to 16,622 units, of which 11,796 represented current declining well stock. A decrease of less than 1% in well stock was observed on the 2016 level. However, there has been a 198 unit or + 2% increase in current declining well stock since 2015.

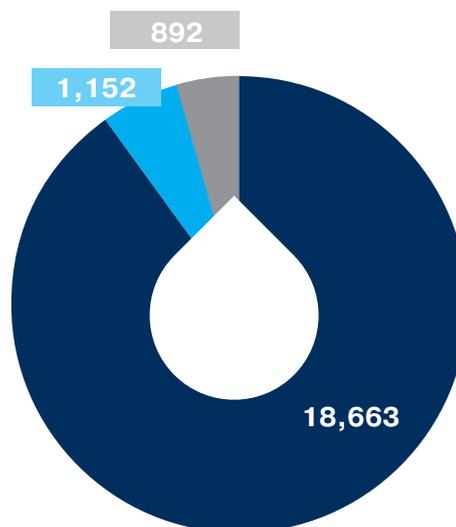
Over the past three years, current declining well stock accounted for 90% of oil and condensate production.

Deposits are found in the west and the south of the country, with the technical characteristics of the oil varying significantly from region to region. The heaviest oil comes from the Karazhanbasmunai field with a tonne-to-barrel factor of 6.69 barrels/tonne. The lightest oil is produced at the Kazgermunai field with a tonne-to-barrel factor of 7.7 barrels/tonne. Oil produced at KMG's major non-operational projects is even lighter, registering a tonne-to-barrel factor of nearly 8 barrels/tonne.

### NUMBER OF WELLS – KMG OPERATING ASSETS

Number of wells, units	2015	2016	2017
New wells	593	464	541
Current declining well stock	11,598	11,841	11,796
Non-operating wells	480	456	631
Injection wells	3,546	3,627	3,654
Total KMG operating assets	16,217	16,388	16,622

### DISTRIBUTION OF OIL PRODUCTION ACCORDING TO KMG OPERATING ASSETS, THOUS. TONNES



- Production from current declining well stock
- Production from geological and technical measures
- Production from new wells

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## Oil and condensate sales (export and domestic)

### Oil exports

During 2017, KMG exported 17.2 mln tonnes of oil or 74% of total oil production. This is an 8% increase compared to 2016 and was caused by an increase in exports from Kashagan, as well as output increases from JSC Ozenmunaigas and JSC Embamunaygas.

With an average annual Brent crude oil price of 54 USD per barrel, the average oil selling price in 2017 was 49.34 USD per barrel due to an adjustment for KMG oil quality.

### Domestic oil supplies

In 2017, of the 23.4 mln tonnes of oil produced, 6.1 mln tonnes or 26% of it were supplied domestically for refining at the country's main refineries. This is a 9% or 594 thous. tonnes drop from 2016 levels.

Since April 2016, KMG has been applying a new oil refining business model, according to which refineries provide oil refining services at fixed tariffs, while oil suppliers, who own the oil and derivative petroleum products, sell petroleum products themselves.

## REFINERY SUPPLIES OF KMG RAW HYDROCARBONS, THOUS. TONNES

Main refineries	2016 fact	2017 fact
Atyrau Refinery	3,058	2,560
PKOP	598	555
POCR	2,755	2,655
Caspi Bitum	312	359
<b>TOTAL</b>	<b>6,723</b>	<b>6,129</b>

## CHARACTERISTICS OF KMG OPERATING ASSETS IN 2017

	Porosity	Density in API degrees	Sulphur content, %	Number of fields	Average production rate of new wells, tonnes/day	Average production rate of current declining well stock, tonnes/day	Tonne-to-barrel conversion factor, barrels/tonne
JSC Ozenmunaigas	0.14-0.38	0.836-0.885	0.1-0.2	2	12	4.4	7.23
JSC Embamunaygas	15-33	32.6	0.5-1.5	34 (in operation)	10.5	3.7	7.27
JSC Karazhanbasmunai	0.15-0.41	18-20	1.49-1.64	1	3.7	2.3	6.69
JV Kazgermunai LLP	0.10-0.266 (unit fraction)	663-799.5 (kg/cm <sup>3</sup> )	0.07-0.37 (%)	5	63.97	41.37	7.7
JSC Mangistaumunaigaz	9-29%	20-39	0.02-2.19	15	18	5.8	7.23
Kazakhoil Aktobe LLP	0.077-0.0775	0.824-0.827	0.93-1.19	2	-	17.6-22.7	7.5
Kazakhturkmunay LLP	10-18%	39	-	6	-	921	7.5

**GAS PRODUCTION**

**KMG gas production**

KMG produced 8 mln m<sup>3</sup> of natural and associated gas in 2017, of which 2.54 mln m<sup>3</sup> was generated by KMG operating assets.

Gas production values include actual gas produced and do not include gas reinjected into reservoirs. Gas re-injection is used to maintain reservoir pressure, which in turn ensures a high level of oil production.

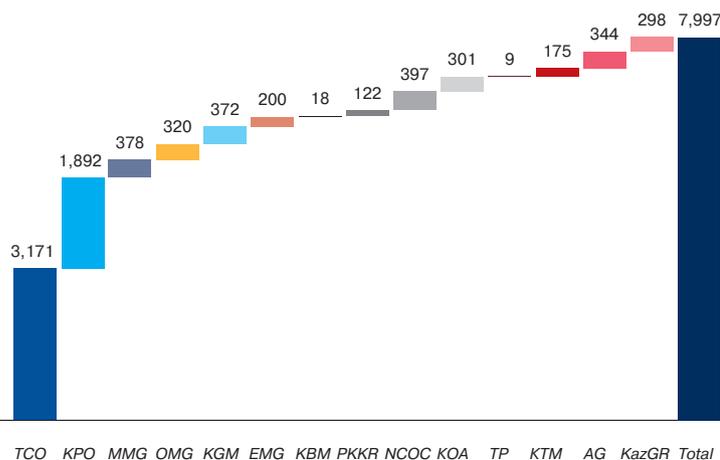
Gas production increased in 2016 by 8.1% (+ 602 mln m<sup>3</sup>) mainly due to production growth in major non-operational projects.

**Commercial gas production**

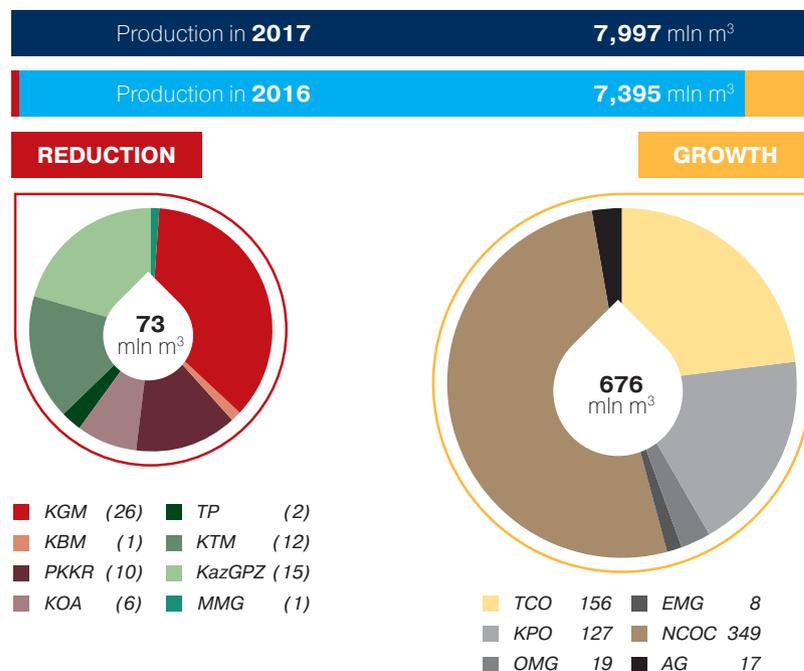
In 2017, commercial gas production amounted to 1,475.5 mln m<sup>3</sup>, excluding major non-operational project production. Only 5 of KMG's operating assets produce commercial gas. Importantly, KazGPZ, in addition to refining its own raw materials, produces commercial gas using raw materials from other KMG operating assets that do not produce commercial gas at their own facilities. For that reason, gas production at KazGPZ in 2017 amounted to 298 mln m<sup>3</sup> and commercial gas production amounted to 612 mln m<sup>3</sup>.

Commercial gas production at KMG operating assets increased cumulatively by 27 mln m<sup>3</sup>, or 2%. Production increased significantly at KazGPZ due to increased sour gas supplies from other operational subsoil users, while gas production decreased slightly. Only commercial gas

**KMG GAS PRODUCTION (MLN M<sup>3</sup>)**



**COMPARISON OF GAS PRODUCTION IN 2016 AND 2017 (MLN M<sup>3</sup>)**



production decreased at Kazgermunai due to a decline in oil production at the field. Commercial gas production at other operating assets increased.

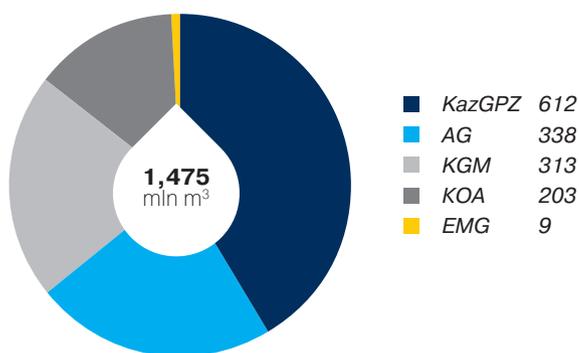
### Gas and gas product sales

In the reporting year, operational subsoil users sold 1,372.5 thous. m<sup>3</sup> of commercial gas, which is slightly more than in the previous year. Sour gas, liquefied gas and sulphur were also sold together with commercial gas. Operating asset production was mainly sold domestically. Production sales do not include commercial gas used by subsoil users for own production needs. Depending on technical characteristics, 5%–20% of commodity gas produced is used for own needs.

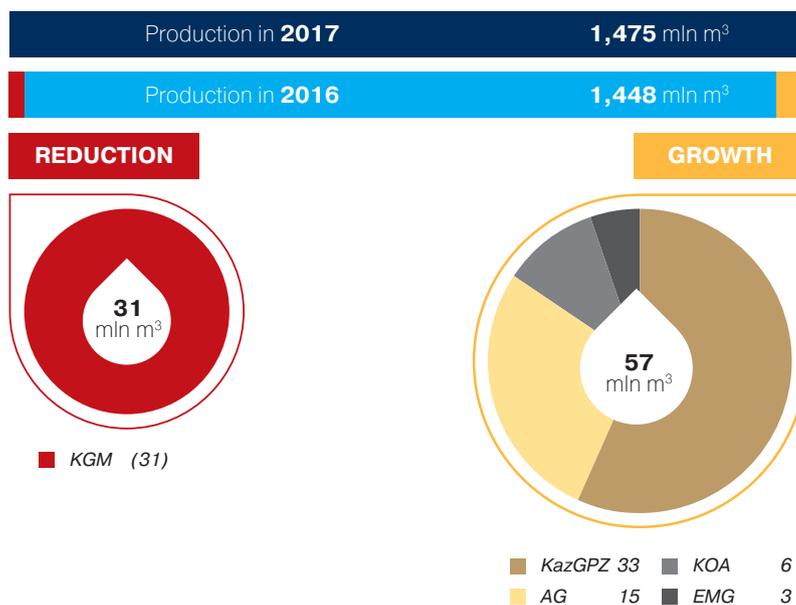
### GAS AND GAS PRODUCT SALES

Name	Unit of measurement	Index
Dry gas (commercial gas)	mln m <sup>3</sup>	1,372.5
Sour gas	mln m <sup>3</sup>	679.2
Liquefied gas	thous. tonnes	419.1
Sulphur	thous. tonnes	7.0

### COMMERCIAL GAS PRODUCTION AT KMG OPERATING ASSETS IN 2017 (MLN M<sup>3</sup>)



### COMPARISON OF COMMERCIAL GAS PRODUCTION AT KMG OPERATING ASSETS IN 2016 AND 2017 (MLN M<sup>3</sup>)



## MAJOR OPERATING PRODUCTION ASSETS

KMG's major operating assets, including JSC Exploration Production KazMunayGas and JSC Mangistaumunaigaz are responsible for 68% of all oil and condensate produced by the KMG Group.

### JSC Exploration Production KazMunayGas (KMG EP)

#### Production

KMG EP, a KMG subsidiary, is one of the leaders in Kazakhstan in oil production terms and incorporates the following assets:

- ◆ JSC Ozenmunaigas (100%)
- ◆ JSC Embamunaygas
- ◆ Kazakhturkmunay LLP (100%)
- ◆ JSC Karazhanbasmunai (50%)
- ◆ JV Kazgermunai LLP (66.5%)
- ◆ JSC PetroKazakhstan Kumkol Resources (33%)
- ◆ JSC Turgai Petroleum (16.5%)

In 2017, EP KMG production levels, taking into account shares in KGM, KBM and PetroKazakhstan Inc., amounted to 11,867 thous. tonnes of oil (240 thous. barrels/day), which is 2% less than in 2016. The decline in oil production was mainly caused by a decrease in production from current declining well stock and a natural decline in PKI and KGM oil production.

#### Crude oil supplies and petroleum product sales

OMG and EMG sales in 2017 amounted to 8,233 thous. tonnes of crude oil (163 thous. barrels/day), of which 5,700 thous. tonnes (113 thous. barrels/day) were exported and 2,533 thous. tonnes (50 thous. barrel/day) were sold domestically, which is 31% of total sales. In 2016, the same figures were at 8,404 thous. tonnes of crude oil, including 4,946 thous. tonnes for export and 3,458 thous. tonnes sold domestically, which is 41% of total sales.

Petroleum product sales in 2017, in accordance with the KMG oil refining business model, amounted to 2,388 thous. tonnes.

KMG EP's share in KGM, KZhM and PKI sales amounted to 3,414 thous.

tonnes of oil (70 thous. barrels/day), including 1,443 thous. tonnes of oil (28 thous. barrels/day) for export and 1,971 thous. tonnes (42 thous. barrels/day) for domestic sales, which is 58% of total sales.

The structure of EP KMG oil supplies in terms of the shares of KGM, CCEL and PKI changed in 2017 from 2016. For example, the share of exports in total sales fell from 50% to 42%, while the share of domestic supplies increased from 50% to 58%.

### MMG

#### Production

JSC Mangistaumunaigaz is one of the five largest oil and gas companies in Kazakhstan. In 2017, it exceeded its geological and technical measures (GTM) plan, producing 6,356 thous. tonnes of oil, which was 1% more than in 2016.

#### Oil sales

MMG sales in 2017 amounted to 6,311 thous. tonnes of crude oil, including 4,463 thous. tonnes (88 thous. barrels/day) for export and 1,847 thous. tonnes (37 thous. barrels/day) for domestic sales, which is 29.3% of total sales. In 2016, the same figure was 23.4%.

Share of operating assets, including those of JSC KazMunayGas Exploration and Production and JSC Mangistaumunaigaz, in total oil and condensate produced by the KMG Group

68%

## MAJOR NON-OPERATING PRODUCTION ASSETS

### Tengiz Project

The Tengizchevroil LLP agreement was signed on 2 April 1993 by Kazakhstan and Chevron, with a 40-year hydrocarbon exploration and production license issued to TCO in 1993.

TCO's main activities include the exploration, production and sale of hydrocarbons from the Tengiz and Korolevskoye fields in Atyrau region.

The current TCO partners are Chevron (50%), ExxonMobil (25%), KMG (20%) and LukArco (5%).

### TCO production and financial activities

In 2017, TCO oil production reached a record level of 28.697 mln tonnes, which is 1.127 mln tonnes higher than the annual plan and 1.141 mln tonnes more than in 2016. The recorded production was helped by the stable and reliable operation of the Sour Gas Reinjection Plant/Integrated Process Line/Second Generation Plant and successful scheduled overhauls.

### Projects in progress

On 5 July 2016, TCO partners took a final decision to finance the Future Growth Project/Wellhead Pressure Management Project (FGP/WPMP) to build a new 12 mln tonne/year refinery and crude gas re-injection facilities with capacity of 9.4 bcm; build a new well-stream gathering system, pressure-boosting facilities, as well as infrastructure and auxiliary facilities.

The estimated cost of the FGP/WPMP is 36.8 bln USD, with commissioning planned for June 2022. The projected local content in FGP/WPMP implementation is 32%.

The FGP/WPMP has already created more than 30 thousand jobs in Kazakhstan. The project incorporates personnel training and the creation of around 700 permanent operating jobs at the new FGP/WPMP facilities.



### TCO PRODUCTION VOLUME

	2016	2017
Oil production, mln tonnes	27.5	28.7
Gas production, bcm	15.1	15.9
Dry gas production, bcm	8.8	9.2
Gas reinjection, bcm	3.0	3.1

### North Caspian Project

The North Caspian Production Sharing Agreement (NC PSA) was signed on 18th of November 1997. The parties (contractors) of NC PSA are KMG Kashagan B.V. (16.88%), Eni, Total, ExxonMobil and Shell (16.81% each), CNPC (8.33%) and Inpex (7.56%).

North Caspian Operating Company N.V. acts as the operator on behalf of the North Caspian Production Sharing Agreement contractors.

The North Caspian Production Sharing Agreement contract territory includes the Kashagan, Kalamkas-Sea, Aktoty, Kairan and Kashagan South-West fields.

### Kashagan

2017 saw the continuation at Kashagan of work to stabilise and increase production, with a focus on safety, environmental protection and equipment reliability.

For 2017, actual oil production amounted to 8,286 thous. tonnes or 107.3% of a plan of 7,722 thous. tonnes (+564 thous. tonnes). Production targets were exceeded due to the commissioning of a crude gas re-injection system in August 2017. Gas production amounted to 4,799 mln m<sup>3</sup> or 97.2% of the 4,937 mln m<sup>3</sup> (-138 mln m<sup>3</sup>) plan, due to a decrease in the actual gas-oil ratio. Sulphur exports were launched in November 2017.

Average oil production in 2017 was 22.8 thous. tonnes/day, with a maximum 36.8 thous. tonnes/day. As at 31

December 2017, the Operator had managed to stabilise production, continue start-up operations and commission technological equipment at offshore and onshore facilities.

### Projects in progress

A project involving expanding gas re-injection capacity has been launched to increase oil production to 450 thous. barrels/day. The project will be in two stages, with the first stage involving the upgrade of two existing gas reinjection compressors, and the second stage – the installation of an additional gas reinjection compressor at one of the existing drilling islands. A selection panel is currently reviewing concepts for the project.

### KMG Kashagan B.V. share buy-back

According to the terms of the addendum to the Option Agreement between Cooperatieve KazMunayGas U.A. (98.88% owned by KMG) and Samruk-Kazyna, the option period for buying back a 50% interest in KMG Kashagan B.V. has been extended from 2018–2020 to 2020–2022.



Kashagan oil  
production:

**8,286**  
MLN TONNES



Kashagan  
production plan  
execution is at

**107.3%**

### NORTH CASPIAN PROJECT PRODUCTION

	2016	2017
Oil production, mln tonnes	1.0	8.3
Gas production, bcm	0.6	4.8
Gas reinjection, bcm	0	0.3

## Karachaganak Project

The Karachaganak Project is part of the 40-year Final Production Sharing Agreement signed on 18th of November 1997 and is in effect from 27th of January 1998.

The contractors are Shell (29.25%), Agip (29.25%), Chevron (18%), Lukoil (13.5%) and KMG (10%), with Shell and Agip acting as the single Project Operator.

### Production performance

In 2017, liquid hydrocarbon production hit the record figure of 11.247 mln tonnes (104.6%), exceeding the annual plan by 0.492 mln tonnes and 2016 production levels by 0.781 mln tonnes.

In 2017, actual liquid hydrocarbon and gas production significantly exceeded projected figures thanks to stable and reliable process unit operations after preventive maintenance in 2016, and the commissioning of production wells ahead of schedule.

### Further development projects

The Karachaganak Growth Project, which is currently at the concept selection stage, is due to be launched over several stages to further increase oil production. The project's first stage envisages drilling new and upgrading existing wells, constructing gas treatment facilities and installing additional compressors to increase reverse gas reinjection, construct the required auxiliary facilities and others.



## KARACHAGANAK PRODUCTION PERFORMANCE

Indicators	2016	2017
Liquid hydrocarbon production, mln tonnes	10.5	11.2
Gas production, bcm	17.7	18.9
Gas reinjection, bcm	8.0	9.3

Karachaganak oil  
production

**11,247**  
MLN TONNES

Karachaganak  
production plan  
execution is at

**104.6%**

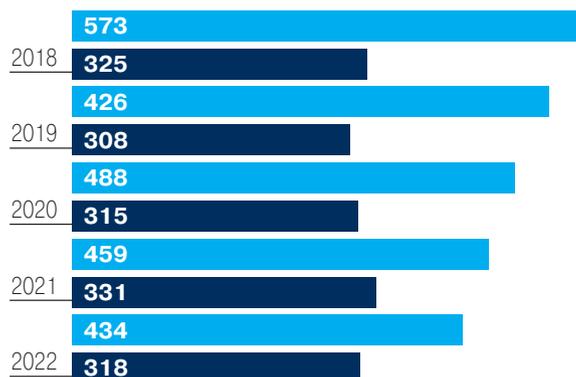
## GTM AND UPSTREAM CAPITAL EXPENDITURES

A number of geological and technical measures (GTM) have been planned for 2018–2022 to combat natural decline in field production and meet production plans.

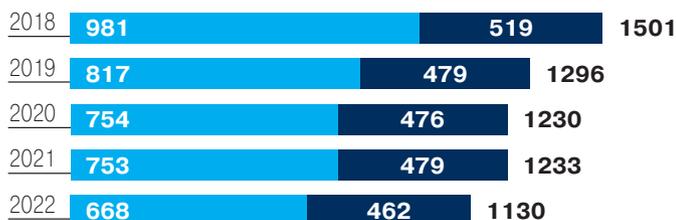
Thus, in 2016, as part of plan to improve geological and technical measures, Kazakhturkmunay LLP developed and introduced a pilot programme to stabilise and increase oil production using effective geological and technical measures as well as international standards and equipment available in Kazakhstan. The project was developed by KMG in collaboration with the Research and Development Institute of Production and Drilling Technology and Kazakhturkmunay LLP. Operations include improving field development systems and launching electrical centrifugal pumps installed at 14 wells. Subsequent operations involve hydraulic fracturing, which also helps activate oil and gas well performance and increase well injection capacity.

Hydraulic fracturing and the well installation of electric centrifugal pumps led to an increase in oil production from 663 to 1,060 tonnes per day. In 2017, Kazakhturkmunay LLP organised a series of detailed field studies and actively studied global experience in implementing innovative oil production technologies, focusing on personnel development. In the future, it plans to improve development systems to ensure stable production within five years of 357–360 thous. tonnes.

## NUMBER OF WELLS FOR GTM



## EFFECT OF GTM ON OIL PRODUCTION, THOUS. TONNES



- GTM for the existing well stock
- New borehole drilling

## UPSTREAM CAPITAL EXPENDITURE, BLN TENGE



As a result of the above programme, oil production at Kazakhturkmunay LLP in 2017 increased by 60% from 242 tonnes to 387 tonnes.

The positive experience will be replicated at other KMG operating assets and tailored for each field.

During 2018–2022, KMG is planning geological and technical measures to slow down the natural drop in production and meet JSC Ozenmunaigas, JSC Embamunaygas, Karazhanbasmunai, Kazgermunai, JSC Mangistaumunaygas, Kazakhturkmunay LLP and Kazakhoil Aktobe LLP oil production targets. The operations include:

- ◆ Drilling new production wells
- ◆ The following geological and technical measures for the current well stock:
  - ◆ deposit numbering
  - ◆ hydraulic fracturing
  - ◆ hydrochloric acid treatment
  - ◆ upstream/downstream transitions – recumbent horizons
  - ◆ blasting operations
  - ◆ side-tracking
  - ◆ perforation, initiation and shooting

Total investment in drilling and geological and technical measures in 2017 for KMG oil and gas production assets to maintain and expand oil and condensate production amounted to 140 bln tenge, which is 20 bln tenge or 16% higher than for the previous year.

KMG's capital investment in oil and gas production in 2017 amounted to 135.2 bln tenge, which is 10% less than in 2016 and almost half the level in 2015. Capital costs fell in accordance with a cost reduction strategy to improve KMG's financial sustainability.



**The plan is to replicate the positive experience at other KMG operating assets, taking into account specifics of each field.**

# TRANSPORTATION

## Oil transportation

Ensuring the country's energy security depends to a large extent on the development of oil transportation infrastructure. Existing transport infrastructure provides oil transportation to the refineries of Kazakhstan and for export, and also has transit capabilities.

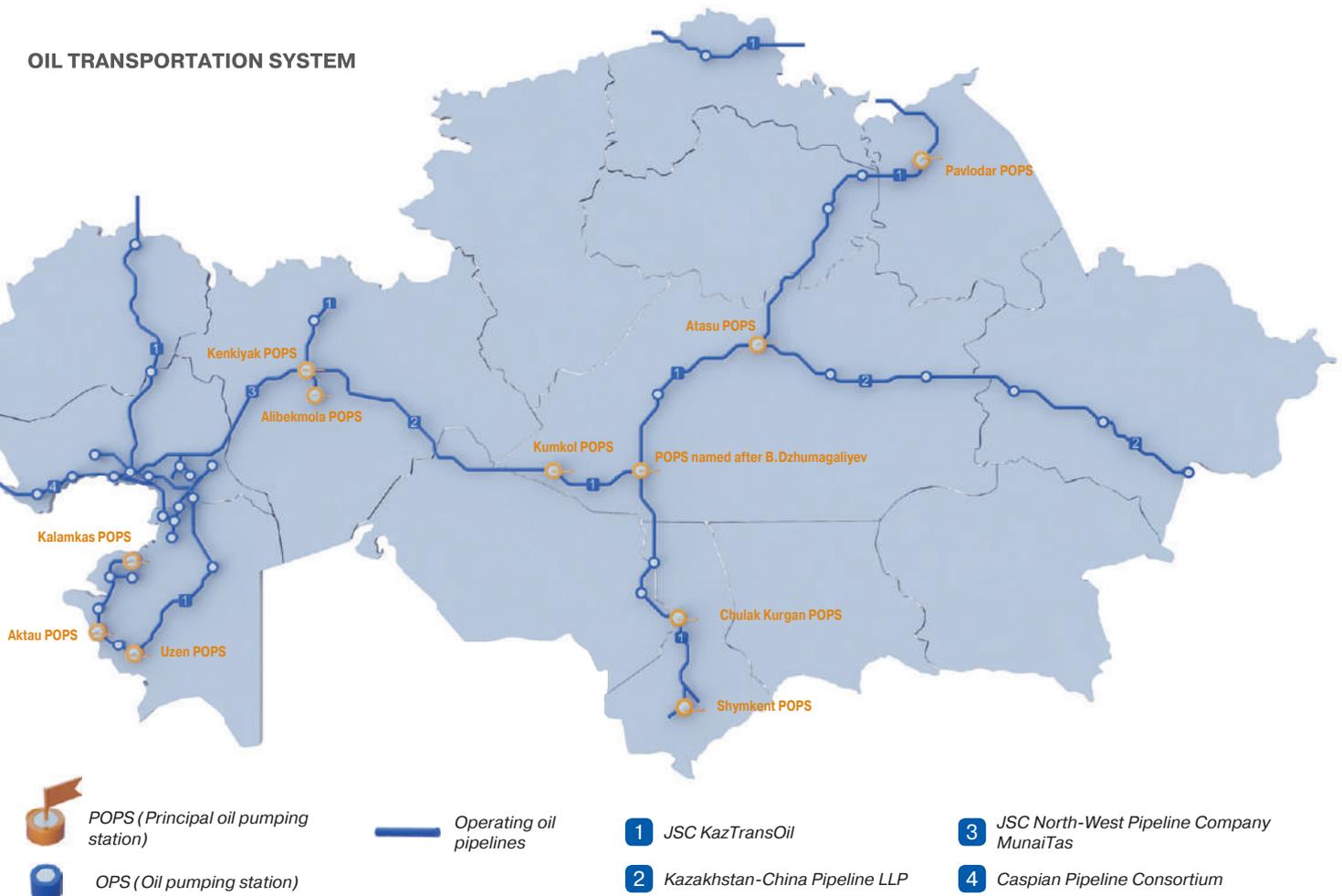
KMG oil is transported by one of two means – main oil pipeline (operated by the subsidiary JSC KazTransOil – KTO) and transportation by marine fleet (the subsidiary NMTC Kazmortransflot LLP).

### OIL PIPELINE TRANSPORTATION

KTO (90%) operates the majority of the 7,585 km crude oil pipeline network in Kazakhstan:

◆ KTO – 5,377 km

### OIL TRANSPORTATION SYSTEM



◆ Kazakhstan-China Pipeline (KTO – 50%, CNODC – 50%) – 1,759 km

◆ MunaiTas (KTO – 51%, CNPC E&DC Ltd – 49%) – 449 km

In 2017, oil pipeline transportation was supported by 40 oil pumping stations, 67 oil heating furnaces and a 1,391 thous. m<sup>3</sup> oil storage tank farm.

In 2017, total oil transportation increased by 3.5% (1.96 mln tonnes) to 58.5 mln tonnes, mainly due to an increase in the transit of Russian oil to China and an increase in oil supplies from Kashagan.

Oil exports in 2017 decreased by 4% (0.9 mln tonnes) due to a decrease in oil deliveries by upstream companies.

Domestic oil supplies increased by 3% (0.4 mln tonnes) following an increase in local oil refinery output.

The volume of transit oil increased in 2017 by 44% (3.1 mln tonnes) due to an increase in Russian oil supplied to China under a contract between KTO and PJSC Rosneft.

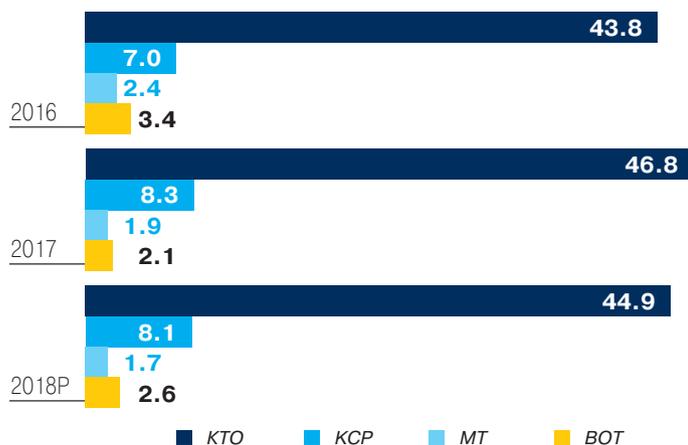
Oil transportation at the Batumi Oil Terminal fell by 38% (1.3 mln tonnes) due to shippers decreasing hydrocarbon supplies.

In 2018, total oil transportation is expected to fall by 2% (1.2 mln tonnes) mainly because of a decrease in oil deliveries by upstream companies.

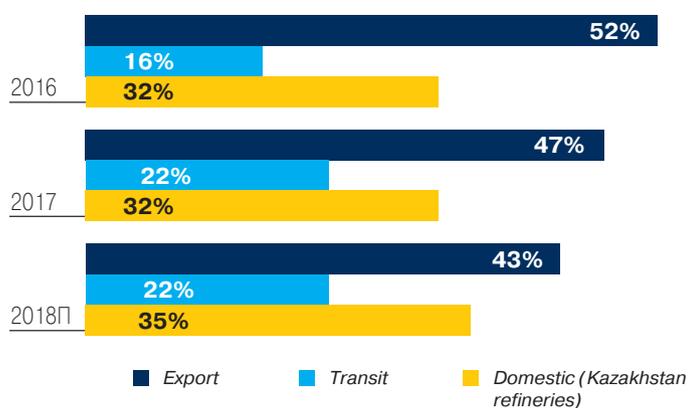
#### BREAKDOWN OF OIL PIPELINE LENGTH BY OPERATING PERIOD (AS OF 31 DECEMBER 2017), THOUS. KM

Up to 10 years (inclusive)	1.9
From 11 to 20 years (inclusive)	2.4
From 21 to 30 years (inclusive)	0.7
From 31 to 40 years (inclusive)	2.2
More than 40 years	0.4
<b>Total</b>	<b>7.6</b>

#### OIL TRANSPORTATION VOLUME (KMG SHARE), MLN TONNES



#### CHANGES IN AND THE STRUCTURE OF OIL TRANSPORTATION BY KTO ROUTE



**Planned activities for 2018**

- ◆ Negotiations between Russia, Kazakhstan and Uzbekistan are due to continue regarding crude oil supplies to Uzbekistan.
- ◆ Issues surrounding the launch of the Kenkiyak-Atyrau oil pipeline reverse project are due to be discussed within the framework of the project to expand Kazakhstan-China oil pipeline and supply West Kazakhstan oil to Kazakhstan refineries.

**OVERVIEW OF CAPITAL PROJECTS**

Capital investment in new production projects has been used predominantly to reconstruct and expand the N. Shmanov oil pumping station, reconstruct the Kenkiyak principal oil pumping station and build unstaffed automated communication centres.

The majority of capital investment to maintain current production levels was spent replacing sections of the Ozen-Atyrau-Samara oil pipeline; reconstructing the Astrakhan-Mangyshlak water pipeline WPS-5 water pump station; overhauling the Tuymazy-Omsk-Novosibirsk-2 oil pipeline; upgrading the oil quantity and quality measurement system at the Pavlodar head oil pumping station and the Shymkent transfer and acceptance point; and upgrading the Kalamkas-Karazhanbas-Aktau oil pipeline. The work should help maintain and improve the technical condition of existing oil pipeline

systems; mitigate the risk of downtime, failures and unscheduled repairs, and improve the reliability and quality of services provided.

**Caspian Pipeline Consortium**

KMG owns 20.75% of the Caspian Pipeline Consortium (CPC), which is one of the priority export pipelines for Kazakhstan oil. The CPC pipeline, which stretches for 1,510 km (including a 452 km Kazakhstan segment) links the Tengiz oil field in Kazakhstan with the Ozereyevka South oil terminal in the Black Sea (near the port of Novorossiysk).

In 2017, CPC pipeline transported 55.1 mln tonnes of oil, including 49.6 mln tonnes of Kazakhstan oil.

One of the most significant oil transportation infrastructure events of 2017 was the completion of the project to increase CPC throughput capacity in the Kazakhstan sector to 53.7 mln tonnes per year, which will allow Kazakhstan to export greater volumes of oil to global markets.

**Marine oil transportation**

Kazakhstan's main options for transporting oil by sea are the Caspian, Black and Mediterranean Sea routes.

At the end of 2017, KMTF production assets included 6 oil tankers with a deadweight of between 12,000 and 13,000 tonnes in the Caspian Sea and two Aframax-type oil tankers in the Black Sea.



Total oil pipeline  
length of

**7,585** KM

2017 saw a slight decrease in oil transportation by sea of 2% (130 thousand tonnes) and a change in oil tanker routes to Makhachkala-Baku and Turkmenbashi-Baku-Makhachkala.

In 2018, marine oil transportation is expected to decrease by 5% (320 thousand tonnes) from 2017 levels due to a lack of guaranteed oil and contracts for the Aktau-Baku and Makhachkala-Baku routes.

#### Overview of capital projects

##### “Construction of three tug boats for the Tengizchevroil Future Growth Project”

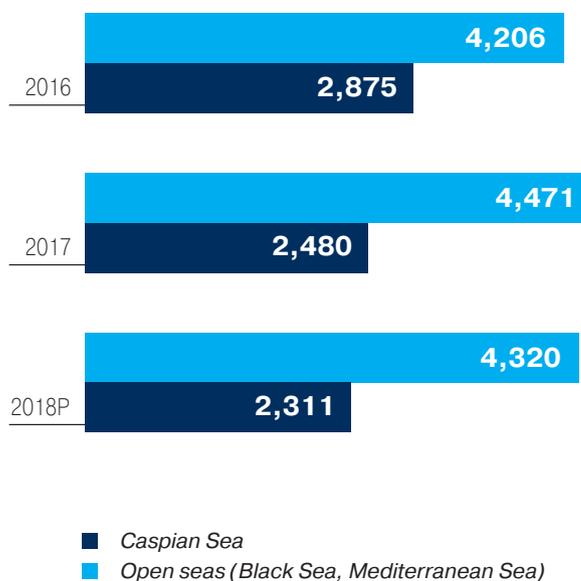
The project has been commissioned to help establish a marine transportation system for the TCO Future Growth Project and Wellhead Pressure Management Project. Tug boats will help navigate vessels in the cargo transport route shipping channels.

KMTF is one of the main TCO FGP vessel navigation contractors in the cargo transport route shipping channel around the port of Prorva.

In July 2017, as part of the FGP, KMTF signed contracts with Damen, a leading shipyard, to build three tug boats.

In September 2017, KMTF accepted two tug boats – “Emba” and “Talas” – which were completed ahead of schedule. Construction of the third tug boat, “Irgiz”, is due to be completed in the first half of 2018.

#### MARINE OIL TRANSPORTATION, MLN TONNES



#### CAPITAL OIL TRANSPORTATION COSTS, BLN TENGE



### “Construction of three Caspian-class barges (MCV) for the TCO Future Growth Project”

The project has also been commissioned to help establish a marine transportation system for the FGP/WPMP. Self-propelled barges will be used to transport all production modules manufactured in Kazakhstan.

In July 2016, KMTF signed contracts with Vard, a leading shipyard, to build three self-propelled barges.

In August 2017, KMTF accepted two barges – “Barys” and “Berkut”. Completion of construction of the third barge, “Sunkar”, is expected in January 2018.

Replenishment of the fleet with these six vessels allows KMTF to strengthen its market positions, supporting offshore oil and gas operations. Moreover, the vessels will be in demand during further field development in the Kazakhstan sector of the Caspian Sea.

## Gas transportation and marketing

Gas export route diversification is one of the Group's priorities. In the past few years, KMG has made active improvements to the gas pipeline system and significant investment in projects to build gas pipelines, expand and upgrade gas distribution networks, which has allowed it to supply natural gas to more regions of the country, remove dependence on imported gas and open new export routes.

The gas transportation system of the KazTransGas group of companies and underground gas storage facilities ensure gas supply reliability and flexibility. The Central Asian gas pipeline is the shortest route from the Central Asian gas producing regions (mainly Turkmenistan

and Uzbekistan) to China and Europe (via Russia).

KTG operates the largest network of main gas pipelines in Kazakhstan, stretching for more than 18,960 km and with an annual throughput capacity of up to 160 bcm and gas distribution networks of more than 45,000 km. KTG operates 3 major underground gas storage facilities in Kazakhstan with total active storage capacity of 4.6 bcm.

In 2017, gas transportation by main gas pipelines was supported by 38 compressor stations and 342 gas pumping units with total capacity of 2,157,264 MW.



**18,960**  
KM

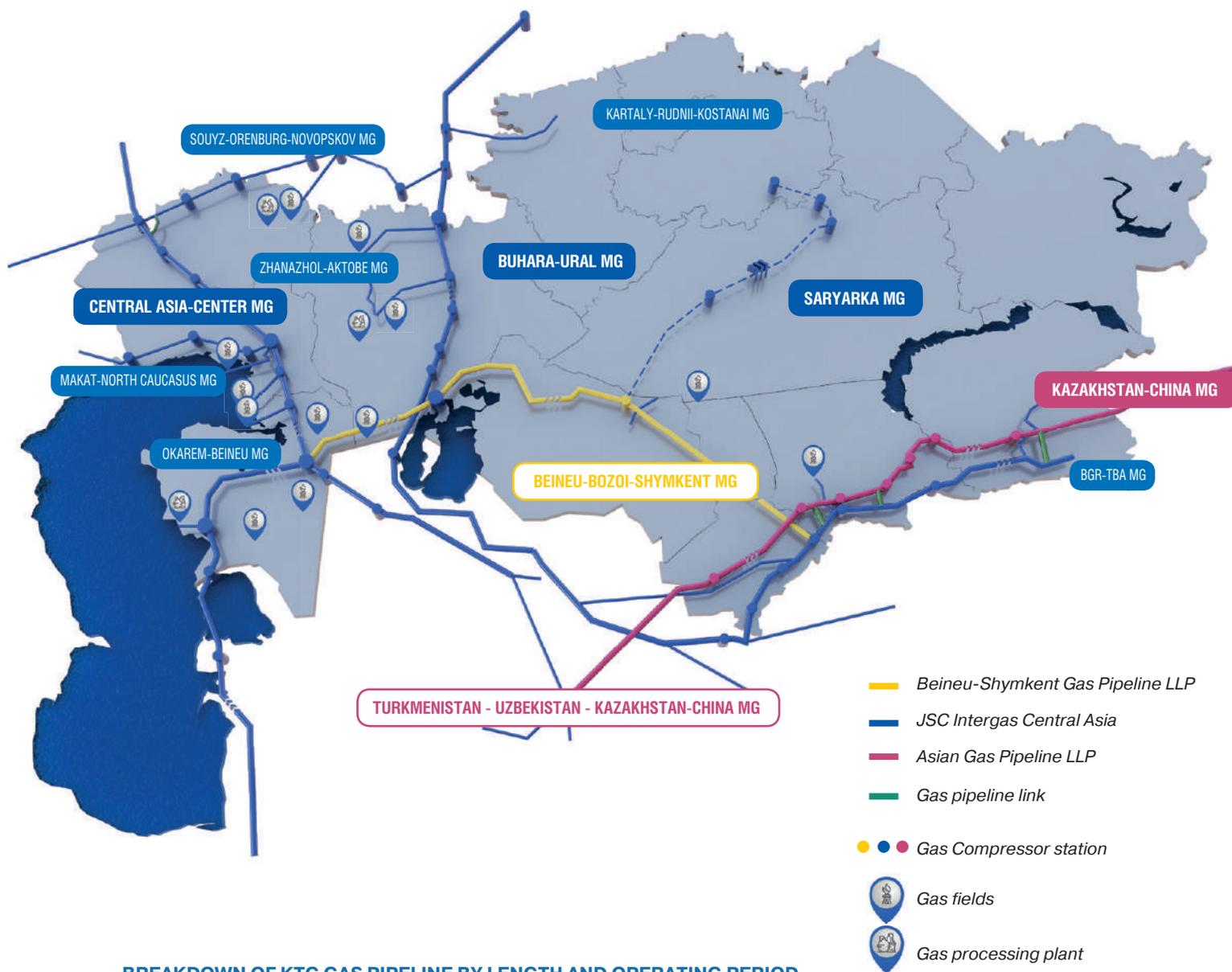
**Total gas pipeline length**



**45**  
THOUS. KM

**Length of KTG gas distribution networks**

## GAS TRANSPORTATION SYSTEM


**BREAKDOWN OF KTG GAS PIPELINE BY LENGTH AND OPERATING PERIOD  
(AS OF 31 DECEMBER 2017), THOUS. KM**

Up to 10 years (inclusive)	6,948
From 11 to 40 years (inclusive)	5,225
More than 40 years	6,787
<b>Total</b>	<b>18,960</b>

Gas transportation volume (KMG share), bcm

In 2017, gas transportation increased by 14.7% (9.8 bcm) due to a 5.7 bcm growth in transit gas belonging to PJSC Gazprom through Central Asia, and gas exports.

In 2017, Kazakhstan began to export gas to China, the largest and most promising sales market in Asia, as a result of which gas exports in 2017 increased by 3.4 bcm (34%). The majority of gas exports came from Tengiz and Kashagan.

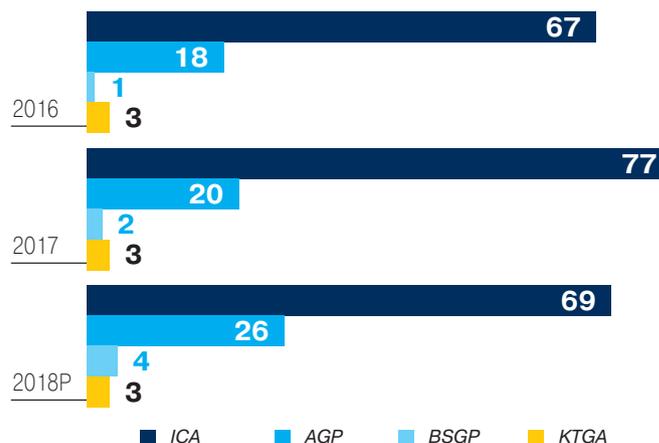
#### OVERVIEW OF CAPITAL PROJECTS

In 2017, KMG completed a number of investment projects:

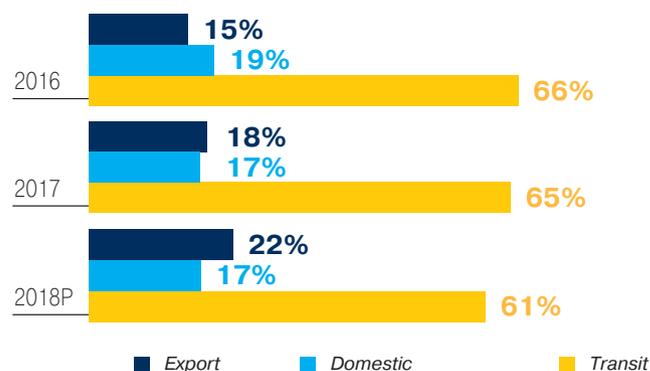
- ◆ connect population centres to the gas network and upgrade gas distribution networks in the Aktobe region;
- ◆ build the Karaozek compressor station in Kyzylorda region;
- ◆ build a vehicle gas filling compressor station in Aktobe;
- ◆ build a high-pressure main gas pipeline "Facilities to treat gas from the Kozhasai field to the Bukhara-Ural main gas pipeline in Aktobe region."

During the year, four powerful high-tech compressor stations were commissioned in a short period at the transnational

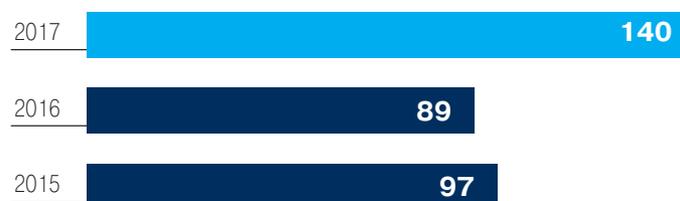
#### GAS TRANSPORTATION VOLUME (KMG SHARE), BCM



#### CHANGES IN AND STRUCTURE OF GAS TRANSPORTATION



#### CAPITAL COSTS, BLN. TENGE



Kazakhstan-China and Beineu-Bozoi-Shymkent main gas pipelines, providing export capacity and increasing transit and domestic gas transportation to 52 bcm per year for the Kazakhstan-China main gas pipeline, and 10 bcm per year for the Beineu-Bozoi-Shymkent main gas pipeline. By reaching capacity in its Beineu-Bozoi-Shymkent main gas pipeline, KTG has resolved two important objectives – guaranteeing stable gas supplies to the south of the country and launching exports to China, which due to a contract signed between KTG and PetroChina International Company Limited, should reach 5 bcm per year.

The Akyr-Tobe booster compressor station, with capacity to supply up to 2 bcm of gas per year from the BGR-TBA main gas pipeline to the Kazakhstan-China main gas pipeline, has been put into operation.

The most powerful automated gas distribution station in Kazakhstan was commissioned in Aktobe. and has capacity to supply gas to half of the region.

Continued work is planned on long-term investment projects to upgrade gas distribution networks in Taraz and provide a gas supply to Mangistau and Kostanai regions.

At the same time, to supply gas to northern and central regions of the country, in 2017 KTG concluded a contract for design and estimate documentation to build the Saryarka main gas pipeline.

#### **DEVELOPMENT PLANS FOR CAPITAL PROJECTS**

To gradually increase and guarantee stable supplies of Kazakhstan gas for export to China of up to 10 bcm per year, by 2019, KTG intends to:

- ◆ Expand the capacity of the Beineu-Bozoi-Shymkent main gas pipeline to 15 bcm per year
- ◆ Increase the capacity of the Kazakhstan-China main gas pipeline (A and B lines) to 40 bcm per year through the construction of additional compressor stations



## REGIONAL GASIFICATION

Within the framework of its regional gasification programme, KTG continues its efforts to supply gas and upgrade gas connections for population centres in Kazakhstan.

In 2017, ten population centres and a total of 3,202 subscribers were connected to the gas supply as KTG completed its project to provide a gas supply to population centres and upgrade gas distribution networks in Aktobe region.

Work is currently continuing on the implementation of projects to:

- ◆ “Upgrade the Taraz gas distribution network
- ◆ “Upgrade, reconstruct and construct new gas distribution networks in Mangistau region population centres”. At the beginning of 2018, five such centres and 1,577 subscribers had been connected to the gas supply
- ◆ “Expand the gasification of Kostanai region population centres”. At the beginning of 2018, six such centres and 403 new subscribers had been connected to the gas supply

## GAS-MOTOR INFRASTRUCTURE DEVELOPMENT

PJSC Gazprom together with CNPC and KMG are studying issues around the construction of liquefied and compressed natural gas filling stations on the international transportation route passing through Russia, Kazakhstan and China.

Once the project has been implemented, the road transportation of goods and passengers between the project countries and the European Union will become economically viable. If travel time by sea and the Transib route is currently 45 days and 14 days, a journey using the Europe-China corridor from Lianyungang



port to the European border will take about 10 days. The project will also ensure the transfer of LNG production, transportation and regasification technology to Kazakhstan, give an impetus to develop the CNG market further and make it possible to connect population centres located far from main gas pipelines in the north and east of the country using the “virtual gas pipeline” method.

In 2017, a new vehicle gas filling compressor station with capacity to provide compressed gas (compressed methane) to up to 300 buses and more than 2,000 cars per day was opened in Aktobe.

KTG is overseeing a significant volume of work across the country as part of the “Concept to transition Kazakhstan to a Green Economy” to improve the environment by transitioning vehicles to more environmentally friendly and cost-efficient fuel types instead of traditional motor fuels, such as gasoline or diesel.

The main consumers for compressed natural gas will be bus fleets, private passenger vehicles, freight and passenger vehicles belonging to regional branches of KTG subsidiaries, and private vehicles. KTG has ensured that stations are being built in conjunction with the establishment of CNG-operated bus fleets.

Initially, 70 buses will be fuelled by CNG in Aktobe, with that number due to rise to 200 by 2020. At the same time, gas filling stations can serve up to 400 vehicles a day.

To promote the use of natural gas as a motor fuel, KTG is planning to develop a regional action plan to transition municipal and public transport to compressed natural gas and build a network of vehicle gas filling compressor stations.



# REFINING

## Hydrocarbon refining

### KMG REFINING ASSETS

Within the framework of KMG assets, liquid hydrocarbons (mainly oil) are refined by four refineries in Kazakhstan and two plants in Romania. The Kazakhstan refineries, except the Caspi Bitum plant, were built during the Soviet era in different parts of the country, in the west, south and north.

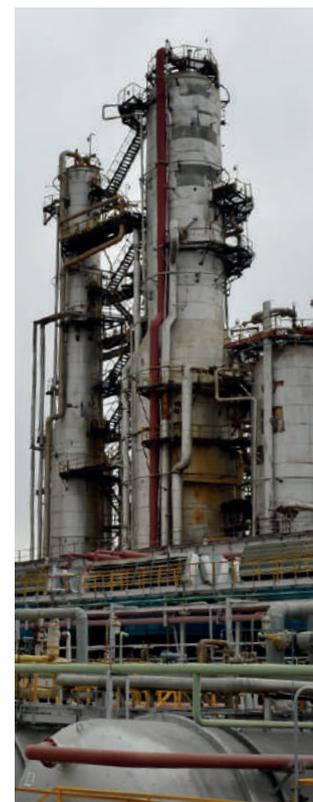
The first refinery in Kazakhstan was built in Atyrau in 1945. The Pavlodar Oil Chemistry Refinery (POCR) was built several decades later, in the seventies. The Shymkent Refinery (PKOP) is the youngest of the major Kazakhstan refineries and was commissioned in the mid-eighties. The Caspi Bitum plant was commissioned in 2013 as part of the development of the modern petroleum refining industry of Kazakhstan.

The Romanian refineries were acquired with the aim of diversifying KMG's operations and developing foreign

markets. In 2007, KMG acquired the Rompetrol Group, which incorporates Petromidia Refinery, the largest refinery in Romania, and Vega Refinery (the only producer of extraction naphtha in Central and Eastern Europe). Later, the company was renamed KMG International (KMG I).

POCR modernisation was completed in 2017. The Atyrau Refinery had installed all new equipment and machinery and began testing and commissioning works by the end of the year. The first phase of PKOP modernisation work is complete. Phase two is due to be completed in the second half of 2018.

To transition to a more organisational and management structure, the sub-holding company JSC KazMunayGas – Refining and Marketing was merged with KMG.



<sup>13</sup> KMG is currently considering an opportunity to sell 51% of KMG I (100% KMG SDE), which owns the Petromidia and Vega plants and a network of filling stations in Europe

<sup>14</sup> Refining capacity covers only oil refining and no other hydrocarbons which counts additional 1 mln tonnes per year

### CHARACTERISTICS OF KMG'S REFINING ASSETS

	Atyrau Refinery	POCR	PKOP	Caspi Bitum	Petromidia <sup>13</sup>	Vega <sup>13</sup>
Location	Atyrau, Kazakhstan	Pavlodar, Kazakhstan	Shymkent, Kazakhstan	Aktau, Kazakhstan	Navodari, Romania	Ploiesti, Romania
Commissioned	1945	1978	1985	2013	1979	1905
Refining capacity, mln tonnes	5.5	5.1	5.25	1.0	5.0 <sup>14</sup>	0.5
KMG ownership interest, %	99.53%	100%	49.73%	50%	54.63%	54.63%
Refinery co-owners	-	-	CNPC	CITIC	Romanian Government	Romanian Government

## HYDROCARBON REFINING OUTPUT

### KMG hydrocarbon refining output

In 2017, KMG's cumulative hydrocarbon refining output, taking into account its operating share, amounted to 18.2 mln tonnes or 379 thous. barrels per day.<sup>15</sup>

Hydrocarbon processing increased by 532 thous. tonnes or 3% from 2016 (17.7 mln tonnes). Refining output increased at all refineries, except for the Atyrau Refinery, due to the:

- increase in raw material supplies to POCR, PKOP and Caspi Bitum
- the 256 tonne growth in the refining of other raw materials at Petromidia. Crude oil refining output remained more or less at the 2016 level
- growth of supplies to Vega plant of 19 thous. tonnes of raw materials

Actual refining output at the Atyrau Refinery fell due to plant modernisation work during the year.

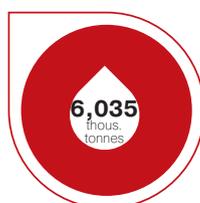
### Raw material suppliers for the Kazakhstan refineries

During the year, the Atyrau Refinery received 2.6 mln tonnes of hydrocarbons (55%) from KMG subsoil users. In addition, the majority of supplies to POCR of 2.6 mln tonnes of raw materials (56%) also came from KMG subsoil users. KMG's share in supplies to the Shymkent Refinery amounted to 12%, while the CNPC group of companies accounted for approximately 56%. Caspi Bitum received its feedstock from its two

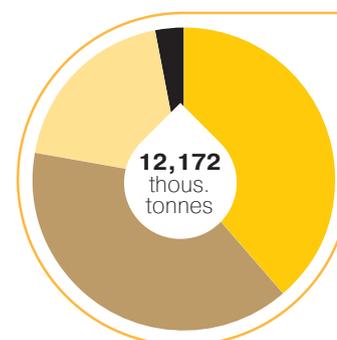
## KMG HYDROCARBON REFINING OUTPUT

Total

18,207 thous. tonnes



POCR	4,747
Atyrau Refinery	4,724
PKOP	2,343
Caspi Bitum	358
KMG I (Romanian refineries)	6,035



## COMPARISON OF KMG HYDROCARBON REFINING IN 2016 AND 2017 (THOUS. TONNES)

Production output in 2017

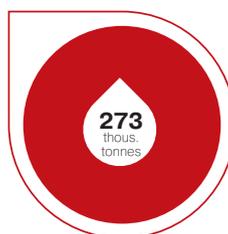
18,207 thous. tonnes

Production output in 2016

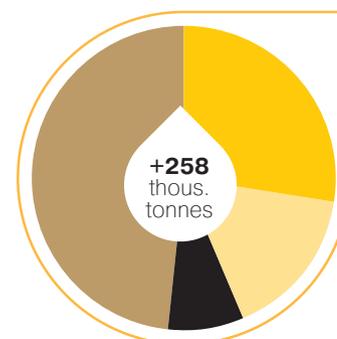
17,675 thous. tonnes

REDUCTION

GROWTH



Atyrau Refinery	(37)
POCR	157
PKOP	92
Caspi Bitum	46
KMG I (Romanian refineries)	273



<sup>15</sup> Includes 100% of the refining volume to identify the operating shares of Atyrau Refinery, POCR, the Romanian refineries and 50% for PKOP and Caspi Bitum

shareholders, KMG and the CITIC group of companies – 50% each.

As a result, KMG's share of hydrocarbons in the total sent to the 4 Kazakhstan refineries for refining amounted to 6.1 mln tonnes (41%) in 2017. In 2016, that figure was 6.7 mln tonnes (46%), which is almost 600 thous. tonnes higher than in 2017.

#### Raw material suppliers for the Romanian Petromidia and Vega plants

Total refining output at the Petromidia plant of 5.7 mln tonnes includes 4.7 mln tonnes of oil and 1 mln tonnes of other alternative feedstock, such as naphtha, methanol, fuel oil, gases and others.

The majority of hydrocarbon supplies of 4.7 mln tonnes for refining at the Petromidia plant came from KMG companies, such as JSC Ozenmunaigas (1.5 mln tonnes), JSC Embamunaygas (0.7 mln tonnes) and third parties (2.5 mln tonnes) such as Glencore Energy UK Ltd, Litasco, Petroineos Trading Limited, Socar Trading S.A., Tenergy Trading SA and Vitol S.A.).

The feedstock for the Vega plant came exclusively from the Petromidia plant.



#### KMG HYDROCARBON SUPPLIES TO REFINERIES, THOUS. TONNES

	2016 fact	2017 fact
Atyrau Refinery	3,058	2,560
PKOP	598	555
POCR	2,755	2,655
Caspi Bitum	312	359
<b>TOTAL</b>	<b>6,723</b>	<b>6,129</b>

#### KMG REFINERY PRODUCTION CAPACITY UTILISATION

	Atyrau Refinery	POCR	Shymkent Refinery	Caspi Bitum	Petromidia*	Vega*	Total
Design refining capacity, thous. tonnes	5,500	5,100	5,250	1,000	6,000	500	<b>22,350</b>
Hydrocarbon refining output (100%), thous. tonnes	4,724	4,747	4,686	718	5,662	373	<b>20,910</b>
Refinery capacity utilisation in 2017, %	94%	93%	89%	72%	94%	75%	<b>90%</b>

### KMG refinery production capacity utilisation

In 2017, the refineries worked to 90% of their design capacity, which corresponds to global averages.

### REFINERY BUSINESS MODEL

#### Tariff-based refining at the Kazakhstan refineries

Since April 2016, the main Kazakhstan refineries (Atyrau Refinery, POCR, PKOP and Caspi Bitum) have been operating on the basis of a new refining business model, whereby they provide oil refining services according to fixed tariffs, do not purchase oil for refining and do not sell finished oil products, all of which are the responsibility of oil suppliers selling finished petroleum products independently. Thanks to KMG's vertically integrated structure and its new refining business model, the refining business can focus on its specialisation, thereby increasing the operational

efficiency of the entire KMG Group. As part of the KMG transformation from strategic asset management to operational management, the refining business model allows refineries to focus solely on production issues, and streamline refining operations and reduce costs.

The state regulation of refining prices was abolished on 1 January 2017.

In 2017, refining tariffs were increased from 10% to 42% to ease the repayment of loans to finance the capital-intensive refinery modernisation projects, which cost approximately 6 bln USD.

#### Petromidia and Vega refining process

The Petromidia and Vega refineries operate in a more classical fashion, i.e. purchase feedstock, refine it, and then sell it on either wholesale or retail.



# 90%

average oil refinery  
utilisation in 2017

### REFINING TARIFFS AT KAZAKHSTAN'S LARGEST REFINERIES

Tariff period	Atyrau Refinery		POCR		PKOP	
	until April 1, 2017	from April 1, 2017	until August 1, 2017	from August 1, 2017	until October 6, 2017	from October 6, 2017
Tariff (excluding VAT), KZT/tonne of oil	20,501.00	24,512.00	14,895.20	16,417.00	11,453.82	16,301.71

## Petroleum products output

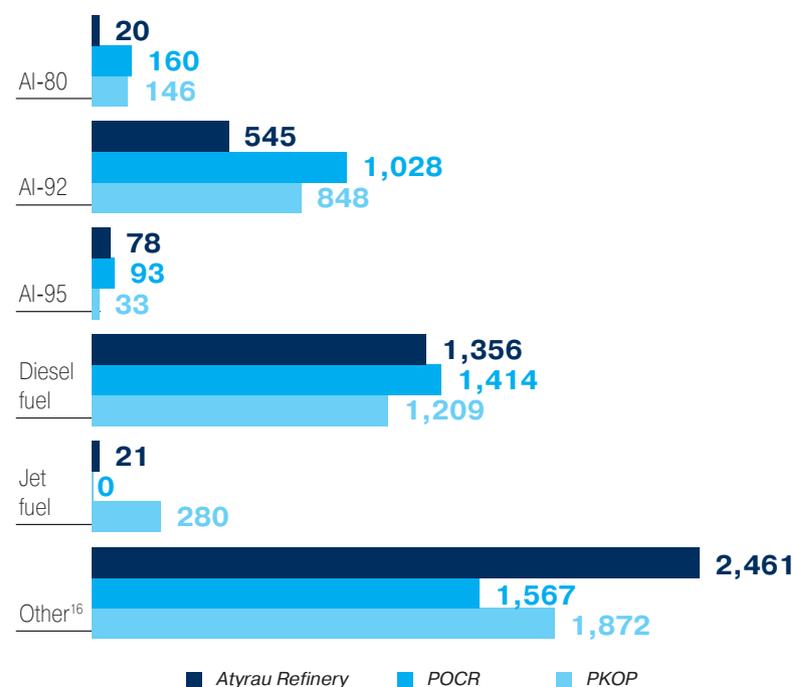
Petroleum product output, taking into account KMG's operating share, rose 4% or 623 thous. tonnes in 2017 to 17.2 mln tonnes due to an increase in feedstock supplies. An important factor in the changes at Kazakhstan's three largest refineries was the increase in light oil product output, which affected the cost of the hydrocarbon refining product basket. Thus, for example, Ai-92 gasoline output at PKOP rose 35%, while the increase in Ai-95/98 gasoline output at POCR reached 27%. All of these changes occurred due to refinery modernisation work.

During the reporting period, diesel and Ai-92 gasoline accounted for the majority of the individual types of fuel produced at Kazakhstan refineries. POCR was responsible for the largest diesel and Ai-92 gasoline output of 1,414 thous. tonnes and 1,028 thous. tonnes, respectively.

### PETROLEUM PRODUCT OUTPUT, INCLUSIVE OF THE KMG OPERATING SHARE, THOUS. TONNES<sup>17</sup>

	2016 fact	2017 fact
Atyrau Refinery	4,491	4,482
POCR	4,036	4,261
PKOP (50%)	2,136	2,194
Caspi Bitum (50%)	307	353
<b>Total for Kazakhstan</b>	<b>10,970</b>	<b>11,290</b>
Petromidia	5,242	5,530
Vega	350	365
<b>Total for KMG</b>	<b>5,592</b>	<b>5,895</b>
<b>Inclusive of the KMG operating share</b>	<b>16,562</b>	<b>17,185</b>

### PETROLEUM PRODUCTS OUTPUT AT KAZAKHSTAN REFINERIES IN 2017, THOUS. TONNES



<sup>16</sup> Others include benzene, paraxylene, liquefied gas, vacuum gas oil, fuel oil, petroleum coke, sulphur and heating oil

<sup>17</sup> Includes 100% of the refining volume to identify the operating shares of Atyrau Refinery, POCR, the Romanian refineries and 50% for PKOP and Caspi Bitum

## Petroleum products sales

### KMG retail network in Kazakhstan

In 2017, KMG, through its network of 343 filling stations and fuel-gas filling stations, 60% of which were located in cities and 40% on roadsides throughout Kazakhstan, accounted for 14% of domestic retail petroleum sales.

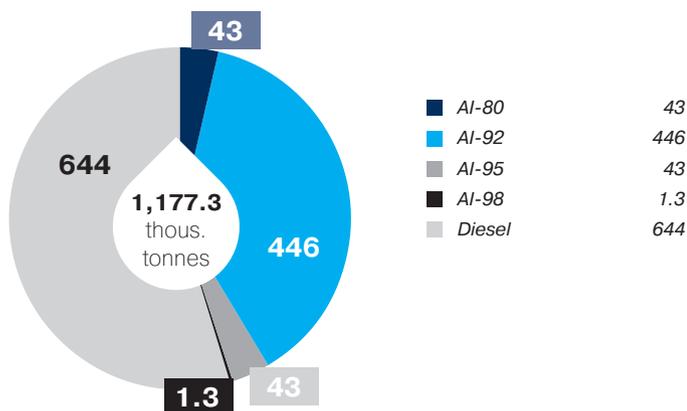
KMG filling stations are supplied through the subsidiary – KazMunayGas Onimderi LLP. Ai-92 gasoline and diesel accounted for the greatest sales at KMG filling stations, 644 thous. tonnes and 446 thous. tonnes, respectively.

KMG applies three formulas – COCO, CODO and DODO – to reduce costs and promote retail sales at its filling station network.

The COCO formula is used in the independent development of 176 KMG filling stations, creating a positive client perception of the KMG brand.

The CODO formula involves the contractual transfer of the maintenance of existing KMG filling stations to partners to reduce current maintenance costs and enables small businesses to increase profits by concentrating efforts on a particular facility. 142 KMG filling stations were transferred under the programme.

### PETROLEUM PRODUCTS OUTPUT AT KAZAKHSTAN REFINERIES IN 2017, THOUS. TONNES



The DODO (franchising) formula implies the transfer of third-party filling stations to the KMG network. Under this scenario, the original owner retains ownership and is responsible for maintaining the filling station, while KMG supplies its own petroleum products. In 2017, 25 such filling stations were launched under the KMG brand.

#### WHOLESALE KMG PETROLEUM PRODUCT SALES IN KAZAKHSTAN

Between January and December 2017, wholesale petroleum product sales rose 2.8% to 2,388 thous. tonnes. Wholesale gasoline sales increased by 16% and liquefied gas by 18% due to an increase in refining depth.

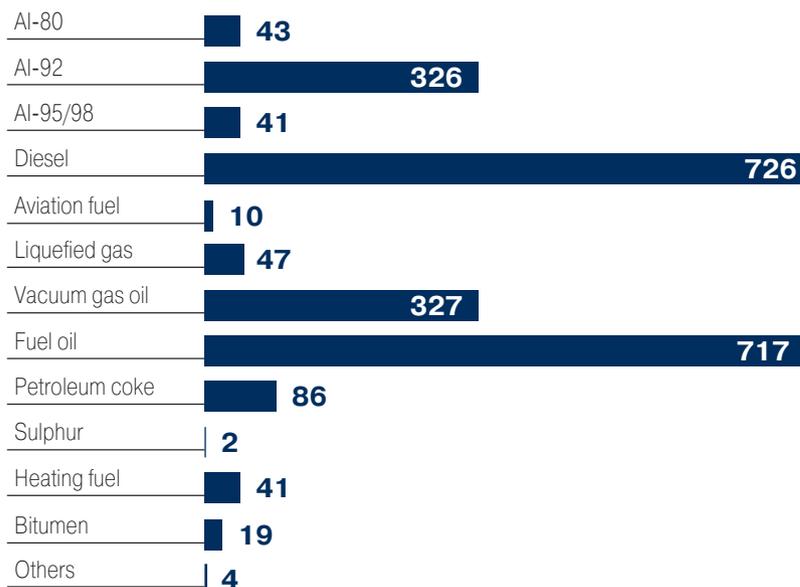
#### KMG I RETAIL NETWORK

Between January and December 2017, KMG I sold a total of 1,074 thous. tonnes of petroleum products through its retail network, including 357 thous. tonnes for export and 716 thous. tonnes domestically in Romania:

#### KAZAKHSTAN PETROLEUM PRODUCT LOGISTICS

To ensure its own filling stations receive petroleum products when required, and domestic agricultural producers the same during sowing and harvesting seasons, and socially significant facilities during the heating season, KMG acts as a freight forwarding company in conjunction with JSC NC Kazakhstan Temir Zholy to supply petroleum products from local refineries by rail.

#### WHOLESALE KMG PETROLEUM PRODUCT SALES IN KAZAKHSTAN, THOUS. TONNES



Gasoline wholesale  
in Kazakhstan:

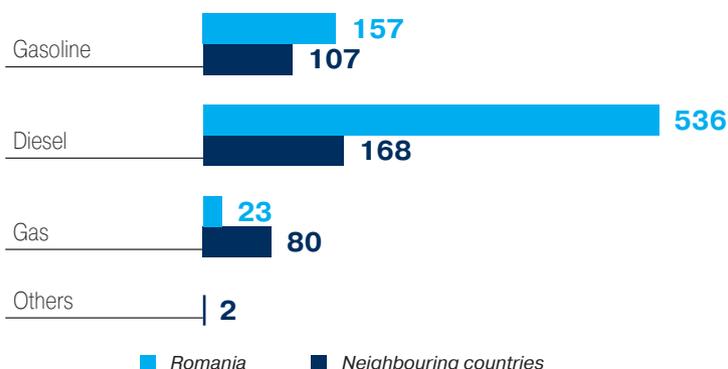
+16%



Liquefied gas wholesale  
in Kazakhstan:

+18%

#### PETROLEUM PRODUCT RETAIL SALES, THOUS. TONNES



■ Romania

■ Neighbouring countries

This has allowed KMG to meet the demand for diesel and gasoline loading from the main refineries using the JSC KazTemirTrans fleet.

At the same time, KMG controls and monitors the shipment of petroleum products from the main refineries, including:

- oil processing indices by resource holder, petroleum product yield, petroleum product balance, railway transportation plans, actual shipping by direction and petroleum product type
- calculating railway tariffs and other transportation costs required to make decisions on oil/petroleum product supplies by rail
- identifying rational delivery options and optimising transportation routes, taking into account the effective use of rolling stock

#### KMG I petroleum product logistics

In 2012, to reduce logistics costs, a buoy was built close to the Petromidia Refinery, 9 km from the shore, to help incoming oil tankers unload. Since commissioning in January 2009 and the present day, a total of 32.6 mln tonnes of crude oil have passed through the buoy and 380 oil tankers have been unloaded. Previously, tankers had to use the port of Constanta, making unloading operations far more expensive.

#### Diesel supplies to agricultural producers

According to a memorandum outlining an agreement between the state authorities, the main oil resource and oil product holders and petroleum product producers to provide diesel to Kazakhstan agricultural producers and a provisional Ministry of Energy-approved schedule for assigning regions to oil refineries, during 2017 spring and autumn field work, KMG successfully guaranteed diesel shipments from the Atyrau Refinery and POCR to agricultural producers.

#### Sowing season

During the 2017 sowing season, of the 38.4 thous. tonnes of diesel to be supplied, KMG itself supplied 28.1 thous. tonnes to the following regions.

#### Harvest season

During the 2017 harvest season, of the 34.9 thous. tonnes of diesel to be supplied to the regions, KMG supplied 26.8 thous. tonnes itself as follows.

#### Aviation fuel sales

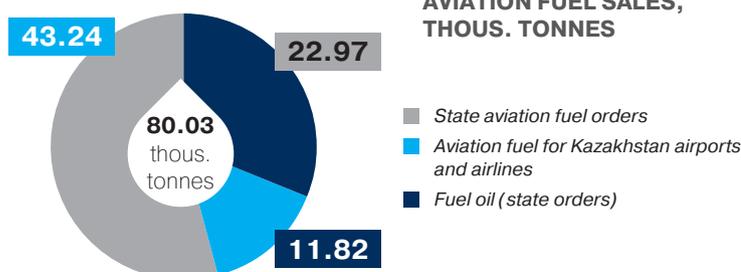
To strengthen its position in the Kazakhstan fuel market and develop an alternative aviation fuel distribution mechanism, KZT set up KazMunayGas-Aero LLP, which, in 2017, supplied 80 thous. tonnes of aviation fuel, more than half of which originated from state orders.

#### SOWING SEASON. AMOUNT SUPPLIED IN 2017, TONNES (ACCORDING TO APPLICATIONS)

Region	Supplied
Kostanai	5,761.37
North-Kazakhstan	7,598.50
East-Kazakhstan	3,911.53
Akmola	5,465.56
West-Kazakhstan	5,382.24
<b>TOTAL:</b>	<b>28,119.20</b>

#### HARVEST SEASON. AMOUNT SUPPLIED IN 2017, TONNES (ACCORDING TO APPLICATIONS)

Region	Supplied
Kostanai	9,578.56
North-Kazakhstan	6,396.53
East-Kazakhstan	4,611.86
Akmola	6,255.70
<b>TOTAL:</b>	<b>26,842.66</b>



## Kazakhstan refinery modernisation works

### GOALS OF THE MODERNISATION WORKS AND CURRENT STATUS

The main goals of modernisation works at Kazakhstan's refineries are to:

- cover domestic demand for high-quality fuel and lubricants in full
- achieve the dynamic development of competitiveness by introducing new technology and increasing efficiency and economic return

In 2017, POCR completed its capital-intensive modernisation; the Atyrau Refinery installed new equipment and machinery, while PKOP completed the 1st phase of its own modernisation. PKOP's completion of the second modernisation phase should allow the refinery to meet all medium-term domestic fuel needs.

### ATYRAU REFINERY RECONSTRUCTION AND MODERNISATION

#### Phase 1: Aromatic Hydrocarbon Production Complex (AHPC) construction

An aromatic hydrocarbon production complex has been built to ensure the production of K3-class vehicle fuel in accordance with Customs Union technical regulations and produce benzene (133 thous. tonnes) and paraxylene (496 thous. tonnes) for the petrochemical industry. The project, which lasted from 2010 until 2016,

cost a total of 1,329 mln USD and created 3.5 thous. jobs. Another 277 jobs will be created during the operating stage. As part of the project, a continuous catalytic converter unit and a benzene recovery unit were commissioned in 2015, which led to the commissioning of a PARAMAX combined aromatic hydrocarbon production plant in September 2016.

The complex can be operated in fuel or petrochemical mode, currently operating in the fuel mode, which enables it to increase domestic high-octane gasoline production.

Since being commissioned, the AHPC has helped increase annual high-octane gasoline production from 260 thous. tonnes in 2014 to 604 thous. tonnes in 2016 and launch the production of benzene, a basic feedstock used in the petrochemical industry, of which about 8 thous. tonnes were exported in 2017.

#### Phase 2: Advanced Oil Refining Complex (AORC) construction

The advanced oil refining complex was built between 2011 and 2017 to aid K4-K5 vehicle fuel production in accordance with Customs Union technical regulations, and increase refining depth and plant capacity to 5.5 mln tonnes per year. The total cost of the complex was 2,050.1 mln USD. Construction work created 4 thous. jobs, while the operation stage will provide another 490 jobs.



### Atyrau Oil Refinery modernisation

#### STAGE 1

Investment of

 **1,329**  
MLN USD

New jobs:

 **277**  
PEOPLE

#### STAGE 2

Investment of

 **2,050**  
MLN USD

New jobs:

 **490**  
PEOPLE

Construction work resulted in the creation of:

- ◆ a catalytic cracking unit
- ◆ selective naphtha hydrogenation, liquefied hydrocarbon gas desulphuration, butene oligomerisation, light naphtha etherification, naphtha hydrotreatment, gas oil hydrotreatment, benzene hydrogenation and saturated gas fractionation units
- ◆ hydrogen production and purification, and sulphur production units

The various units have already started operations and will play their part in increasing annual high-octane gasoline production from 623 thous. tonnes in 2017 to the planned 1,430 thous. tonnes in 2018, and aviation fuel from 21 thous. tonnes to the planned 76 thous. tonnes in 2018, with a subsequent increase to 250 thous. tonnes in 2019. At the same time, annual fuel oil production will drop from 1,495 thous. tonnes in 2017 to the planned 594 thous. tonnes in 2018. Vacuum gas oil and heating oil production will be stopped.

#### **PAVLODAR OIL CHEMISTRY REFINERY (POCR) MODERNISATION**

The aim of the POCR modernisation project between 2011 and 2017 was to create the conditions required to produce K4 vehicle fuel in accordance with Customs Union technical regulations. The cost of the project, which created 2 thous. jobs, was 896 mln USD. After transitioning to

the operation stage, the refinery will create another 161 jobs.

The project also commissioned naphtha isomerisation and splitter units as well as a combined sulphur production unit. The upgrade project also included an initiative to reconstruct existing atmospheric distillation, naphtha hydrotreatment, diesel fuel hydrotreatment, kerosene hydrotreatment, catalytic cracking and vacuum gas oil hydrotreatment units.

After modernisation, POCR will be able to increase annual production of high-octane gasoline from 1,121 thous. tonnes in 2017 to the planned 1,476 thous. tonnes in 2018, and launch aviation fuel production.

#### **SHYMKENT REFINERY (PKOP) MODERNISATION AND RECONSTRUCTION**

The first stage of the Shymkent Refinery modernisation was completed in 2017. Completion of the second phase is expected in the second half of 2018.

Completion of the first modernisation phase on 30 June 2017, has given PKOP the capacity to produce K4 and K5 vehicle fuel and increase annual high-octane gasoline production from 660 thous. tonnes in 2016 to 1,881 thous. tonnes in 2017.

Completion of the second phase will increase:

- ◆ refining output to 6.0 mln tonnes per year



#### **Pavlodar Oil Chemistry Refinery**

Investment of

 **896**  
MLN USD

New jobs:

 **161**  
PEOPLE

- ◆ high-octane gasoline production from 881 thous. tonnes in 2017 to the planned 1,426 thous. tonnes in 2018 and 2,270 thous. tonnes in 2019
- ◆ diesel production from 1,209 thous. tonnes in 2017 to the planned 1,900 thous. tonnes in 2019
- ◆ aviation fuel production from 280 thous. tonnes in 2017 to the planned 400 thous. tonnes in 2019

#### POST-MODERNISATION QUANTITATIVE AND QUALITATIVE IMPROVEMENTS

Modernisation work at the three refineries will increase their raw hydrocarbon refining capacity by 8.5% from 15.4 mln tonnes to 16.6 mln tonnes.

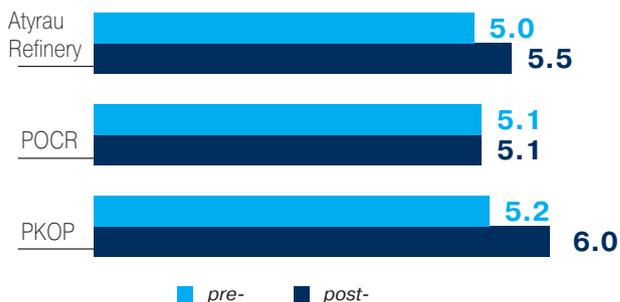
An important aspect of modernisation will be the increase in the hydrocarbon refining level from 71% to 78–80%, which more or less corresponds to the European average.

As the refineries will have capacity to meet domestic medium-term fuel demand once the modernisation project is completed, there will be less dependence on fuel and lubricant imports from neighbouring countries.

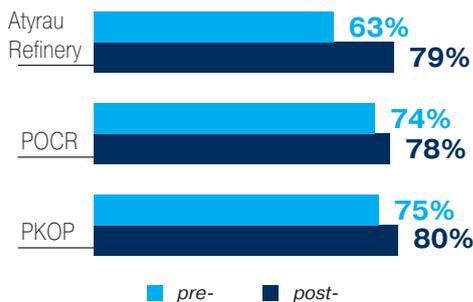
#### Growth in production capacity after refinery modernisation



#### HYDROCARBON FEEDSTOCK PRODUCTION CAPACITY, MLN TONNES



#### HYDROCARBON FEEDSTOCK PROCESSING DEPTH, %



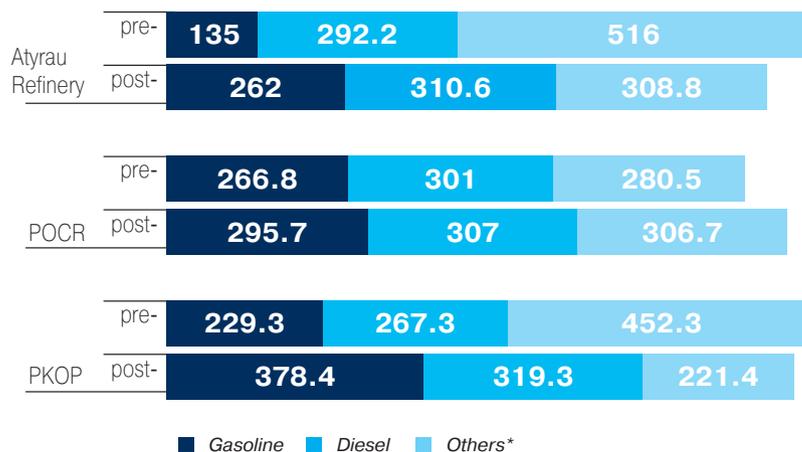
## KMG I Refinery (Petromidia and Vega plants) modernisation

The purpose of the 450 mln USD modernisation work at the KMG I Refinery was to increase design capacity and light oil product output, and introduce capacity to process sulphur-rich oil, which should have a positive impact on refinery margins.

The project included the construction of three new plants, including a hydro-cracking unit, and upgrading two existing plants.

Modernisation work has increased refining output from 3.8 to 5 mln tonnes of feedstock and led to a transition to Euro-5 standard fuel production. At the same time, oil refining output actually exceeds nominal capacity due to the processing of other feedstock types, besides oil. The light product yield, including gasoline, diesel and aviation fuel, per tonne of feedstock after modernisation will be approximately 86%. Diesel accounts for about 49% of the production structure at the Petromidia Refinery and kerosene – about 250 thous. tonnes.

### HYDROCARBON PRODUCTS PRODUCTION PRE- AND POST-MODERNISATION FOR 1,000 TONNES OF OIL



\* TS-1 aviation fuel, heating oil, fuel oil, vacuum gas oil, coke, liquefied gas, benzene, paraxylene, sulphur and bitumen



# INTERNATIONAL ACTIVITIES



## REFINING

The Petromidia and Vega refineries are located on the Black Sea coast, and in Ploiesti, Romania, close to a number of major markets.



## MARKETING

The KMG International group incorporates a well-developed and well-known retail network in the European Union, including countries such as Romania, Bulgaria, Georgia, Moldova, France and Spain.



## PARTICIPATION IN MODERNISATION

The engineering divisions of a KMG subsidiary - KMG Engineering (Rominserv) took an active role in upgrade work at the Atyrau, Shymkent and Pavlodar Refineries.

**KMG International** is an integrated, diversified and competitive oil company with international operations in refining, petrochemicals, and oil and petroleum product sales.



KazMunayGaz  
International

72  
CONTINENTS  
COUNTRIES

**KMG International's** aim is to increase Company value for the shareholder and achieve the highest management standards. Commitment to the transparency of corporate governance is extremely important in maintaining shareholder, partner and creditor trust and modernising the Group in qualitative terms.

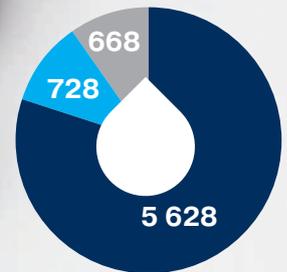
JSC KazTransGas Tbilisi is involved in the sale and distribution of gas in Georgia.

Batumi Oil Terminal LLC provides oil and oil product reloading services, such as oil tanker discharge, accumulation and loading for clients from Kazakhstan, Azerbaijan, Turkmenistan and Georgia.

KazTransGas Bishkek Ltd's was created to repair and upgrade the Bukhara gas-bearing area and the Tashkent-Bishkek-Almaty main gas pipeline.

Batumi Sea Port LLC provides cargo reloading, storage, warehousing, vessel and general vehicle maintenance services.

HEADCOUNT AT THE END OF 2017



- KMG International
- Batumi Sea Port
- Batumi Oil Terminal



The **Batumi Oil Terminal** and **Batumi Sea Port** are KMG production assets that were purchased to ensure Kazakhstan's strategic presence on the Black Sea and to create production transportation and logistics facilities outside of Kazakhstan.

A synergy effect for the KMG Group is the creation of a strategically important oil transportation corridor based on the Batumi Oil Terminal, providing direct market entry for Kazakhstan oil and petroleum products.

# SERVICE PROJECTS

## GENERAL OVERVIEW

The following is a list of the KMG Group's main oilfield service companies:

- ◆ KMG Drilling and Services LLP
- ◆ Oil Services Company LLP
- ◆ Oil Construction Company LLP
- ◆ Oil Transport Corporation LLP
- ◆ Mangistauenergomunai LLP
- ◆ Munaitelcom LLP
- ◆ Teniz Service LLP

## MARKET CONDITIONS

The significant macroeconomic changes associated with the drop in oil prices, the rise in feedstock and equipment prices directly reduced the production programme of JSC Mangistaumunaigaz, KMG's largest oilfield service customer (Oil Services Company LLP, Oil Transport Corporation LLP, Oil Construction Company LLP, Mangistauenergomunai LLP and Munaitelcom LLP). The decline in revenue and increase in production costs led to significant losses for these oilfield service companies and

additional compensation costs for KMG.

## SOCIAL RESPONSIBILITY

The main issue for oilfield service companies has been their losses over the last few years. For this reason, KMG, as a socially responsible corporation, has committed to compensate losses and update fixed assets belonging to oilfield service companies, and in 2017 launched a number of measures to improve performance. Thus, over the last 4 years, KMG has provided financial support to loss-making oilfield service companies in the amount of 121.4 bln. tenge.

In addition, to improve working conditions for Oil Transport Corporation LLP employees, in 2017 KMG built a production base for 400 units of equipment, purchased a production base for 100 units of equipment and a field camp for 200 people at the Kalamkas field.

In 2017, it also implemented an early retirement programme and programme allowing the early termination of employment contracts by mutual consent and subject to compensation.

## ADDITIONAL MEASURES TAKEN TO DEVELOP OILFIELD SERVICE ASSETS

In addition, to develop oilfield services, in 2017, KMG also:

- ◆ Helped search for additional work for oilfield service companies
- ◆ Implemented cost reduction activities
- ◆ Withdrew non-core assets
- ◆ Sold unused oilfield service company facilities
- ◆ Formed and approved an integrated programme for the development of KMG and KMG EP oilfield service assets

In the medium term, these measures will allow oilfield service companies to break even in 2019. For example, thanks to the above measures, Oil Construction Company LLP recorded a profit in January-February 2018.

## CURRENT PROJECTS

In 2017, KMG implemented a service project to build a self-elevating floating drilling rig (SEFDR); launched the "TCO drilling programme implementation project" and a project

**KMG built a production base for 400 units of equipment, purchased a production base for 100 units of equipment and a field camp for 200 people at the Kalamkas field.**

to establish the KMG Parker Drilling Company LLP joint venture.

In Q1 2017, the SEFDR was completed, preliminary acceptance and transfer certificates were signed, and the key final 8th construction stage was paid for. The project was managed by KMG Drilling and Services LLP based on a contract with a consortium of Keppel Kazakhstan LLP and Ersai Caspian Contractor LLP. In 2018, the SEFDR will be made ready for participation in project N operations in 2019.

Since 2015, the KMG joint venture Nabors Drilling Company LLP has been providing drilling services at Tengiz as part of the project to implement TCO's drilling programme. In 2017, it provided four drilling rigs, and in December 2017, after signing a new two-year service contract, it is due to commission an additional No. 585 drilling rig.

To drill wells at the Karachaganak Petroleum Operating B.V. project, KMG established the joint venture KMG Drilling and Services LLP, which received approval from the KMG Investment Committee and Management Board to acquire a 49% interest in KMG Parker Drilling Company share capital.

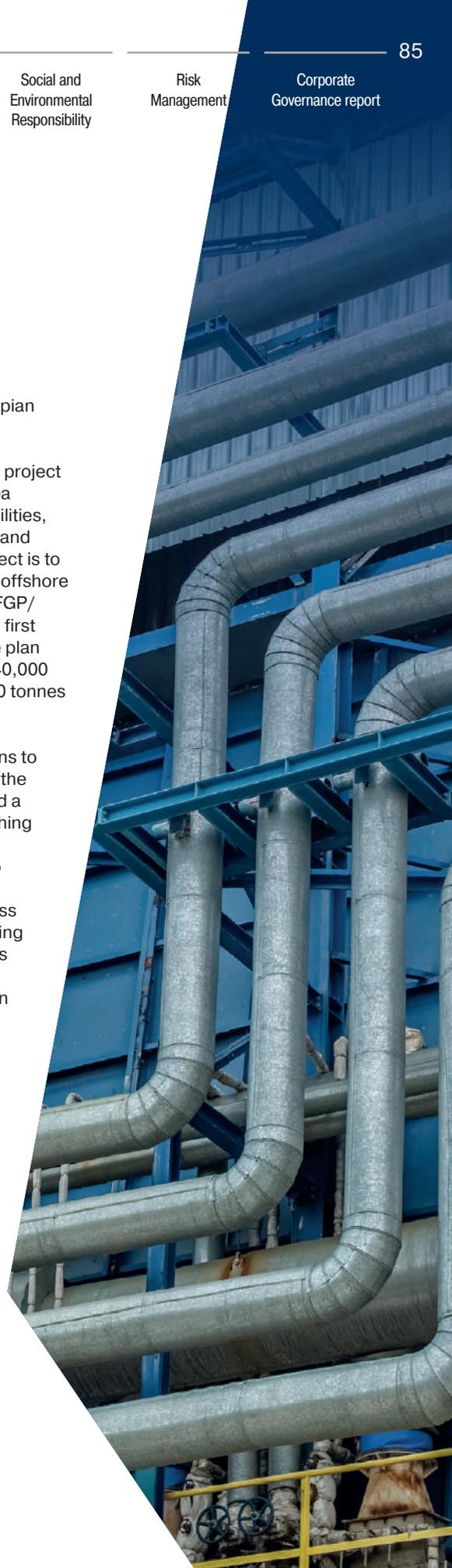
TCO has also requested KMG, as part of an offshore transportation system for its FGP/WPMP, is also implementing its "Cargo Transportation Route" project through

Teniz Service LLP in the North Caspian Sea.

The "Cargo Transportation Route" project incorporates the North Caspian sea channel together with berthing facilities, onshore buildings and structures, and access roads. The goal of the project is to create a single transport corridor (offshore and onshore) to deliver cargo for FGP/WPMP implementation (during the first three years of implementation, the plan is for the transshipment of about 340,000 tonnes of cargo, including 140,000 tonnes of modules).

In 2017, KMG completed operations to dredge the sea channel, excavate the coastal side of the sea channel and a turning basin, as well as build berthing facilities. On shore, it completed construction of a road designed to transport modules from berthing facilities to Tengiz, as well as access roads. The installation of engineering networks, construction of buildings and structures, vehicle roads and ship traffic control systems is still in progress.

Construction of CTR facilities was 88% complete as at 31 December 2017, and is due to be completed in 2018, and commissioned gradually between April and October 2018.







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# 9 TECHNOLOGY: RESEARCH AND DEVELOPMENT INSTITUTE OF PRODUCTION AND DRILLING TECHNOLOGY

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# TECHNOLOGY: RESEARCH AND DEVELOPMENT INSTITUTE OF PRODUCTION AND DRILLING TECHNOLOGY

“KazMunayGas” Research and Development Institute of Production and Drilling Technology LLP (RDI PDT) is a research center of KMG. It was founded in 2014 to provide comprehensive scientific and engineering support for the exploration, development, production and drilling of KMG’s hydrocarbon resources. It has its headquarters in Astana, and two

branches – Caspimunaigas in Atyrau and KazNIPimunaigaz in Aktau. The branch offices provide real-time direct support to KMG operating and non-operating assets.

The RDI PDT and its branches’ goals are to:

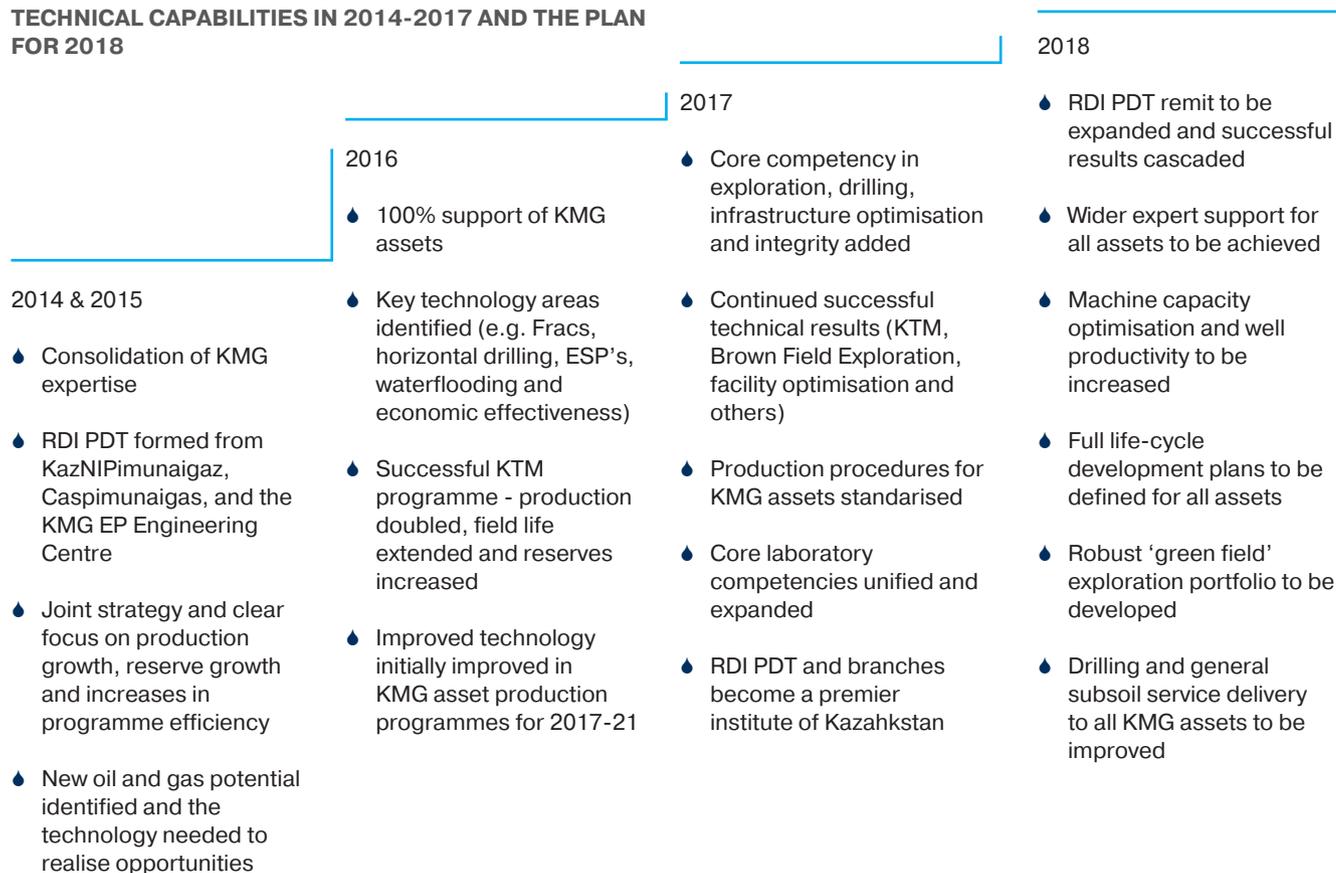
- ◆ Increase economic production

- ◆ Increase reserves and resource bases and

- ◆ Improve production and programme efficiency

The key to delivering these goals has been the ability to identify and introduce competitive, industry standard technology and procedures, and provide the expert skills needed

## EVOLUTION OF THE DEVELOPMENT OF RDI PDT TECHNICAL CAPABILITIES IN 2014-2017 AND THE PLAN FOR 2018



to effectively deploy the same across the KMG portfolio. Starting in 2016, the RDI PDT, in collaboration with production and exploration assets, have successfully demonstrated several key technical solutions across the KMG portfolio.

### 2017 BUSINESS REVIEW

KMG has 119 hydrocarbon fields, of which 86 are at the active development stage. To develop new opportunities and tackle obstacles to economic growth, the RDI PDT operates in the following five main areas:

- ◆ exploration
- ◆ production
- ◆ major projects
- ◆ surface facilities
- ◆ drilling and well servicing and workovers

### EXPLORATION

Kazakhstan is a world-class hydrocarbon resource country. For this reason, it is critical that KMG develop internationally competitive capabilities to ensure proper recognition and development of these resources. In 2017, RDI PDT specialists prepared five structural-tectonic 3D models for the Mangyshlak, Ustyurt-Bozashin and three side zones of the Caspian sedimentary basins, covering a large part of Western Kazakhstan. An atlas of prospects for the Triassic, Jurassic and Cretaceous complexes of the Mangyshlak

sedimentary basin has been developed and contains an estimated total potential of ≈7 bln. tonnes of oil equivalent.

Based on the results of a comprehensive analysis of geological and geophysical data, a high graded, initial portfolio of seven projects with total expected growth potential of 777 mln tonnes of geological oil resources and 38 bcm of gas has been documented.

KMG is now building a comprehensive view of Kazakhstan hydrocarbon resources, using internal, and internationally competitive skills and technology.

**4.6**  
MLN TONNES

growth in reserves for  
a number of fields as of  
YE2017



Significant exploration potential also exists in production assets. In 2016, the RDI PDT, in collaboration with production asset professionals, launched the "Brownfield Exploration Programme for KMG's Developed Fields". New deposits (for example, missed horizons) and improved oil identification techniques helped oil reserves grow by 4.6 mln. tonnes at the end of 2017 for selected fields. Additional growth in reserves is expected as these studies are expanded.

Kazakhstan has a long and successful oil industry history. However, current and up-to-date information along with a large volume of historical geological, geophysical and field data is needed to ensure the successful implementation of exploration and development projects. The RDI PDT has now developed a modern centralised information and data management system to collect, store and access these materials.

## PRODUCTION

Key to KMG's future success will be the modern, effective, and economic development of its existing and new production opportunities. The RDI PDT plays a central role in identifying appropriate opportunities, providing support and guidance as to the required technology and procedures, and the skills needed to execute

these programmes so that they are economically successful.

As examples, KMG has tested horizontal well, horizontal well with multi-stage fracturing, sidetracking and deeping, and other drilling technologies, which have made it possible to generate large oil increments together lower overall costs, or lower costs/tonne. For example, lower drilling costs (the replacement of vertical wells with sidetracking and deeping) will generate a capital cost saving of 6.2 bln. tenge in 2017–2018.

The quality of geological and technical measures (GTM) is also becoming standard, portfolio-wide selection criteria, complete with economic ranking, resulting in more oil for less cost.

Controlling corrosion and infrastructure integrity are major challenges at some mature KMG assets. Bactericides injection to control the biocontamination of formations, injecting corrosion and scaling inhibitors at suction pump in producing wells, submersible motor pumps and tubing with protective coatings are examples of new techniques that have been introduced recently. These measures give a positive technical and economic effect and allow for improved well failure time between costly workovers – giving more oil for less cost.



60% ▲

Oil production at Kazakhturkmunai LLP increased by **60%** from **242** thous. tonnes in 2015 to **387** thous. tonnes in 2017

KMG Business  
Model and Business  
Geography

Strategy

Transition to a New  
Operating Model

Group  
performance

Technology: Research  
and Development  
Institute of Production  
and Drilling Technology

Social and  
Environmental  
Responsibility

Risk  
Management

Corporate  
Governance report

A vivid example is the development and application of optimal GTM to increase production at Kazakhturkmunai LLP. Because of the work performed, oil production increased by 60%, from 242 thousand tonnes in 2015 to 387 thousand tonnes in 2017. Meaning the programme made a return within 5 months. The use of modern technology will maintain production for at least five more years. This successful practice will be replicated at other KMG fields.

#### MAJOR PROJECTS

RDI PDT activities include scientific and technical support for offshore projects (Kashagan, Kalamkas-Sea, Kairan, Aktoty and Khazar), TCO (Tengiz, Korolevskoye) and KPO (Karachaganak).

For the first time in the history of KMG, the major project team has developed its own geological and hydrodynamic models for the Kashagan, Karachaganak, Tengiz and Korolevskoye fields, which are used to prepare technical opinions and support KMG management investment decisions. The technical collaboration of the team's experts and international NCOC, TCO and KPO partners, has improved development project decisions, and reduced costs – generating greater value for KMG from these strategic assets.



## DRILLING AND WORKOVER

KMG spends more than 100 bln tenge each year (106 bln tenge in 2017) in the delivery of new wells and on workovers. At the start of 2015, it was recognised that many aspects of well construction delivery and well repair operations were far below expected industry standards for several key fields. Inadequate technical projects and poor quality of construction, drilling muds, equipment and development are opportunities for improved performance, and economic benefit. As an example, corrosion of the existing Uzen well stock was identified in late 2016 as a major contributor to the failure to meet production targets, causing excessive costs (e.g. tubing failure and replacements, shortened well life, loss of containment and others).

The RDI PDT and its branches, in cooperation with the Uzen team, are now implementing a comprehensive corrosion treatment and mitigation programme. Coupling this with improved well designs, quality control and effective corrosion monitoring programmes, will mean increased production and lower costs. These programmes and techniques are now being expanded to the full KMG portfolio as needed.

JSC Ozenmunaigas, in cooperation with the RDI PDT and key external vendors, have improved the quality of wellbore cementing. For a select set of 25 wells, the production

horizon interval has showed improved cement bond index in more than 90% of cases, while overall for JSC Ozenmunaigas the cementing quality index has increased from 76% to 83%. A reduction in reservoir damage has also been achieved, leading to an improvement in water flooding effectiveness, growing production and improving reserve recovery.

The RDI PDT has also identified an opportunity to reduce unproductive drilling time and successfully introduced on-line drilling monitoring for complex KMG wells and now monitors them in real-time via a visualisation centre staffed by a team of multidisciplinary experts.

## SURFACE FACILITIES AND INFRASTRUCTURE

In the oil and gas industry, surface facility optimisation and asset integrity assessments are critical, especially in aging fields. In 2017, the RDI PDT built a team of facility integrity, reliability and infrastructure optimisation specialists to ensure field life economic longevity and that production systems are fit-for-purpose over time. The team launched several programmes in 2017 that will generate benefits in 2018, for example, the program of removing technological limitations, emulsion control, optimization of accounting systems, corrosion control system and more.









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**SOCIAL AND  
ENVIRONMENTAL  
RESPONSIBILITY**

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# SOCIAL AND ENVIRONMENTAL RESPONSIBILITY<sup>18</sup>

## Personnel and social responsibility

### KMG PERSONNEL POLICY

Samruk-Kazyna's expectations for 2017 included the introduction of a new organisational structure in KMG and the principles of meritocracy (the introduction of approved target HR processes and the launch of the Job Matching project) through specific human resource policy mechanisms and tools, as well as the active transformation of the HR function.

For this purpose, in 2017 KMG continued its implementation of the project to introduce a new human resource management model in line with the KMG Transformation Programme and to transition to a new operational management model (JobMatching) for CEO–3<sup>19</sup> corporate function positions, such as IT, HR, HSE, strategy, corporate security, internal audit and others.

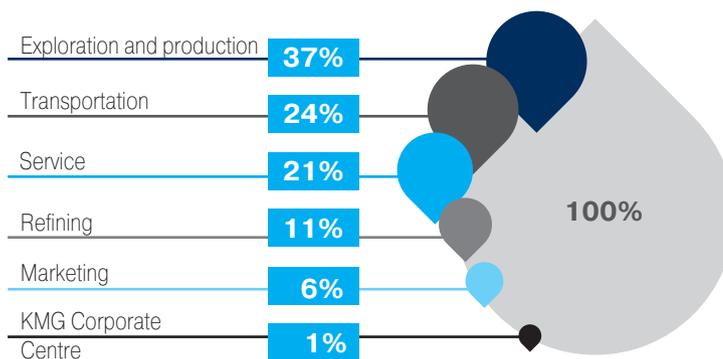
KMG Board of Directors committees and Job Matching commissions assessed 79 CEO–3 level job descriptions for target processes and prescribed qualifications in accordance with KPIs, and introduced a grading system for the positions. The Group also approved grades for senior managers and the main approaches to a grading-based remuneration system, which allowed it to establish both internal and external salary parity depending on the contribution of each position to KMG performance achievements.

Within the framework of its Human Resources Policy for 2017–2021, in 2017, KMG developed a target organisational

### KMG HEADCOUNT



### BREAKDOWN OF TOTAL KMG HEADCOUNT BY SEGMENT IN 2017, %



<sup>18</sup> Detailed information on environmental, economic and social development is provided in the 2017 Consolidated Sustainable Development Report for the KMG Group of Companies. The Sustainable Development Report is prepared in accordance with the Global Reporting Initiative's international sustainable development reporting guidelines and is available on the KMG website at: [http://www.kmg.kz/rus/ustoichivoe\\_razvitie/reports/](http://www.kmg.kz/rus/ustoichivoe_razvitie/reports/)

The Sustainable Development Report is also a Communication on Progress within the framework of KMG's United Nations Global Compact membership and is available at the Global Compact website at: <https://www.unglobalcompact.org/what-is-gc/participants/6810>

<sup>19</sup> Department director level

structure for the KMG Corporate Centre HR function in accordance with the Ulrich model.

A methodology was developed to meet meritocracy principles and regulate target HR processes for the KMG Corporate Centre

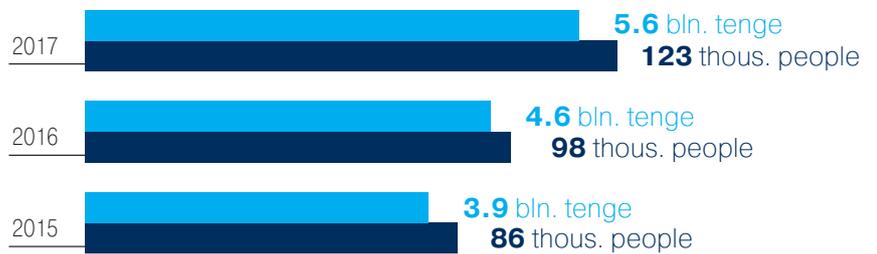
In 2017, KMG headcount decreased by 4% due to the streamlining of vacancies created as a result of hiring moratorium, the implementation of a programme allowing the early termination of employment contracts by mutual consent and subject to compensation, and the implementation of the transformation programme

**STAFF PROFESSIONAL DEVELOPMENT**

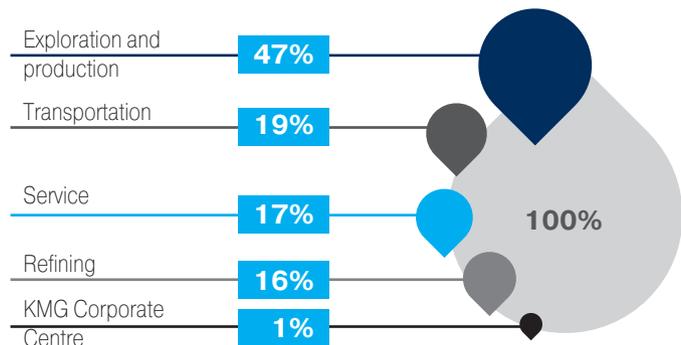
KMG places special importance on the development of human capital in the regions where it has operations. To achieve its strategic goals and objectives, KMG provides annual staff training and development and introduces new approaches and methods to staff training and development within the KMG Group.

To improve the training and development process; form and maintain the required level of staff qualifications, and ensure the most effective use of budget funds, KMG implemented a new “70/20/10 – on-the-job training/internal training/external training” staff training and development concept from 2016. One of the innovations of the new concept has been the Institute of Internal Trainers established to attract highly qualified employees to KMG, with professional skills in their field and who

**STAFF PROFESSIONAL DEVELOPMENT**



**STAFF RECEIVING TRAINING, BY SEGMENT FOR 2017, %**



are capable of transferring best experience, professional knowledge and skills. The new training approach not only improves skills and knowledge, but also increases the chances for experienced employees to mentor, improve internal communication and best reveal the potential of young professionals and their desire to become the best in their profession or field.

In 2017, to exchange and study advanced experience, acquire professional knowledge and skills, KMG set up the Formula for Success internship programme, which helped 39 employees from 8 companies complete internships in 6 KMG subsidiaries. At the same time, in 2017, JSC EP KazMunayGas signed a Memorandum of Cooperation to organise internships for KMG employees.

In 2017, Karachaganak Petroleum Operating, The KMG Scientific Research Institute of Production and Drilling Technology, Professional Geosolutions LLP and Kazakhoil Aktobe LLP signed an internship agreement for 2018.

In addition to the above projects, KMG is actively increasing annually the number of employees undergoing training. In 2017, it provided training for 120 thous. people at a cost of 5.6 bln tenge, which was 23% higher than in the previous year.

Importantly, starting from 2017, KMG has paid special emphasis on training senior management, through its Human Resources Committee, approving development programmes for KMG corporate centre and subsidiary senior management (CEO-1 and CEO-2), specifically the "Integrated Development Programme" for directors and their deputies and the "Efficient Manager Programme" for the integrated staff reserve.

#### STAFF RESERVE PROGRAMME

One of the priorities of KMG's Human Resources Policy has been to create a personnel reserve involving the recruitment and identification of young and promising leaders to train new-style managers with the required professional skills.

In 2017, KMG continued implementing its systematic "Zhyldysdy Aspan"

approach to talent management, targeting and training managers to ensure management succession, as well as provide employees with the opportunities to develop and grow their career with KMG.

For this reason, in 2017, KMG launched a major project to assess managerial potential, with 190 managers from 52 subsidiaries undergoing online testing to determine the level of their personal and professional competencies. The assessment was integrated with individual efficiency evaluation results so that the candidates could find their place on a nine-matrix Talent Map. Anyone who fell into the green zone was included in the Succession Plan.

In 2017, KMG also continued its course of developing and promoting high-potential employees, and as such, of the 86 reservists enrolled in the KMG Personnel Reserve, 29 were promoted, with 8 appointed to senior positions.

In 2017, as part of the "Effective Leader" programme approved by the KMG Human Resources Committee, 28 reservists received

#### KMG GROUP STAFF RESERVE

STAFF RESERVE

86 PEOPLE



PROMOTED

29 PEOPLE



TO SENIOR POSITION

8 PEOPLE



training in personal and business competencies and professional skills from some of the best facilitators from Kazakhstan and Russia. Overall, a total of 54 reservists will eventually receive training in 9 areas under the programme.

Besides the above training programmes, KMG has invested in two-diploma EMBA programmes for reservists. In 2017, 6 reservists successfully completed the course; with 9 more currently studying under the KBTU-RSU programme and 18 under the KBTU-USPTU programme.

As part of the internship programme, 7 KMG reservists have completed

training in companies such as General Electric and Rosneft, as well as at the University of Aberdeen, considered by many to be the oil capital of Europe.

#### COLLECTIVE AGREEMENTS

KMG currently has a number of collective agreements in place with production enterprise teams, which vary both in content (social support conditions) and in structure.

A standard collective agreement has been developed to standardise salaries, social support, working conditions, working and leisure

time and others. In the many KMG subsidiaries, the standard collective agreement provides a basic social package, which includes benefits in connection with annual leave; the birth/adoption of a child, death of an employee or family member; maternity payments; benefits to attend to a child up to the age of 18 months; compensation for employment agreement termination if an employee is unable to transfer to another job due to disability or incapacity; voluntary medical and health insurance for employees and their family members; places for children between 7 and 14 in children's health camps and others.

## Social projects

#### CORPORATE AND FESTIVE EVENTS

The KMG corporate sports day is a regular event along with the "Uzdik Maman" professional skills day, and brings together teams from different subsidiaries to exchange experience and contacts, and learn technological processes from others.

#### "UZDIK MAMAN" PROFESSIONAL SKILLS DAY

In 2017, KMG hosted the final stage of the "Best in Profession – 2017" professional skills contest for KMG employees. The first stage in the various subsidiaries involved 3,200



employees taking part in 32 basic oil and gas complex professions.

120 people, representing the country's best young experts, whose dedication and professionalism have rightly allowed them to represent their particular subsidiary, were invited to the final stage to demonstrate their theoretical knowledge and practical skills in 17 working professions.

#### **OIL WORKERS' SPORTS DAY**

To promote a corporate culture and closer ties among its many teams, KMG held its annual employee sports day. A healthy competitive spirit and informal communication promote team spirit and responsibility for the image of their company and the KMG Group as a whole.

The annual sports day always attracts a large number of competitors and 2017 was no exception, with 28 subsidiaries (more than 300 people) taking part in mini-football, volleyball, swimming, basketball, chess, tennis and arm wrestling.

#### **KMG YOUTH POLICY**

KMG has set up a Youth Council whose goal is to create and implement an integrated youth policy throughout the entire organisation. This is to be achieved through five areas of activity – professional development, cultural development, innovation and labour-saving initiatives, the promotion of sport and a healthy lifestyle, and social support.

The Youth Policy has led to the creation of youth councils in 45 subsidiaries to initiate and organise festive, social, charity, sports, intellectual and information events.

The youth councils are also responsible for organising annual meetings of KMG young experts.

The Youth Council also promotes an annual competition to find the best innovative ideas among KMG employees under 29 years of age.

#### **SOCIAL STABILITY RATING**

Between 2013 and 2017, KMG's Social Stability Rating (SSR) from the Samruk-Kazyna Social Partnership Centre increased from 61% to 76%, which is "above average."

KMG has used SSR study findings to develop and update action plans for all areas in KMG and specific subsidiaries requiring social stability input.

The KMG 2016–2018 Social Stability Action Plan covers the various areas of Group activities affecting employee social wellbeing (internal communications, food quality, living conditions, the provision of PPE, training, career growth and others).

#### **BUSINESS ETHICS CODE**

The Corporate Business Ethics Code establishes corporate values such as competence and professionalism, reputation, safety, environmental friendliness, responsibility, respect for others, team spirit and meritocracy.

KMG, along with the structural units responsible for identifying, avoiding and preventing possible violations of

Between 2013 and 2017, KMG's Social Stability Rating (SSR) from the Samruk-Kazyna Social Partnership Centre increased from 61% to 76%, which is "above average."

**76%**

business conduct and business ethics (such as HR, the Corporate Security Service, hotline numbers 786565 and KMG's electronic information crisis system [doverie@kmg.kz](mailto:doverie@kmg.kz)), has created a corporate ombudsman to assist in the settlement of disputes and conflicts.

KMG pursues an integrated policy against corruption, the theft and misuse of funds, the theft and

deliberate destruction of material assets, the misrepresentation and forgery of financial statements and other documents, the abuse of official authority, negligence and inaction, and other offences.

#### **INTEGRATED INTERNAL COMMUNICATION SYSTEM**

All KMG production enterprises have introduced internal communication

rules whereby senior executive officers and work collectives meet twice a year, subsidiary line managers meet with collectives, and managers with trade unions quarterly, to allow employees to address questions to Group management and receive timely responses.

In 2017, more than 70 meetings were held between senior officers and work collectives.

## Sponsorship and charity

On 28 January 2016, the Samruk-Kazyna Board of Directors issued a decision (Minutes No. 126) to approve a Charity Policy and Charity Programme.

According to the Charity Policy, all Samruk-Kazyna charity activities are the responsibility of the Samruk-Kazyna Trust Social Development Foundation.

Priorities include:

- ◆ assisting people and communities in the social and medical sectors
- ◆ developing the media and cultural community, and nurturing human potential



- ◆ supporting employment relations, inter-ethnic relations, investment in sustainable corporate development
- ◆ supporting regional business initiatives
- ◆ promoting the image of Astana on the global arena

The Samruk-Kazyna Trust Social Development Foundation implements

## Astana EXPO – 2017

KMG was one of the major sponsors of the “Astana Expo–2017” exhibition, presenting its “Our Way” exposition in a 370 m<sup>2</sup> corporate pavilion, which incorporated information on Group activities and its vertically integrated structure, its contribution to the economy and society of Kazakhstan, as well as development prospects for the oil and gas industry.

On 28 June 2017, KMG held a ceremony to open its pavilion for senior management and members of the Management Board and Board of Directors.

On 22–23 July 2017, KMG hosted the Fourth Annual Forum of Young Professionals under the slogan of “Oil of the Future.” The Forum was attended by 200 people from different regions

charity projects and programmes focusing on socially important issues from the entire Samruk-Kazyna group of companies. All activities are carried out with the support of the state authorities, the government and public and social policy experts. The Foundation's charity projects are managed by non-governmental organisations selected by tender.

of the country, including KMG senior management, young experts, key enterprise employees and oil and gas industry experts.

The Forum's main event was the “Oil of the Future” panel session, at which industry experts presented their vision of modern oil and gas industry development trends and, the oil industry's future role in the global energy supply system. KMG business units' senior executives talked to junior specialists about KMG's strategic plans, the KMG transformation programme and youth policy.

KMG experts also spoke at the EXPO Future Energy Forum panel sessions, presenting information on KMG environmental sustainability activities and the Group's carbon footprint, and on sustainable development activities.



KMG, as a member of the Ministry of Energy expert group, analysed the possibility of applying the new (environmentally friendly) technology proposed at EXPO-2017 and identified much of it as promising for implementation in subsidiaries and dependent entities.

Evaluation results helped KMG select a number of projects for potential implementation. Executive are already considering the possibility of using turbo-expanders at JSC KazTransGas facilities, mobile wastewater treatment and Velkinmyaki treatment facilities at JSC Mangistaumunaigaz, a Turbosfera energy-saving plant, gas turbine and control valve manufactured by General Electric in JSC Embamunaygas.

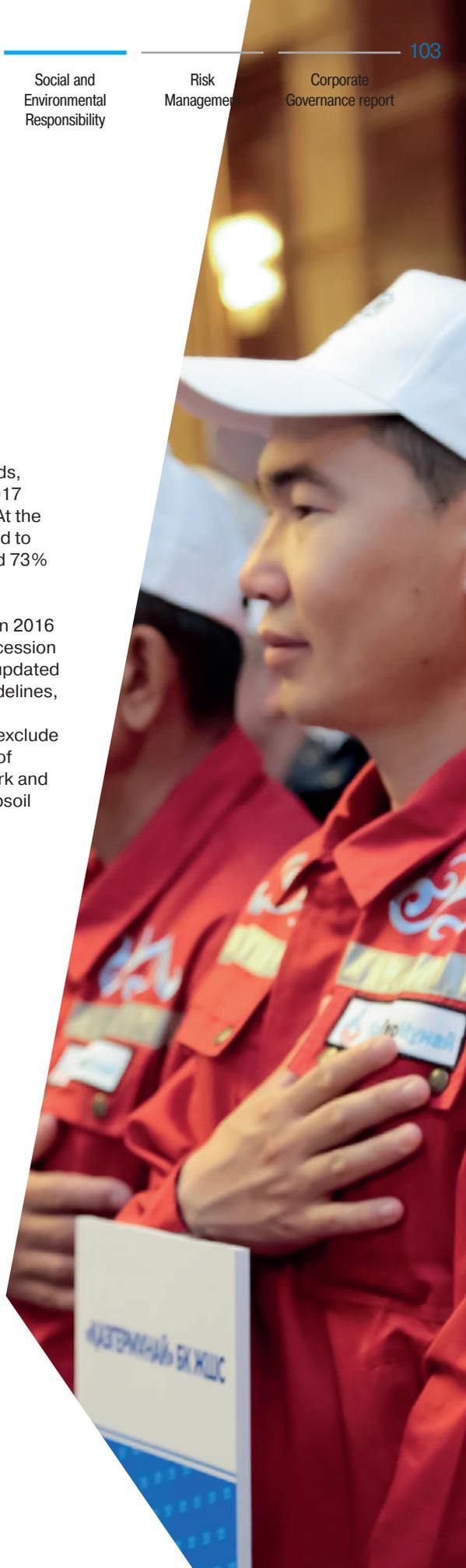
## PROCUREMENTS AND LOCAL CONTENT

KMG's total procurements of goods, work and services at the end of 2017 amounted to 2 trl. 553 bln tenge. At the same time, local content amounted to 75%, including 79% for goods and 73% for work and services.

KMG local content fell 1% between 2016 and 2017 due to Kazakhstan's accession to the World Trade Organisation, updated Samruk-Kazyna procurement guidelines, which became effective for KMG organisations in 2016, and which exclude provisions relating to the support of domestic producers of goods, work and services, with the exception of subsoil use contract procurements.

## TOTAL VALUE OF GOODS, WORK AND SERVICES AND LOCAL CONTENT PERCENTAGES (BLN TENGE)

Year	Total	Local content, %	Goods		Work/services	
			Value	Local content, %	Value	Local content, %
2016	<b>1,871</b>	76	722	83	1,149	71
2017	<b>2,553</b>	75	863	79	1,690	73



## Environmental responsibility, on-site and industrial safety

HSE management objectives are directly linked to KMG's Development Strategy, which prescribes a high level of health, industrial safety and environmental protection in accordance with global standards. In its production operations, KMG adheres to national statutory requirements and KMG HSE Policies, whose main HSE management principles are risk identification and management, the introduction of safe and resource-saving technology to reduce pollutant and greenhouse gas emissions and increase energy efficiency, ensuring the permanent readiness of personnel and production facilities in the event of an emergency situation, as well as ensuring reporting transparency and awareness. The policies apply to all KMG Group employees, and to the employees of contractors serving KMG.

Compliance with the highest safety standards is the driver of operational and production success and one of the strategic goals of KMG. In addition, KMG is focused intensively on promoting safety culture across the Group to ensure all employees exhibit the right behaviours at work.



After several years of data collection, and analysis, it was determined that leadership commitment and employee engagement needed to be improved, an overabundance of outdated procedures needed to be brought in line with industry best practises, standardised and simplified across all operating entities. Using new information, KMG created target programmes to address human factor areas in the modernisation process.

The key objective in HSE management is to fully rule out injuries, incidents and spills.

Despite the importance of risk reduction techniques, no technological innovation can solve the problem of human error, hence the determining factor is still people. This is why ensuring employee competence has always played an integral part in the development of safety programmes.

KMG places great importance on HSE training, which is why the number of employees receiving it and the funds allocated to it have grown since 2015 and 2016.

Overall, the table above shows that the need for HSE training in KMG remains acute.

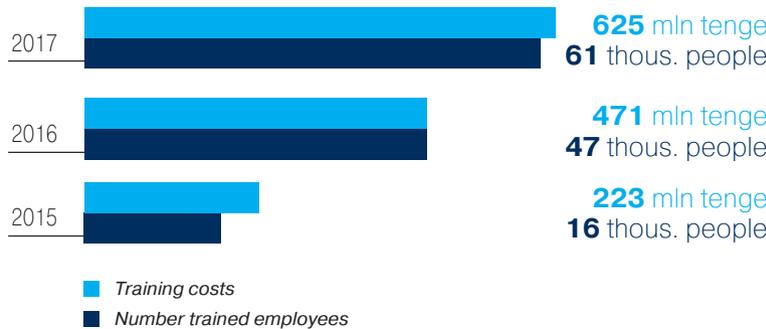
Given the specifics of the Kazakhstan oil and gas sector, and national requirements to educate, train and ensure the professional development of personnel, the priority areas are occupational health and safety, industrial and fire safety.

During 2016, 56,000 or 92% of all employees completed mandatory training to a cost of 490 mln tenge.

In 2017, that figure rose to 61,140 employees and 625 mln tenge.

Of the employees receiving HSE training in 2017, 1,300 were senior managers and 59,800 middle-level employees.

**HSE TRAININGS**



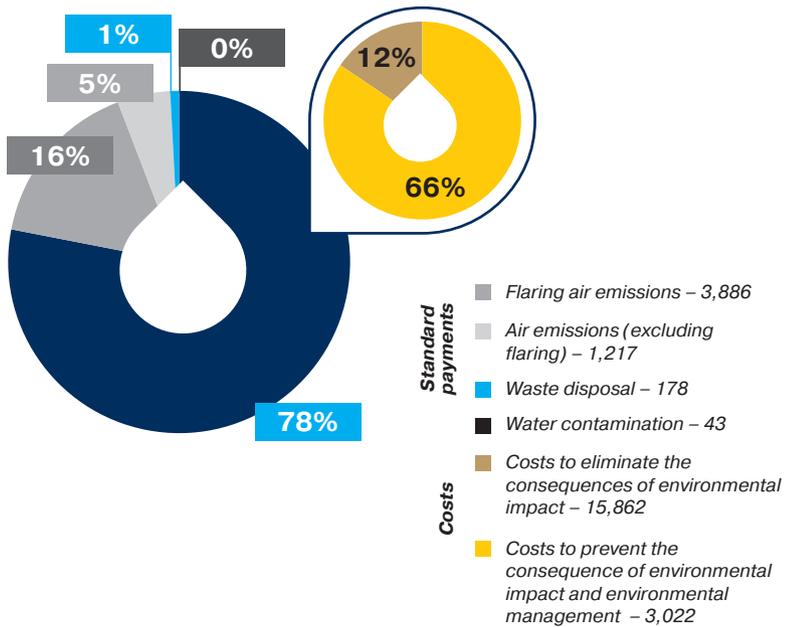
	Goal in 2017	Progress in 2017	Priorities in 2018
HSE management system	Implement a three-tier HSE Committee system	<p>HSE Committee levels</p> <ol style="list-style-type: none"> <li>1. KMG Board of Directors, whose main function is to approve and monitor the activities of other committees</li> <li>2. Corporate Centre, whose main function is to develop, evaluate and coordinate the HSE management system, standards and performance coefficients</li> <li>3. Subsidiaries, whose main function is to implement safety programmes and standards</li> </ol>	Simplify and integrate KMG Group policies, regulations and security systems; develop and implement a unified Corporate HSE Management System
	Develop corporate HSE standards	<p>Six new Standards were developed:</p> <ul style="list-style-type: none"> <li>◆ Rules for verifying and assessing the readiness of KMG organisations to prevent and extinguish fires</li> <li>◆ KMG Behavioural Safety Observation Rules</li> <li>◆ Regulations for organising emergency medical care in the KMG Group</li> <li>◆ Rules for KMG, its subsidiaries and dependent entities to report on key occupational health and safety indices</li> <li>◆ KMG guidelines for identifying HSE hazards and risks during the performance of hazardous operations</li> <li>◆ KMG guidelines to isolating energy sources</li> </ul>	<p>Continue the improvement and development of new «safety tools»; and develop the following standards:</p> <ul style="list-style-type: none"> <li>◆ PPE</li> <li>◆ Driving behaviours</li> <li>◆ Crisis management</li> <li>◆ Contractor management</li> <li>◆ Environmental standards</li> </ul> <p>Digitalisation</p>

	Goal in 2017	Progress in 2017	Priorities in 2018
HSE management system	<p>Achieve the long-term goal of no injuries, incidents or spills by establishing corporate KPIs to reduce the lost time incident rate (LTIR) by 15%</p> <p>safety behaviour KPIs for senior management (&gt; 50,000 BSOs)</p> <p>Implement a campaign to raise awareness of the use of seat belts together with the "Convincer" simulator</p>	<p>The number of lost time incidents decreased by 18% on the previous year (71 cases in 2017).</p> <p>Total work-related deaths fell by 28% compared to 2016. In 2017, 5 KMG employees died from work-related incidents.</p> <p>Total non-work-related deaths fell by 35% compared to 2016 (26 cases in 2017). The number of road accidents increased by 25% compared to the previous year. In 2017, 89 road accidents were recorded.</p> <p>The ratio of employees to one HSE employee improved by 7% (fell from 1:87 to 1:81).</p>	<p>Set 2018 lost time incident rate (LTIR) KPIs for subsidiaries</p> <p>Involve employees in safety issues through the BSO programme (&gt; 35,000 BSOs planned), switching the focus from observation quantity to quality.</p> <p>Safe driving through the implementation of the BSO driving programme (&gt; 15,000 BSOs planned)</p>
Employees health and safety, industrial safety	<p>Starting from 2014, KMG initiated the application and use of IOGP reporting, and performs benchmarking against similar oil and gas companies</p> <p>Introduce an integrated approach to verifying and assessing readiness to prevent and extinguish fires at production facilities</p>	<p>KMG has been a full IOGP member since January 2018.</p>	<p>Improve KMG transparency by providing HSE reports to the IOGP; participate in Association field-specific subcommittees and working groups</p>

	Goal in 2017	Progress in 2017	Priorities in 2018																																																						
Environmental protection	<p>Establish an Integrity Programme for field pipelines in oil-producing companies</p> <p>Complete associated petroleum gas (APG) utilisation projects</p> <p>Since 2015, KMG has been participating in the World Bank's «Complete cessation of regular APG flaring by 2030». (GGFR) initiative</p>	<p>APG flaring reached 85%</p> <p><b>CHANGES IN ASSOCIATED GAS PRODUCTION AND FLARING IN KMG (FOR THE 2001-2017)</b></p> <table border="1"> <caption>Estimated data for Associated Gas Production and Flaring (2001-2017)</caption> <thead> <tr> <th>Year</th> <th>Associated Gas Production</th> <th>Flaring</th> </tr> </thead> <tbody> <tr><td>2001</td><td>500.0</td><td>100.0</td></tr> <tr><td>2002</td><td>600.0</td><td>150.0</td></tr> <tr><td>2003</td><td>800.0</td><td>250.0</td></tr> <tr><td>2004</td><td>1100.0</td><td>400.0</td></tr> <tr><td>2005</td><td>1600.0</td><td>800.0</td></tr> <tr><td>2006</td><td>1800.0</td><td>900.0</td></tr> <tr><td>2007</td><td>1700.0</td><td>700.0</td></tr> <tr><td>2008</td><td>1500.0</td><td>600.0</td></tr> <tr><td>2009</td><td>1600.0</td><td>700.0</td></tr> <tr><td>2010</td><td>1600.0</td><td>600.0</td></tr> <tr><td>2011</td><td>1600.0</td><td>500.0</td></tr> <tr><td>2012</td><td>1800.0</td><td>400.0</td></tr> <tr><td>2013</td><td>2100.0</td><td>400.0</td></tr> <tr><td>2014</td><td>2100.0</td><td>200.0</td></tr> <tr><td>2015</td><td>2300.0</td><td>300.0</td></tr> <tr><td>2016</td><td>2400.0</td><td>350.0</td></tr> <tr><td>2017</td><td>2300.0</td><td>400.0</td></tr> </tbody> </table>	Year	Associated Gas Production	Flaring	2001	500.0	100.0	2002	600.0	150.0	2003	800.0	250.0	2004	1100.0	400.0	2005	1600.0	800.0	2006	1800.0	900.0	2007	1700.0	700.0	2008	1500.0	600.0	2009	1600.0	700.0	2010	1600.0	600.0	2011	1600.0	500.0	2012	1800.0	400.0	2013	2100.0	400.0	2014	2100.0	200.0	2015	2300.0	300.0	2016	2400.0	350.0	2017	2300.0	400.0	<p>Implement measures to increase the beneficial use of APG</p> <p>Cooperate further with the World Bank</p> <p>File reporting for 2017 as part of the GGFR Initiative</p>
Year	Associated Gas Production	Flaring																																																							
2001	500.0	100.0																																																							
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GHG emissions	<p>Join the Global Methane Initiative (GMI)</p> <p>Develop a Climate Plan</p> <p>Conduct an energy audit of the Corporate Centre and develop an Energy-Saving Action Plan</p>	<p>KMG is a member of the GMI project network, while the Ministry of Energy is a member of the GMI Oil and Gas Subcommittee</p>	<p>Analyse and assess KMG indirect greenhouse gas emissions and CDP climate programme reporting</p> <p>Prepare an emission management Corporate Standard for KMG</p>																																																						
Energy efficiency	<p>Implement an energy saving and energy efficiency Road Map (a saving of at least 0.9 mln. GJ in 2017)</p>	<p>In 2017, the Corporate Centre underwent an energy audit, resulting in 11 new energy saving and energy efficiency measures, which could reduce total fuel and energy resource consumption by 14.3% from the 2016 base level.</p> <p>In 2017, more than 82 energy saving and efficiency measures were implemented, reducing fuel and energy consumption to 0.7 mln. GJ. As the main energy saving and efficiency measures, namely the introduction of technological equipment, were implemented in late 2017, the economic effect will only be felt in 2018</p>	<p>Identify the refinery Energy Efficiency Index («indices calculated using the methodology provided by the Solomon international company»)</p>																																																						

Ecological indicators	Production			Transportation			Refining		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
<b>Associated gas flaring</b>									
Quantity of gas burned per unit of hydrocarbons produced (tonnes per 1,000 tonnes of hydrocarbons produced)	12	12	11	–	–	–	–	–	–
Flaring (mln m <sup>3</sup> )	0.3	0.3	0.3	–	–	–	–	–	–
<b>Energy capacity</b>									
Energy consumption (mln GJ)	41.4	40.7	39.1	33.2	32.3	37.4	42.4	40.2	43
Specific consumption of energy resources (GJ per tonne of hydrocarbons produced)	1.8	1.73	1.62	–	–	–	3	2.9	3
<b>Pollutant emissions</b>									
Sulphur oxide (SO <sub>x</sub> ) (thous. tonnes SO <sub>2</sub> )	7	9	7.8	0.3	0.4	0.2	9.4	7.5	6.8
Nitrogen oxide (NO <sub>x</sub> ) (thous. tonnes NO <sub>2</sub> )	5.5	6.1	6.3	2.7	3.2	3.5	5	3.5	3.9

### STRUCTURE OF ENVIRONMENTAL PAYMENTS FOR 2017, MLN TENGE



### ENVIRONMENTAL PROTECTION

The priorities for environmental protection are to control greenhouse gas emissions, reduce flaring, recycle historical waste, rehabilitate land and increase energy efficiency. KMG is constantly striving to improve its environmental management system and, to that end actively interacts with all environmental protection stakeholders, and publishes annual information on all environmental aspects; constantly affirming its commitment to openness and social responsibility.

2016–2017 saw significantly fewer fines for environmental violations compared with previous years.

In 2017, total fines paid amounted to 245 mln tenge (versus 1,170 mln tenge in 2016 and, 1,764 mln tenge in 2015), including administrative fine, damages and excess payments.

## ACHIEVEMENTS

To promote safety culture and reduce industrial injuries, in 2017, KMG:

- ◆ Implemented a Behavioural Safety Observation Programme, resulting in 85,301 behavioural safety observations (BSO) conducted within the KMG Group
- ◆ Conducted comprehensive audits in those subsidiaries with the highest injury levels
- ◆ Provided on-site presentations on new safety programmes for management and employees – on the importance of their involvement in the safety processes
- ◆ Achieved an 82% completion score for its 2017 programme initiatives from the 5 year HSE transformation roadmap. The seat belt awareness campaign with the Convincer simulator was used to train >250 corporate centre employees in Astana, while a further 2,000 employees took part in presentations. The Convincer simulator was then sent to Mangistau region to further the awareness campaign
- ◆ Hosted the III Annual Chairman of the KMG Management Board competition for the “Best innovative health, safety and environmental ideas and practices “ for KMG employees
- ◆ Developed “8 Golden Rules”, “Safety Alphabet” and “10 Steps to Wellness” mobile applications for use by all employees
- ◆ Took first place in the environmental rating of oil and gas companies of Kazakhstan organised by the World Wildlife Fund of Russia and the CREON Group, with the support of the Ministry of Energy and in partnership with the United Nations Environment Programme in Central Asia, and the National Rating Agency



KMG Business  
Model and Business  
Geography

Strategy

Transition to a New  
Operating Model

Group  
performance

Technology: Research  
and Development  
Institute of Production  
and Drilling Technology

Social and  
Environmental  
Responsibility

Risk  
Management

Corporate  
Governance report



# ҚазМұнай

NATIONAL COMPANY

ҰЛТТЫҚ КО

Газ

ОМПАНИЯ



# 11

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## RISK MANAGEMENT

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# RISK MANAGEMENT

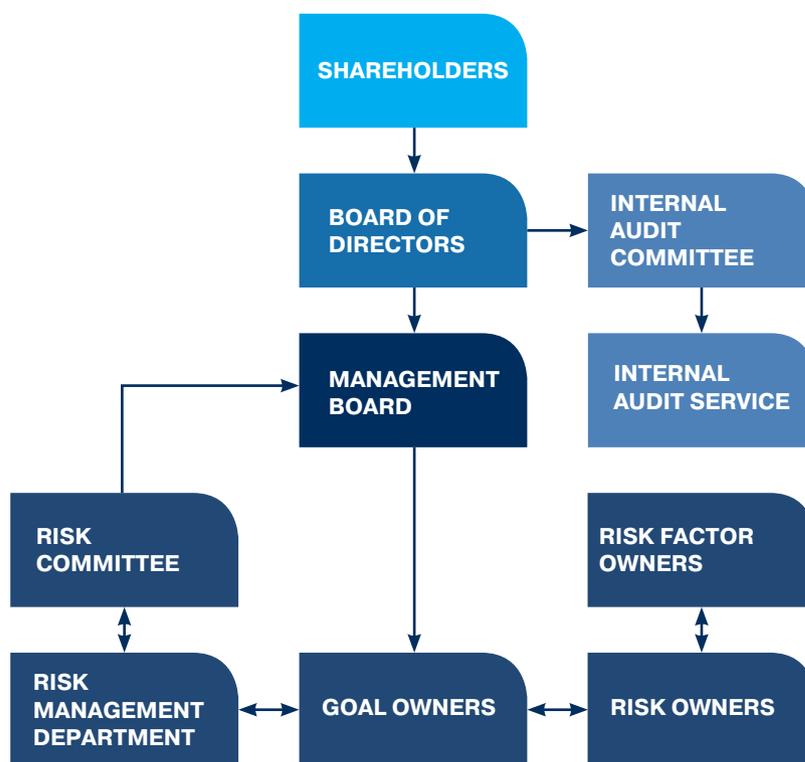
The corporate risk management system is a key component of the corporate governance system, and is used to identify, assess, monitor and mitigate potential risks that may adversely affect KMG, its subsidiaries and dependent entities in their efforts to achieve strategic and operational goals.

Recognising the importance of a corporate risk management system and managing risks on a consolidated basis, and taking into account KMG shareholder expectation of high risk management standards, in 2017 KMG launched significant initiatives to improve risk management.

Specifically, the variable "Implementation of a vertical risk management process in the KMG Group" characterising the degree to which a set of measures aimed at implementing a vertical process for managing production and non-production risks in KMG companies in which more than 50% of shares (share capital interest) are owned directly or indirectly by KMG or under its trustee management had been achieved was added to the KPIs for managers responsible for key operating areas.

KMG launched a risk management automation project to help identify, assess, analyse, manage and monitor risk status in the KMG Group, allowing it to significantly reduce time and work resources, generate information promptly to help make risk-based managerial decisions, and provide any relevant information regarding all significant KMG Group risks affecting

## ORGANISATIONAL STRUCTURE OF THE KMG CORPORATE RISK MANAGEMENT SYSTEM



efficiency together with risk mitigation plans.

The Group continues to assess the corporate risk management system independently, and tested the KMG corporate governance system,

including the “Risk management, internal control and audit” component, receiving a BB level rating, which helped create an action plan to further improve the corporate risk management system.

The Group promotes risk culture by involving all structural units and subsidiaries in the risk management process, and by regularly exchanging information among the Board of Directors, Management Board, the KMG Risk Committee and employees.

## RISKS

Group operations are subject to:

- 1) production risks associated with the production process
- 2) non-production risks associated with non-production business processes
- 3) difficult-to-manage or unmanageable external environmental risks

The KMG Board of Directors approves the Group’s Risk Register, Risk Map and Risk Management Plan on an annual basis. In 2017, the Risk Register and Risk Map identified and assessed 31 risks in the above areas. Risk management measures were developed and risk owners identified for each risk, while the Group monitors key risk dynamics and implements key risk mitigation measures by sending quarterly risk reports to the KMG

Management Board and Board of Directors.

### PRODUCTION RISKS

#### Decline in production output

The Group’s key operational risk is a decline in production at fields in the final stages of development, high production costs, and the risk of unsuccessful new exploration projects. At the same time, exploratory drilling has become more complex due to hard-to-recover hydrocarbon reserves and the need for contemporary technological solutions such as virtual reality modelling, geological and hydrodynamic 3D/4D modelling, advanced drilling techniques and integrated well servicing.

To reduce geological exploration risks, KMG uses new seismic data processing and interpretation techniques, and by interacting with

the world’s leading companies, it has the opportunity to actively introduce modern oil exploration and production technology.

#### **Risk of adverse environmental impact, production personnel injury and property damage as a result of accidents, emergencies and man-made disasters at production facilities and sites**

The Group’s production operations are potentially dangerous due to explosion and fire risk, the high risk of adverse environmental impact, production personnel injury and property damage as a result of accidents and emergencies, man-made disasters at production facilities and sites, as well as unlawful third party actions. The consequences of any such risks have a negative effect on the Group’s reputation, production and financial performance.

To mitigate production risks, KMG:

- 1) repairs equipment and machinery in good time in accordance with statutory requirements
- 2) performs reconstruction and modernisation work in good time
- 3) estimates the best operating schedules for equipment and machinery
- 4) tests for and identifies potentially dangerous factors that can lead to corrosion
- 5) ensures the professional development of maintenance personnel

To prevent industrial accidents, KMG implements organisational and technical measures that ensure:

- 1) safe working conditions, and the prevention of occupational injuries and diseases
- 2) timely knowledge training and occupational health and safety assessment; the presence at the work site of supervisors and officials

3) internal occupational health and safety controls

KMG is gradually introducing modern technical security equipment and improving security activities at those oil pipeline sites most exposed to criminal acts.

In accordance with statutory industrial and environmental safety requirements, the Group takes out annual compulsory civil liability insurance for facility owners whose operations have an inherent risk of harming third parties, and compulsory environmental insurance. Likewise, as part of the KMG Corporate Reinsurance Programme, whose purpose is to establish procedures for launching corporate risk insurance programmes to protect assets and liabilities belonging to KMG and its subsidiaries, the Group takes out annual voluntary property damage insurance (risk of accidental loss, destruction or damage). The KMG Corporate Reinsurance Programme covers 36 subsidiaries.

#### **Social risk**

Despite clarification work and on-site communication, a risk of the negative perception of the KMG Oilfield Service

Development Programme (5/50) still exists, giving rise to potential social discontent among employees and, even, unauthorised strikes. This risk has repeatedly become reality and had a considerable impact on production performance.

KMG monitors and analyses the social climate and prepares measures to address problematic issues to mitigate the risk of unauthorised strikes. With this in mind, KMG has adopted internal documents and introduced internal employer/employee communication, which include mandatory meetings between senior executives and work collectives, quarterly meetings between line managers and employees, meetings between production organisation managers and trade unions, and other tools to monitor the social climate, jointly address problematic issues and provide clarifications when necessary.

Youth councils are an effective platform for active dialogue with junior colleagues, and with that in mind KMG is preparing an integrated youth policy focusing on creating an active life position among junior employees and involving them directly in social and production life.

## NON-PRODUCTION RISKS

### Liquidity risk

KMG's key risks are those associated with liquidity and financial stability. Insufficient financial resources may lead to non-compliance with debt covenants, and jeopardise the implementation of strategically important projects and swift development. To mitigate these risks, and apply the relevant technology, KMG is focusing on increasing operating activities, clearly prioritising capital costs, and rationalising its asset and project portfolios.

### Tax risk

KMG is also exposed to tax risk, in the form of varying interpretations of the tax law. It cannot influence tax authority decisions with regard to additional tax assessments, fines and penalties based on incorrect interpretations of the tax law after tax reviews. To mitigate its tax risks, the Group is constantly looking to improve tax administration processes and conduct tax audits.

### Corruption risk

KMG treats the distribution of resources in violation of the Group's best interests, inflicting damage on it for personal gain, and any fraud or corruption as completely unacceptable, regardless of the amount of financial losses.

As a subject of anti-corruption law in Kazakhstan and other anti-corruption measures, KMG has adopted anti-corruption standards and is committed to:

- 1) conducting anti-corruption monitoring
- 2) analysing corruption risks (for internal reasons)
- 3) promoting an anti-corruption culture
- 4) creating organisational and legal mechanisms that ensure accountability, controllability and the transparency of decision-making processes
- 5) adopting and complying with business ethics rules
- 6) preventing conflicts of interest



KMG continues to work to introduce and strengthen its internal control systems, establishing an integrated policy to prevent illegal and unfair acts both on the part of third parties and its employees; establish internal investigation procedures for illegal and unscrupulous committed by employees. It also operates a corruption hotline service.

#### EXTERNAL RISKS

##### **Fall in oil prices**

A fall in oil prices will significantly impair KMG's financial performance. To mitigate its risks, KMG creates mathematical price risk models and compares results obtained with projections, all of which help it quickly reduce costs and capital investments so it can meet its obligations should the oil price fall; and does not exclude the possibility of purchasing financial instruments to protect itself against a significant drop in oil prices.

##### **Interest rate risk**

Interest rate changes and a decline in commercial bank liquidity in Kazakhstan may have an adverse effect on the placement of temporarily free cash (TFC) and, accordingly, the Group's financial performance. To mitigate these risks, KMG diversifies the placement of financial instruments within the specified parameters of its treasury investment

portfolio and regularly monitors TFC placements within the KMG Group, as a result ensuring the required return on TFC.

KMG's main source of borrowings is the international lending market, and for that reason the greater part of its debt portfolio is US dollar-denominated. Interest rates for servicing a portion of these loans are based on LIBOR and EURIBOR interbank lending rates. An increase in interest rates may cause KMG's debt servicing costs to appreciate, which in turn may have an adverse effect on solvency and liquidity ratios.

##### **Country risks**

The Group holds cash in current/ correspondent and deposit accounts with financial organisations in foreign countries; purchases overseas issuer securities; implements investment projects overseas by establishing affiliates and joint ventures; and acquires shares in foreign companies. Any changes in the economic and political situation, or military action or conflicts in any of these countries may have a negative effect on financial performance. KMG limits its country risk by setting country limits based on an economic, political, strategic, social or other analysis of the recipient country.

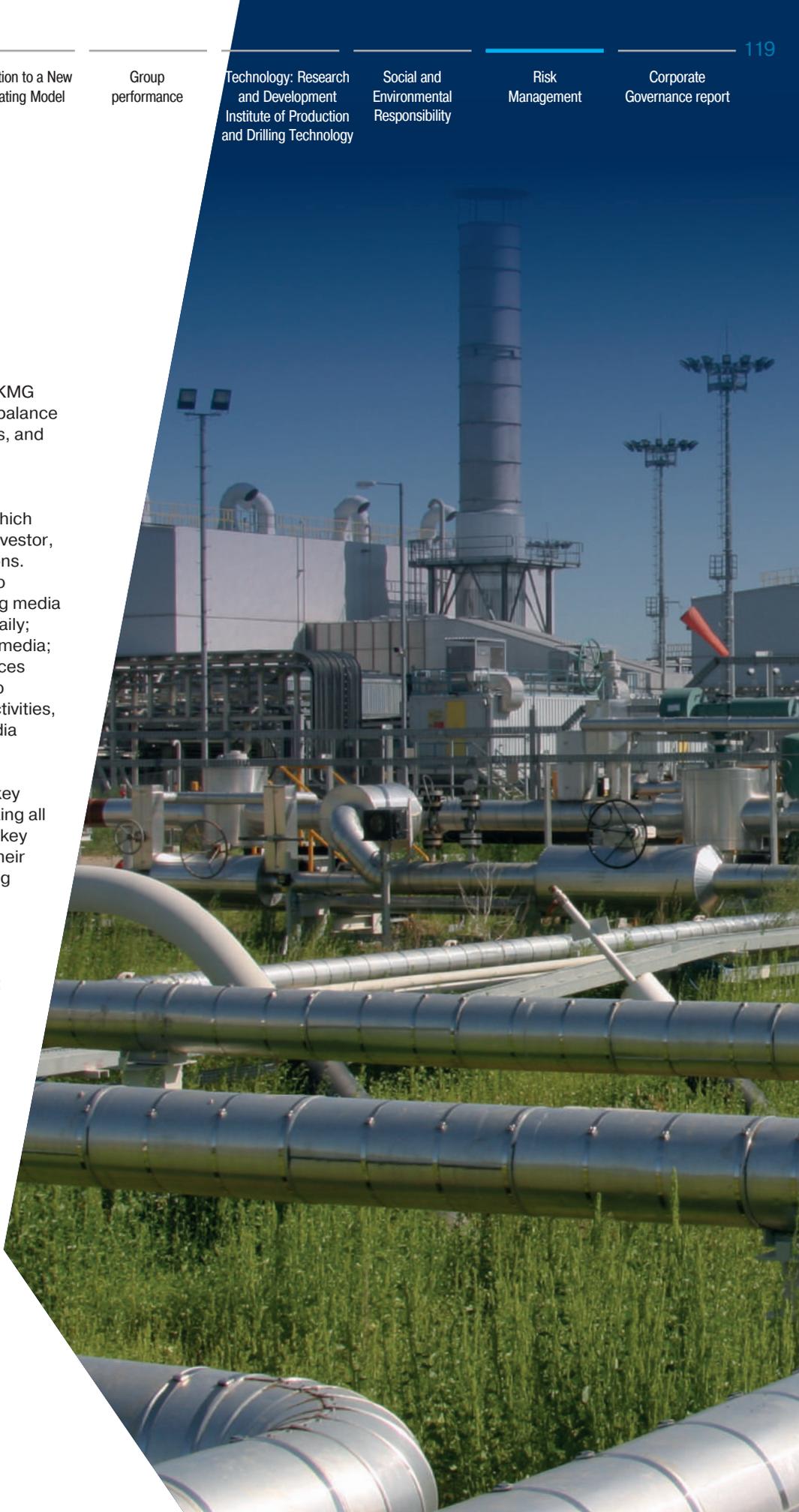
To help it manage its financial risks, KMG sets limits on balance sheet and off-balance sheet liabilities to counterparty banks, and country limits.

### Reputation risk

KMG is exposed to reputation risk, which affects its business reputation and investor, partner and other stakeholder relations. It implements a series of measures to manage the risk, including monitoring media publications regarding its activities daily; publishing articles about itself in the media; organising briefings, press conferences and senior management speeches to highlight the various aspects of its activities, and responds swiftly to negative media coverage.

Generally, KMG completed all of its key risk management efforts in 2017; taking all appropriate measures to respond to key risks and reducing the likelihood of their occurrence and mitigating/preventing possible financial losses.

To further the KMG Transformation Programme and improve the effectiveness of its risk management system, the Group will continue to develop and implement internal control systems (process level risk management) in 2018, as well as develop and implement a continuity management system.







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# 12

**CORPORATE  
GOVERNANCE  
REPORT**

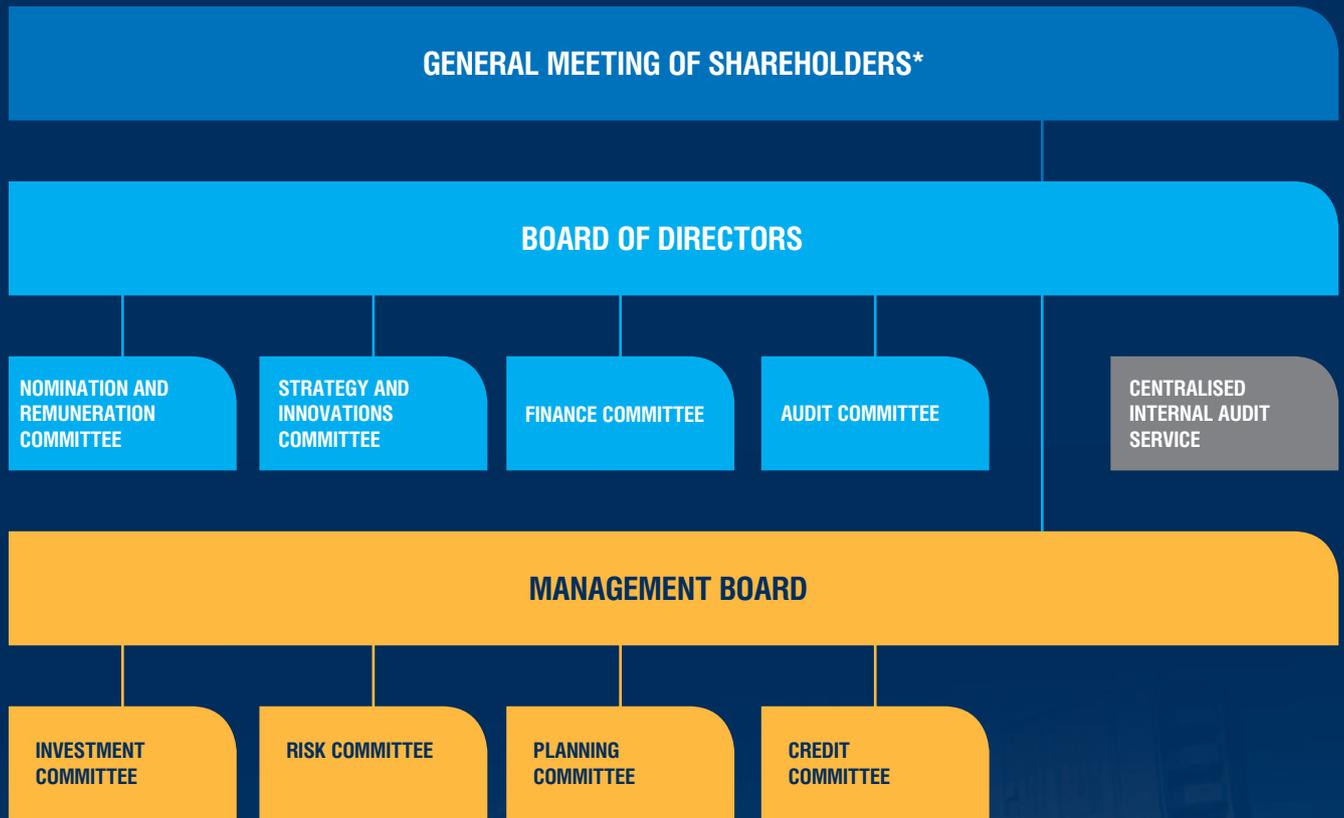
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# CORPORATE GOVERNANCE REPORT

## Corporate governance system

- ◆ KMG's corporate governance system is a set of processes ensuring management and control over its activities, as well as a system of relations between shareholders (Samruk-Kazyna and the National Bank), its Board of Directors, Management Board and stakeholders. The competencies of the various KMG bodies are clearly delineated and specified in its Charter.
- ◆ The KMG corporate governance system is based on respect for the rights and legitimate interests of shareholders and key stakeholders: the State, strategic partners, investors and KMG employees.
- ◆ The existing KMG corporate governance structure is continuously improving, taking into account the requirements and standards of national and international corporate governance practices.
- ◆ Since 2015, KMG has been working towards introducing a new KMG Corporate Governance Code, approved by Samruk-Kazyna Management Board Resolution (Minutes No. 22/15 dated 27 May 2015). The Code aims to improve corporate governance and transparency, and confirm KMG's commitment to proper corporate governance standards.
- ◆ To assess the compliance of KMG's corporate governance practices against the KMG Corporate Governance Code, the Samruk-Kazyna Management Board approved (Minutes No. 35/16 dated 26 September 2016) a Methodology for Corporate Governance Testing in legal entities in which over 50% of voting shares are owned directly or indirectly by Samruk-Kazyna. Under the new document, in 2017 an independent consultant, PricewaterhouseCoopers LLP, conducted a comprehensive assessment of KMG's corporate governance system, awarding KMG a corporate governance rating of "B", and drafted a plan to improve corporate governance for 2018–2020.

# KMG corporate governance structure



\* represented by the Samruk-Kazyna Management Board

## Board of Directors

- ◆ The Board of Directors is responsible for the overall management of KMG activities, except for issues attributed by law and/or the Charter to the exclusive competence of the General Meeting of Shareholders or KMG Management Board. Decisions of the Board of Directors are made in accordance with the procedure determined by the KMG Charter.
- ◆ According to the KMG Charter, the Board of Directors is responsible for prioritising KMG activities and approving development strategy; reviewing and taking decisions on potential acquisitions and other significant financial issues, including the terms and conditions for issuing bonds and derivatives; taking decisions to conclude major transactions and related-party transactions; taking decisions to acquire, transfer (assign) subsoil use rights (after statutory approval from the competent authority); concluding joint activity contracts (agreements) with strategic partners for the joint implementation of subsoil use contract projects; approving investment projects whose full implementation implies that KMG and/or organisations whose voting shares or participatory interests are owned directly or indirectly by KMG should make aggregate

investments in excess of 20 bln. tenge, and any other issues provided for by Kazakhstan law and/or the KMG Charter.

- ◆ The KMG Board of Directors is not only responsible for managerial decisions but also plays a key role in the development of KMG's corporate governance system. For example, the results of independent corporate governance testing are submitted to the KMG Board of Directors for consideration together with corporate governance rating information and recommendations for improvements, which the Board of Directors uses to approve action plans to improve KMG's corporate governance system. The Board of Directors also regularly monitors any activities being implemented and approves reports detailing compliance with the principles and provisions of the KMG Corporate Governance Code; reports on the implementation of action plans to improve KMG's corporate governance system.

### **STRUCTURE OF THE BOARD OF DIRECTORS AND CHANGES IN THE COMPOSITION OF THE BOARD OF DIRECTORS DURING THE YEAR**

Since January 2017, the KMG Board of Directors was composed of the following individuals:

- 1) Frank C.W. Kuijlaars – Chairman, Independent Director
- 2) Christopher John Walton – Independent Director
- 3) Peter William Lane – Independent Director
- 4) Yerlan Urazgeldiyevich Baimuratov – Independent Director
- 5) Berik Tursynbekovich Beysengaliyev – Managing Director for asset optimisation – Samruk-Kazyna Management Board Member, Samruk-Kazyna representative
- 6) Baljeet Kaur Grewal – Managing Director for strategy and asset portfolio management – Samruk-Kazyna Management Board Member, Samruk-Kazyna representative
- 7) Uzakbay Suleymenovich Karabalin – Samruk-Kazyna representative
- 8) Sauat Mukhametbayevich Mynbayev – Chairman of the KMG Management Board

By Resolution of the Samruk-Kazyna Management Board dated 29 June 2017 (Minutes No. 20/17), 9 persons were elected to the KMG Board of Directors:

- 1) Christopher John Walton – Chairman, Independent Director
- 2) Frank C.W. Kuijlaars – Independent Director
- 3) Peter William Lane – Independent Director
- 4) Yerlan Urazgeldiyevich Baimuratov – Independent Director
- 5) Stephen James Whyte – Independent Director

- 6) Berik Tursynbekovich Beysengaliyev – Managing Director for asset optimisation – Samruk-Kazyna Management Board Member, Samruk-Kazyna representative
- 7) Baljeet Kaur Grewal – Managing Director for strategy and asset portfolio management – Samruk-Kazyna Management Board Member, Samruk-Kazyna representative
- 8) Uzakbay Suleymenovich Karabalin – Samruk-Kazyna representative
- 9) Sauat Mukhametbayevich Mynbayev – Chairman of the KMG Management Board

The term of office for KMG Board of Directors members is three years from the resolution date, except for the Independent Directors Frank C.W. Kuijlaars and Peter Lane, whose term of office expired on 31 July 2017.

By Resolution of the Samruk-Kazyna Management Board dated 4 October 2017 (Minutes No. 32/17), the authority of Berik Beysengaliyev as a member of the KMG Board of Directors was terminated prematurely, and Adamas Ilkevicius – Samruk-Kazyna Managing Director for transformation and special projects was elected to the KMG Board of Directors as a Samruk-Kazyna representative.



## Members of the Board of Directors (as AT 31 December 2017)



**CHRISTOPHER  
JOHN  
WALTON**

Chairman of the KMG Board of Directors, Independent Director

Member of the Board of Directors since 2014

Education, academic degrees:

- ◆ Bachelor of Arts (Political Science), University of Western Australia;
- ◆ Master in Business Administration (MBA), Finance, University of Western Australia

Date of birth: 19 June 1957

### Work experience:

In addition to being the Chairman of the Company's Board of Directors, he is also the Acting Chairman and the Audit Chair of the UK Institute of Directors, Audit Chair of the UK's Submarine Delivery Agency and a non-executive member of the Royal Navy's Naval Shipbuilding Strategy Board. He is a trustee of the Guild of Freemen of the City of London Charity.

In the past, Chris Walton held the positions of the Chairman of coal-miner Asia Resource Minerals Plc; ship operator Goldenport Holdings; and Lothian Buses Plc. He held the post of Senior Independent Director and Audit Chair of oil exploration company Rockhopper Exploration Plc; Audit Chair of Kazakhstan Temir Zholy JSC; and Non-Executive Member of the Audit and Risk Committee of the Department for Culture, Media and Sport, UK. From 2002 until 2005 he was a Member of the Regional Economic Advisory Council of the Bank of England (SE England & Anglia).

He held the post of Finance Director & CFO of easyJet Plc, where he successfully led the IPO of the Company. Chris Walton held senior financial and commercial posts in major Australian airline Qantas, Air New Zealand, Australia Post and Australian Airlines. Mr. Walton also served in the Australian Army Reserve.

Chris Walton is a Fellow of the Institute of Directors and a Fellow of the Royal Aeronautical Society.

Joint appointment and membership in the Board of Directors:

Charity Directorship – The Guild of Freemen of the City of London – director.

Government bodies & other positions which are not «company directorships»:

Guild of Freemen of the City of London's Charity – Trustee

Submarine Delivery Agency (a government department) - non-executive director

Naval Shipbuilding Strategy Client Board - independent member

Institute of Directors (a body formed by Royal Charter - not under the Companies Act) - Non-executive director

Shareholding in KMG or its subsidiaries and/or dependent entities: no



**SAUAT  
MUKHAMETBAYEVICH  
MYNBAYEV**

Member of the KMG Board of Directors, Chairman of the KMG Management Board

Member of the Board of Directors since 2014

Education, academic degrees:

- ◆ Economist-cybernetician, Ph.D. in Economics, Lomonosov Moscow State University
- ◆ Postgraduate study at the Lomonosov Moscow State University

Date of birth: 19 November 1962

### Work experience:

Sauat Mynbayev has served as the President of the “Kazakhstan” National Construction Exchange, First Deputy Chairman of the Management Board of Kazkommertsbank, President of CJSC Kazakhstan Development Bank, General Director of Caspian Industrial and Financial Group LLP and Chairman of the Management Board of JSC Samruk Kazakhstan Holding for State Asset Management

He has held the positions of Deputy Minister of Finance of the Republic of Kazakhstan, First Deputy Minister of Finance of the Republic of Kazakhstan, Minister of Finance of the Republic of Kazakhstan, Deputy Head of the Executive Office of the President of the Republic of Kazakhstan, Minister of Agriculture of the Republic of Kazakhstan, Deputy Prime Minister of the Republic of Kazakhstan, Minister of Industry and Trade of the Republic of Kazakhstan, Minister of Energy and Mineral Resources of the Republic of Kazakhstan and Minister of Oil and Gas of the Republic of Kazakhstan.

Shareholding in KMG or its subsidiaries and/or dependent entities: no.

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Governance report



**BALJEET  
KAUR  
GREWAL**

Member of the KMG Board  
of Directors, Samruk-  
Kazyna representative

Member of the Board of Directors since 2016

Education, academic degrees:

- ◆ Bachelor's Degree in International Economics (Diploma with First Class Honours), University of Hertfordshire
- ◆ MBA Executive Programme, Cambridge University

Date of birth: 2 May 1976

**Work experience:**

Baljeet has 15 years of CEO experience in the banking and financial industry, including as an Adviser in Asian Development Bank, Managing Director and Vice President of Kuwait Financial Investment Research House, Vice President and CEO of investment banking research at Maybank Group (Malaysia), ABN AMRO and Deutsche Bank.

She has extensive experience in strategy, investment consulting and national economic strategies in emerging markets. She works in close cooperation with the ECB, IMF, World Bank and various other governing bodies in the field of regulation and strategic development. She is a holder of 18 international investment awards and has extensive experience in the oil and gas sector of emerging markets. Baljeet is an important person in the area of the protection of women's financial interests.

Shareholding in KMG or its subsidiaries and/or dependent entities: no.



**ADAMAS  
OLEGAS  
ILKEVICIUS**

Member of the KMG Board  
of Directors, Samruk-  
Kazyna representative

Member of the Board of Directors since 2017

Education, academic degrees:

- ◆ Master of Business Administration (MBA) in Business Management, Computer Science and Visual Communications - HEC, France;
- ◆ Copenhagen Business School, Denmark and Louvain School of Management, Belgium.

Date of birth: 10 December 1975

**Work experience:**

Adamas has held executive positions in the leading Hi-Tech market companies - HP, Siemens and IBM, acted as a consultant to private and international companies, as well as public sector organisations. He has held the position of General Director of the specialised division of Eurasian Natural Resources Corporation PLC, ENRC BTS. He has also held the positions of Managing Director for business transformation and Managing Director for asset optimisation at Samruk-Kazyna.

Adamas has served as a member of the Board of Directors of JSC NC Kazakhstan Temir Zholy and JSC Kazpost, and held the positions of Chairman of the Supervisory Board of Samruk-Kazyna Business Service LLP, member of the Modernisation/Transformation Council of JSC NAC Kazatomprom, member of the Modernisation/Transformation Council of JSC KEGOC and member of the Modernisation/Transformation Council of JSC Samruk-Energy.

Shareholding in KMG or its subsidiaries and/or dependent entities: no.



**YERLAN  
URAZGELDIYEVICH  
BAIMURATOV**

Member of the KMG Board  
of Directors, Independent  
Director

Member of the Board of Directors since 2014

Education, academic degrees:

- ◆ Engineer-Economist, Almaty Institute of the National Economy
- ◆ Ph.D. in Economics.

Date of birth: 6 July 1959

Work experience:

Yerlan Baimuratov has spent time with research institutes of the State Planning Committee of the Kazakh SSR and held positions from engineer to Institute Scientific Secretary. He has extensive experience in the banking sector, held the positions of Deputy Chairman of the Management Board of Turanbank, Chairman of the Management Board of Alembank, Chairman of the Management Board of Almaty Commercial Bank, and First Deputy Chairman of the Management Board of Halyk Bank.

Yerlan Baimuratov has held the positions of Independent Director at JSC SEC Tobol and JSC NMH KazAgro. He is currently Chairman of the Board of Directors at JSC AsiaAgroFood; an Independent Director of JSC NC Aktau International Sea Commercial Port; Chairman of the Board of Directors at JSC Bayan Sulu and a member of the Supervisory Board of Samruk-Kazyna Invest LLP.

Shareholding in KMG or its subsidiaries and/or dependent entities: no



**STEPHEN  
JAMES  
WHYTE**

Member of the KMG Board  
of Directors, Independent  
Director

Member of the Board of Directors since 2017

Education, academic degrees:

- ◆ Bachelor of Geophysics (BSc Hons), University of Edinburgh;
- ◆ International Baccalaureate, Lester Pearson College

Date of birth: 20 January 1966

Work experience:

Stephen Whyte has 30 years of experience in the oil and gas industry, with a significant part of his career spent at Royal Dutch Shell, where he has held a variety of technical and commercial roles. He also spent six years with UK independent Clyde Petroleum, as Exploration Leader and then commercial Director. After leaving Royal Dutch Shell in 2009, Stephen became SVP, Europe and Central Asia, Commercial, for BG Group. Latterly he was Head of Exploration and Production at Galp Energia, Portugal's largest listed company, where he also served on the Board. Between July 2016 and January 2018 Stephen was the Non-Executive Chairman of sound Energy plc.

Stephen is a Non-Executive Director of Echo Energy plc., member of Audit Committee and Nomination Remuneration Committee of Echo Energy.

Stephen is also a Chairman of the Nomination committee, and member of the Reserves committee of Genel Energy.

Shareholding in KMG or its subsidiaries and/or dependent entities: no.



### UZAKBAY SULEYMENOVICH KARABALIN

Member of the KMG Board  
of Directors, Samruk-  
Kazyna representative



Member of the Board of Directors since 2016

Education, academic degrees:

- ◆ Mining Engineer, Gubkin Russian State Oil and Gas University
- ◆ Post-graduate study at the Gubkin Russian State Oil and Gas University
- ◆ PhD in Technical Sciences
- ◆ Doctor of Engineering Science
- ◆ Academician of the National and International Engineering Academies of the Republic of Kazakhstan

Date of birth: 14 October 1947

#### Work experience:

Uzakbay Karabalin has extensive oil industry experience and has worked for South Emba Oil and the Gas Exploratory Expedition Department of Kazneftegazorazvedka; Kazakh Geological Exploration Oil Research Institute; the regional administration of Prikaspiygeologiya; the Guryev Branch of the Lenin Kazakh Polytechnic Institute; the industry department of the Executive Office of the President of the Republic of Kazakhstan and the Cabinet of Ministers of the Republic of Kazakhstan.

He has held the following positions:

- ◆ Deputy Minister of Energy and Fuel Resources of the Republic of Kazakhstan
- ◆ Deputy Minister of the Oil and Gas Industry of the Republic of Kazakhstan
- ◆ Vice President for corporate development
- ◆ Director for prospective development
- ◆ Vice-President for prospective development
- ◆ First Vice-President of CJSC National Oil and Gas Company Kazakhoil, acting President of CJSC National Oil and Gas Company Kazakhoil

- ◆ President of CJSC KazTransGas
- ◆ Vice Minister of Energy and Mineral Resources of the Republic of Kazakhstan
- ◆ President of JSC NC KazMunayGas
- ◆ General Director of JSC Mangistaumunaigaz
- ◆ General Director of JSC Kazakhstan Institute of Oil and Gas
- ◆ Minister of Oil and Gas of the Republic of Kazakhstan
- ◆ First Deputy Minister of Energy of the Republic of Kazakhstan
- ◆ Chairman of the Board of Directors of CJSC KazTransOil, CJSC NC Oil and Gas Transport, CJSC NC KazMunayGas and JSC KazMunayGas Exploration Production
- ◆ Chairman of the Coordinating Council of the KazEnergy Association
- ◆ Member of the Supervisory Board of KazRosGas LLP
- ◆ Member of the Council of National Investors under the President of the Republic of Kazakhstan

He currently holds the following positions:

- ◆ Deputy Chairman of the KazEnergy Association
  - ◆ Chairman of the Board of Directors of the Atyrau University of Oil and Gas
  - ◆ Member of the Board of Directors (Independent Director) of JSC KING
  - ◆ Chairman of the Supervisory Board of KMG-Eurasia LLP
- Shareholding in KMG or its subsidiaries and/or dependent entities: no.

## Responsibility of the Board of Directors

### In accordance with the KMG Charter:

- ◆ The Board of Directors answers to the General Meeting of Shareholders for the general management of KMG activities
- ◆ The Board of Directors is responsible for ensuring management effectiveness, long-term value and sustainable development in all organisations whose voting shares or participatory interests are owned directly or indirectly by KMG

### In accordance with the Law On Joint Stock Companies:

- ◆ The Board of Directors monitors and, if possible, eliminates any potential conflicts of interest at the level of officials and the General Meeting of Shareholders, including the misuse of KMG assets and corruption when concluding related-party transactions
- ◆ The Board of Directors monitors the effectiveness of KMG corporate governance practices

- ◆ Members of the Board of Directors act in accordance with statutory requirements in Kazakhstan, the KMG Charter and internal documents based on awareness and transparency, and in the best interests of the Group and its shareholders

- ◆ Members of the Board of Directors should treat all shareholders fairly and make objective independent judgements on corporate matters

### In accordance with the KMG Corporate Governance Code:

- ◆ Members of the Board of Directors should duly perform their duties and ensure the growth of the long-term value and sustainable development of KMG
- ◆ The Board of Directors and its committees observe a balance of skills, experience and knowledge that ensures decisions are independent, objective and effective, and in the best interests of KMG, with fair treatment of all shareholders, taking into account

the principles of sustainable development

- ◆ The Board of Directors is diverse in terms of experience, personal characteristics and gender. It is made up of independent directors in a number sufficient to ensure the independence of decisions made and the fair treatment of all shareholders

- ◆ Members of the Board of Directors are evaluated annually based on a structured process approved by the KMG Board of Directors. At the same time, at least once every three years, evaluations are made with the involvement of an independent professional organisation. An evaluation should identify the contribution of the Board of Directors and each of its members to the growth of the long-term value and sustainable development of KMG, and identify directions and recommend measures for improvement. Evaluation results are considered when re-electing or dismissing members of the Board of Directors

## Activities of the Board of Directors

In 2017, the Board of Directors held 19 meetings, with all members present. Seven meetings were held by conference call and one in Atyrau.

In 2017, 270 issues were submitted to the Board of Directors for consideration, including:

- ◆ 62 informational issues, such as reports on the current situation

around key changes in KMG activities; its financial condition; the implementation of KMG Board of Directors resolutions; the implementation of major projects;

occupational health and safety, environmental and other issues

- ◆ 49 issues relating to corporate governance and the regulation of KMG internal activities
- ◆ 8 issues relating to subsoil use and the introduction of amendments to subsoil use contracts
- ◆ 51 issues relating to human resources management in KMG
- ◆ 46 issues relating to the conclusion of major transactions and related-party transactions
- ◆ 14 issues attributed to the exclusive competence of the General Meeting of Shareholders (Participants) of a legal entity in which 10% or more of shares (share capital) are owned by KMG
- ◆ 29 issues relating to KMG Internal Audit Service activities

**In 2017, the Board of Directors approved the following documents:**

- ◆ Action Plan to transition to the KMG target asset structure
- ◆ Induction Programme for newly elected members of the KMG Board of Directors
- ◆ Procedure for monitoring the Induction Programme for newly elected members of the KMG Board of Directors

- ◆ New draft of KMG Management Board Regulations
- ◆ Rules for the graded remuneration of managerial employees, Internal Audit Service employees and the KMG Corporate Secretary, and introduction of amendments to the Rules for the remuneration of managerial employees, Internal Audit Service employees and the KMG Corporate Secretary
- ◆ Regulations for the procurement of KMG goods, work and services
- ◆ KMG Risk Register and risk management Action Plan, KMG Risk Map for 2017
- ◆ Development Strategy for the KMG centralised data bank
- ◆ Amendments to the KMG Accounting Policy approved by a Resolution of the KMG Board of Directors dated 20 June 2013 (Minutes No. 9/2013)
- ◆ Amendments and additions to the JSC KazTransGas Charter
- ◆ Amendments and additions to Regulations for KMG Board of Directors Committees



## Requirements for Independent Directors

### In accordance with the Law On Joint Stock Companies, an Independent Director:

- ◆ is not an affiliate of KMG and did not act as such for the three years preceding his/her election to the Board of Directors (except for his/her tenure as an independent director of the given joint stock company) and is not affiliated with KMG affiliates
- ◆ is not accountable to officials of the joint stock company or entities affiliated to KMG, and was not accountable to such persons during the three years prior to his/her election to the Board of Directors
- ◆ is not a public official
- ◆ is not a shareholder representative at meetings of bodies of the given joint stock company and did not act as such during the three years prior to his/her election to the Board of Directors
- ◆ does not participate in the audit of the given joint stock company as an auditor employed by the audit organisation, and did not participate in any such audits during the three years prior to his/her election to the Board of Directors

### In accordance with the Rules for selecting independent directors of Samruk-Kazyna companies, an Independent Director:

- ◆ has publicly declared his/her status as an independent director before being elected to the Board of Directors
- ◆ has special skills in certain areas related to the functional responsibilities of an independent director, is a member of Board of Directors committees, has strong communication skills, and works on the basis of the principles of transparency, objectivity, constructiveness and professionalism
- ◆ is generally aware of key issues specific to an organisation similar to KMG in the scope and nature of operations, and demonstrates an understanding of:
  - a) regulatory obligations
  - b) the competitive environment in domestic and international markets
  - c) the specifics of corporate finance, internal controls, strategy and/or appointments and/or remuneration to provide an expert opinion as a member of the relevant KMG Board of Directors committee
- ◆ is able to analyse comprehensively and evaluate objectively information provided and develop an independent position on issues based on principles of legality,

fairness and the equal treatment of all shareholders

- ◆ has an impeccable reputation and demonstrated positive achievements in the business and/or industry environment, and adheres to high ethical standards
- ◆ has the required time to participate in the work of the Board of Directors, not only at meetings of the Board of Directors, but also additional time to study materials prepared for meetings of the Board of Directors properly
- ◆ is not a member of the Boards of Directors in more than four companies

### In accordance with the KMG Corporate Governance Code, an Independent Director:

- ◆ is a person who has the required professionalism and independence to make independent and objective decisions that are free from the influence of individual shareholders, the executive body and other stakeholders
- ◆ is actively involved in the discussion of issues where a conflict of interests is possible (preparing financial and non-financial statements, concluding related-party transactions, nominating executive body candidates, and setting remuneration for executive body members)

◆ should monitor possible loss of the status of independence and notify promptly the Chairman of the Board of Directors of any such situations. In the event of any circumstances affecting the independence of a member of the Board of Directors, the Chairman of the Board of Directors will promptly

bring this information to the attention of shareholders to make an appropriate decision

◆ may not be elected to the Board of Directors for more than nine consecutive years. Election for a term of more than nine years is allowed in exceptional cases.

Election of an independent director to the Board of Directors takes place annually with a detailed explanation of the need to elect the member of the Board of Directors and the influence of this on independence in the decision-making process

## Board of Directors Committees

### In accordance with the Law On Joint Stock Companies:

◆ to address the most important issues and provide recommendations to the Board of Directors, KMG sets up Board of Directors committees to consider:

- ◆ strategic planning
- ◆ personnel and remuneration
- ◆ internal audit
- ◆ social issues
- ◆ other issues provided for by internal KMG documents

◆ Board of Directors Committees consist of members of the Board of Directors and experts who have the necessary professional knowledge to work in a particular committee. All Board of Directors committees

are headed by a member of the Board of Directors

◆ the Head of the executive body may not be the chairman of a Board of Directors Committee

### In accordance with the KMG Corporate Governance Code:

Board of Directors Committees promote deep and thorough consideration of issues within the competence of the Board of Directors and improve the quality of decisions made, especially in areas such as audit, risk management, proper and effective application of the Samruk-Kazyna Procurement Rules for Goods, Work and Services; the appointment and remuneration of members of the Board of Directors and the executive body, sustainable development, including occupational health and safety and environmental protection. The existence of committees does

not relieve members of the Board of Directors from liability for decisions made within the competence of the Board of Directors.

### KMG has 4 standing Board of Directors Committees:

- ◆ Nomination and Remuneration Committee
- ◆ Strategy and Innovations Committee
- ◆ Finance Committee
- ◆ Audit Committee

**COMPOSITION OF THE BOARD OF DIRECTORS COMMITTEES:**

Committee	Chairman	Members
<b>Nomination and Remuneration Committee</b>	Yerlan Urazgeldiyevich Baimuratov	Christopher John Walton Stephen James Whyte Uzakbay Suleymenovich Karabalin
<b>Strategy and Innovations Committee</b>	Stephen James Whyte	Christopher John Walton Yerlan Urazgeldiyevich Baimuratov Uzakbay Suleymenovich Karabalin Baljeet Kaur Grewal Adamus Olegas Ilkevicius
<b>Finance Committee</b>	Christopher John Walton	Yerlan Urazgeldiyevich Baimuratov Stephen James Whyte Baljeet Kaur Grewal
<b>Audit Committee</b>	Christopher John Walton	Yerlan Urazgeldiyevich Baimuratov Stephen James Whyte

**NOMINATION AND REMUNERATION COMMITTEE**

The Committee acts to assist the Board of Directors develop and provide recommendations on:

- ◆ planning succession in the Board of Directors and Management Board
- ◆ ensuring continuous and objective performance appraisals for the Board of Directors, the Management Board, the Corporate Secretary and other employees
- ◆ ensuring an efficient human resources policy, compensation

and salary system, and providing social support, professional development and training for officials and employees

**According to the results of 14 meetings held in 2017, the Nomination and Remuneration Committee addressed 68 issues, including:**

- ◆ 5 issues relating to supervisory boards and the composition of the Boards of Directors in KMG subsidiaries

- ◆ 3 issues relating to the chief executive officers of KMG subsidiaries
- ◆ 5 issues relating to internal documents within its competence
- ◆ 18 issues relating to KPIs and remuneration matters
- ◆ 10 issues relating to assignments of the Nomination and Remuneration Committee and reports on the same

**STRATEGY AND INNOVATIONS COMMITTEE**

The Committee acts to assist the Board of Directors develop and provide recommendations on:

- ◆ developing strategy and investment policy, including priority operating areas
- ◆ increasing investment attractiveness, including through improvements to corporate governance

- ◆ proper planning for KMG financial and economic activities
- ◆ introducing innovations in KMG
- ◆ introducing sustainable development principles for KMG strategic planning and socio-economic development

#### FINANCE COMMITTEE

The Finance Committee develops recommendations for the Board of Directors to pursue an efficient KMG financial policy; assesses KMG's financial position, and monitors financial strategy.

#### AUDIT COMMITTEE

The Audit Committee assists the Board of Directors by developing and submitting recommendations on:

- ◆ financial reporting matters
- ◆ internal control and risk management matters
- ◆ external audit matters

- ◆ monitoring KMG transformation

**According to the results of 10 meetings held in 2017, the Strategy and Innovations Committee addressed 109 issues, including:**

- ◆ 45 issues relating to the basic priority areas of KMG activities

**After 11 meetings held in 2017, the Finance Committee addressed 56 issues, including:**

- ◆ issues relating to improving KMG's financial position and ensuring financial sustainability

- ◆ internal audit matters

**After 13 meetings held in 2017, the Audit Committee addressed 74 issues, including:**

- ◆ 11 financial reporting issues
- ◆ 13 internal control and risk management issues

- ◆ 42 issues relating to corporate governance

- ◆ 14 issues relating to privatisation

- ◆ 8 issues relating to subsoil use

- ◆ issues relating to KMG Eurobond issues, the terms of their issue and placement

- ◆ coordinating KMG major transactions and issues related to the preparation of consolidated and separate annual financial statements

- ◆ 9 external audit issues

- ◆ 34 internal audit issues

- ◆ 7 other issues within its competence

## INFORMATION ON THE ATTENDANCE OF MEMBERS OF THE BOARD OF DIRECTORS AT MEETINGS OF THE BOARD OF DIRECTORS AND ITS COMMITTEES

	Board of Directors	Nomination and Remuneration Committee	Strategy and Innovations Committee	Finance Committee	Audit Committee
<b>Number of meetings held in 2017</b>	<b>19</b>	<b>14</b>	<b>10</b>	<b>11</b>	<b>13</b>
Christopher John Walton	100%	100%	100%	100%	100%
Sauat Mukhametbayevich Mynbayev	100%	-	-	-	-
Baljeet Kaur Grewal	100%	-	90%	100%	-
Stephen James Whyte	90%	83,3%	100%	100%	80%
Uzakbay Suleymenovich Karabalin	100%	100%	100%	-	-
Yerlan Urazgeldiyevich Baimuratov	100%	100%	100%	100%	80%
Adamas Olegas Ilkevicius	100%	-	100%	-	-

### Evaluation of the performance of the KMG Board of Directors, members of the Board of Directors and KMG Board of Directors Committees in 2016

According to the KMG Corporate Governance Code, approved by the Samruk-Kazyna Management Board on 27 May 2015, Minutes No. 22/15, the Board of Directors' performance is evaluated at least once every three years by an independent professional organisation.

In January 2017, the KMG Board of Directors decided to assess its performance, and that of its members and committees in 2016 by engaging an independent consultant. Once the relevant procurement procedures had been completed, an agreement was signed with PricewaterhouseCoopers LLP (the Consultant) to procure

corporate governance consulting services (services to evaluate the performance of the KMG Board of Directors, members of the Board of Directors and Board of Directors Committees for 2016).

The Consultant assessed the performance of the Board of Directors according to international corporate governance practices (in particular, OECD corporate governance principles and the UK Corporate Governance Code). The Consultant used its results to draft a report evaluating the performance of the Board of Directors, its committees and the Corporate Secretary, and develop recommendations and priorities for improving the activities of the Board of Directors, its committees and the Corporate Secretary.

To implement the Consultant's evaluation recommendations, KMG:

- ◆ held a meeting of the KMG Board of Directors on 25 May 2017 in Atyrau
- ◆ updated and increased the composition of the KMG Board of Directors on 29 June 2017 according to Resolution of the Samruk-Kazyna Management Board No. 20/17 to 9 people
- ◆ to adhere to best international practices, introduced a first agenda item at regular meetings of the Board of Directors and its Committees after September 2017 of "Minutes of the previous KMG Board of Directors (Committee) meeting and the progress of the execution of subsequent decisions/instructions"

- ◆ on 30 November 2017, had the meeting of the Board of Directors address the issue of optimising the activities of the KMG Board of Directors and its Committees through the implementation of a set of measures (including optimising the number and logistics of meetings to attract world-class independent directors; the need to hold individual strategy and sustainable development sessions; and the Chairman's involvement in all aspects of Board of Directors activities); on 14 December 2017, approved a revised 2018 meeting schedule for the KMG Board of Directors and its Committees as well as a schedule of individual Board of Directors sessions devoted to sustainable development and strategy
- ◆ changed the agenda structure for meetings of the Board of Directors and its Committees, prioritising regular and mandatory issues at each meeting
- ◆ updated the requirements for materials submitted to the KMG Board of Directors for consideration to provide clearer and more complete disclosure of information on each issue
- ◆ acting jointly with Samruk-Kazyna, strengthened the role and involvement of the KMG Board of Directors Nomination and Remuneration Committee in searching for and attracting independent directors to the KMG Board of Directors, considering candidates to the KMG Board of Directors, and planning succession
- ◆ discussed the need for and the preliminary content of training plans for members of the Board of Directors. The plan is due to be approved in 2018
- ◆ revised the role and focus of the Board of Directors Strategy and Innovations Committee, and elected a new chairman
- ◆ amended Board of Directors Committee Regulations regarding the expansion of the authority of Committee Chairmen
- ◆ automated the duties of the KMG Board of Directors



## Remuneration of Board of Directors members

Members of the Board of Directors receive the following remuneration.

Independent Directors Christopher John Walton and Stephen James Whyte receive fixed annual remuneration of 150,000 USD, Independent Director Yerlan Urazgeldiyevich Baimuratov and member of the Board of Directors Uzakbay Suleymenovich Karabalin receive fixed annual remuneration of 18,200,000 tenge.

Furthermore, independent directors holding the following positions receive additional remuneration:

Chairman of the KMG Board of Directors – 75,000 USD per year

Chairman of:

- ◆ the Audit Committee – 35,000 USD per year
- ◆ the Nomination and Remuneration Committee – 25,000 USD per year
- ◆ the Finance Committee – 25,000 USD per year
- ◆ the Strategy and Innovations Committee – 25,000 USD per year

Members of:

- ◆ the Audit Committee – 17,500 USD per year

- ◆ the Strategy and Innovations Committee – 12,500 USD per year
- ◆ the Nomination and Remuneration Committee – 12,500 USD per year
- ◆ the Finance Committee – 12,500 USD per year

For participating in meetings initiated by the Chairman of the KMG Board of Directors and/or Chairman of the Samruk-Kazyna Management Board or the Chairman of the KMG Management Board, independent directors receive 2,000 USD per meeting, provided no more than 1 meeting is held per day.

## Management Board

The Management Board reports to the Board of Directors, and is responsible for managing KMG's daily activities and ensuring they comply with the strategy, development plan and decisions adopted by a General Meeting of Shareholders and the Board of Directors.

In accordance with the KMG Charter, the Chairman of the Management Board is responsible for taking decisions on issues related directly to KMG activities, specifically, service procurement; the creation of working groups and commissions for KMG

projects; representative activities; staff appointments and penalties; employee social support; corporate governance and any other production, administrative and regulatory issues.

### In accordance with the KMG Corporate Governance Code:

- ◆ the Board of Directors and Management Board should work together in a spirit of cooperation, act in the best interests of the Group and make decisions based on the principles of sustainable development and fair attitude to all shareholders

- ◆ the Chairman and members of the Management Board should have impressive professional and personal characteristics, an impeccable business reputation and adhere to strict ethical standards

## Management Board members (as AT 31 December 2017)



**SAUAT  
MUKHAMETBAYEVICH  
MYNBAYEV**

Chairman of the KMG  
Management Board

Member of the Management Board since 2013

### Education, academic degrees:

- ◆ Economist-cybernetician, Ph.D. in Economics, Lomonosov Moscow State University
- ◆ Postgraduate study at the Lomonosov Moscow State University

**Date of birth:** 19 November 1962

### Work experience:

Sauat Mynbayev has served as the President of the “Kazakhstan” National Construction Exchange, First Deputy Chairman of the Management Board of Kazkommertsbank, President of CJSC Kazakhstan Development Bank, General Director of Caspian Industrial and Financial Group LLP and Chairman of the Management Board of JSC Samruk Kazakhstan Holding for State Asset Management

He has held the positions of Deputy Minister of Finance of the Republic of Kazakhstan, First Deputy Minister of Finance of the Republic of Kazakhstan, Minister of Finance of the Republic of Kazakhstan, Deputy Head of the Executive Office of the President of the Republic of Kazakhstan, Minister of Agriculture of the Republic of Kazakhstan, Deputy Prime Minister of the Republic of Kazakhstan, Minister of Industry and Trade of the Republic of Kazakhstan, Minister of Energy and Mineral Resources of the Republic of Kazakhstan and Minister of Oil and Gas of the Republic of Kazakhstan.

Shareholding in KMG or its subsidiaries and/or dependent entities: no



**KAIRAT  
KAMATAYEVICH  
SHARIPBAYEV**

Executive Vice President,  
Gas Transportation and  
Marketing

Member of the Management Board since 2016

### Education, academic degrees:

- ◆ Kazakh Agricultural Institute and Abai Almaty State University
- ◆ Candidate of Political Sciences

**Date of birth:** 16 August 1963

### Work experience:

Kairat Sharipbayev has held the positions of Deputy Akim of Taraz, First Vice President of CJSC Dauri, President of the Kitap Publishing House, and Chairman of the Board of Directors of JSC Danko

He has also held the positions of Deputy General Director for Marketing and Commerce at CJSC Intergas Central Asia; Deputy General Director for Marketing at CJSC KazTransGas; Managing Director for Commerce at JSC NC Kazakhstan Temir Zholy; General Director (Chairman of the Management Board) of JSC KazTransGas Aimak, and General Director (Chairman of the Management Board) of JSC KazTransGas

He has been Chairman of the Board of Directors of JSC KazTransGas since 11 December 2015

Shareholding in KMG or its subsidiaries and/or dependent entities: no.



**OLEG  
VYACHESLAVOVICH  
KARPUSHIN**

Executive Vice-President for  
Production, Exploration and  
Oil Field Services

Member of the Management Board since 2017

**Education, academic degrees:**

- ◆ Mining Engineer-Geologist (Diploma with Honours), Gubkin Russian State Oil and Gas University
- ◆ Master of Business Administration, Duke University, Fuqua Business School

**Date of birth:** 8 April 1968

**Work experience:**

Oleg Karpushin has held various positions in a number of Schlumberger entities (Russia, Belarus, the USA, Central Asia and Azerbaijan), Sakhalin Energy Investment Company Ltd. and Shell Petroleum Development Company (Nigeria)

He has held the positions of General Director of Salym Petroleum Development N.V., Managing Director of the West Division of Shell Petroleum Development Company (Nigeria), a Senior Adviser at Shell Exploration and Production B.V. headquarters (the Hague, the Netherlands), Deputy Chairman of the Management Board - Production Director at PJSC NOVATEK

Shareholding in KMG or its subsidiaries and/or dependent entities: no.



**DAUREN  
SAPARALIYEVICH  
KARABAYEV, CFA**

Executive Vice President,  
Chief Financial Officer

Member of the Management Board since 2016

**Education, academic degrees:**

- ◆ International Economic Relations, Kazakh State Academy of Management
- ◆ Master of Finance, Texas A&M University

**Date of birth:** 11 June 1978

**Work experience:**

Dauren Karabayev began his career in 2001 as a credit analyst at JSC ABN AMRO Bank Kazakhstan. In 2003 he was appointed Head of the bank's Credit Management Department.

From 2004, he held the position of Managing Director in JSC Halyk Bank of Kazakhstan. From 2007 until June 2016 he was the Deputy Chairman of the Management Board of JSC Halyk Bank of Kazakhstan. He then held the position of Project Supervisor at McKinsey & Company Inc.

Shareholding in KMG or its subsidiaries and/or dependent entities: no.



### SERIK SAKBALDIYEVICH ABDENOV

#### Vice President for Human Resources

Member of the Management Board since 2016

#### Education, academic degrees:

- ◆ Lawyer, Kazakh Institute of Legal Studies and International Relations
- ◆ Economist, Kazpotrebsoyuz Karaganda Economic University
- ◆ Master of Business Administration (MBA), Russian Academy of the National Economy under the President of the Russian Federation

**Date of birth:** 15 January 1977

#### Work experience:

Serik Abdenov has held various positions in the Ministry of Justice of the Republic of Kazakhstan, Ministry of Foreign Affairs of the Republic of Kazakhstan, Ministry of Labour and Social Welfare of the Population of the Republic of Kazakhstan

He has also held the positions of First Deputy Akim of East-Kazakhstan Region; Minister of Labour and Social Welfare of the Population of the Republic of Kazakhstan; Adviser to the Chairman of the KMG Management Board; KMG Managing Director for Human Resource Management and Labour Remuneration  
Shareholding in KMG or its subsidiaries and/or dependent entities: no



### ARDAK ZHUMAGULOVICH MUKUSHOV

#### Vice President, Legal Support

Member of the Management Board since 2017

#### Education, academic degrees:

- ◆ Lawyer, Gumilev Eurasian National University
- ◆ Economist, Ryskulov Kazakh Economic University

**Date of birth:** 4 March 1978

#### Work experience:

Ardak Mukushov has held positions with the Main Department of Internal Affairs in Astana; the Ministry of Energy and Mineral Resources of the Republic of Kazakhstan as a Senior Specialist; Department Head; Deputy Department Director and Deputy Director of the Legal Service Department

He has held the positions of Director of the Legal Service Department of the Ministry of Oil and Gas of the Republic of Kazakhstan; Adviser to the Chairman of the KMG Management Board; the Director of the KMG International Contracts Department

He currently holds the position of KMG Vice President for Legal Support  
Shareholding in KMG or its subsidiaries and/or dependent entities: no



### GLEB VALERIEVICH LUXEMBOURG

#### Vice President, Transformation

Member of the Management Board since 2015

#### Education, academic degrees:

- ◆ Mining Engineer, Ivano-Frankovsk Institute of Oil and Gas
- ◆ Moscow Academy of State and Municipal Administration of the State Service Academy under the President of the Russian Federation
- ◆ Master of Business Administration (MBA), Moscow International Higher Business School «MIRBIS»

**Date of birth:** 5 June 1968

#### Work experience:

Gleb Luxembourg has held positions with Yuganskneftegas PC, OJSC YUKOS, YUKSAR LLC and OJSC TNK-BP. He also held the positions of Finance Director at Resursenergo LLC; General Director of the CJSC Nyagan Regional Service Centre; General Director of CJSC RCSU-Nizhnevartovsk; Acting General Director of Tagulskoye LLC; Deputy General Director of Rospan International; Vice President for Health, Safety and Environmental Protection at OJSC TNK-BP, and General Director of OJSC Yamal SPG

Shareholding in KMG or its subsidiaries and/or dependent entities: no

## CHANGES IN THE COMPOSITION OF THE MANAGEMENT BOARD DURING THE YEAR

◆ According to a Resolution of the KMG Board of Directors dated 26 January 2017 (Minutes No. 1/2017), member of the KMG Management Board Y Zhangaulov was dismissed from

17 January 2017 and replaced by A Mukushov as a member of the KMG Management Board for the standard KMG Management Board term of office

◆ According to a Resolution of the KMG Board of Directors dated 31 July 2017 (Minutes No. 10/2017), O Karpushin was elected as a

member of the KMG Management Board for the standard KMG Management Board term of office

◆ According to a Resolution of the KMG Board of Directors dated 11 October 2017 (Minutes No. 14/2017), KMG Management Board D Berlibayev was dismissed from 10 October 2017

## Activities of the Management Board

**During 2017, the KMG Management Board adopted 474 resolutions, including 464 (97.8%) at meetings in presentia, and which included:**

- ◆ **154 resolutions** submitted in due course to the KMG Board of Directors for consideration, including:
- ◆ **61 resolutions** regarding draft documents or amendments and additions to existing resolutions and internal documents, as well as on KMG's participation in the disposal/sale/transfer of interests/shares in subsidiaries to trustee management
- ◆ **46 resolutions** regarding the conclusion of major transactions and KMG related-party transactions
- ◆ **83 resolutions** regarding KMG related-party transactions in accordance with the Rules for Samruk-Kazyna members, which are subject to special conditions

established by the Law On Joint Stock Companies, to conclude transactions

- ◆ **13 resolutions** as a shareholder of Caspian Pipeline Consortium-K (6), JSC Exploration Production KazMunayGas (4), JSC Caspian Pipeline Consortium-R (2) and JSC KazTransOil (1)
- ◆ **35 resolutions** identifying KMG's position as a partner of the Samruk-Kazyna Corporate University (6), Kazakhstan Pipeline Ventures LLP (4), Bekturly Energy Operating LLP (4), N Operating Company LLP (3), Kazakhoil Aktobe LLP (3), KazRosGas LLP (2), Teniz Service LLP (2), Tengizchevroil LLP (2), Caspian Oil and Gas Company LLC (2), Central Oil and Gas Company LLP (2), Kooperatiye KazMunayGas U.A. (2), KazMunayGas-Service LLP (1), PGS Kazakhstan LLP (1) and Isatay Operating Company LLP (1)

- ◆ **17 resolutions** of the Management Board were adopted as resolutions of the Sole Shareholder of JSC KazTransGas (5), N Block B.V. (4), JSC Kazakhstan-British Technical University (3), JSC KazMunayGas – Refining and Marketing (2), KMG International N.V. (2) and JSC Euro-Asia Air Airline (1)
- ◆ **222 resolutions** of the Management Board were adopted as resolutions of the Sole Participant/Sole Founder/entity holding all participatory shares in KMG subsidiaries, including: Oil Transport Corporation LLP, Oil Services Company LLP (17), Oil Construction Company LLP (17), Mangistauenergomunai LLP (15), Urikhtau Operating LLP (14), Munaitelcom LLP (13), KazMunayGas Production and Drilling Technology Research and Development Institute LLP (12), KazMunayGas-Service LLP (12), KMG-Kumkol LLP (11),

KMG Business Model and Business Geography	Strategy	Transition to a New Operating Model	Group performance	Technology: Research and Development Institute of Production and Drilling Technology	Social and Environmental Responsibility	Risk Management	Corporate Governance report
<p>KMG-Security LLP (9), KMG Systems &amp; Services LLP (9), KMG-Karachaganak LLP (8), KMG-Retail LLP (8), Kazmortransflot LLP (8), Offshore Oil Company KazMunayTeniz LLP (7), the Kazakhstan Trade and Exhibition Centre Corporate Fund (7), KMG Drilling and Services LLP (6), AktauNefteService LLP (6), KMG-Eurasia LLP (5), Kazakhturkmunay LLP (5), KMG-Ustyurt LLP (4), PSA LLP (4), Satpayev Operating LLP (2), POCR LLP (2), KazOilMash LLP (1), KazMunayGas Onimderi LLP (1) and KazMunayGas-Aero LLP (1)</p>	<p><b>In 2017, the Management Board approved:</b></p>	<ul style="list-style-type: none"> <li>◆ Supervision regulations for well construction, overhaul and reconstruction in the KMG Group</li> <li>◆ Guidelines for arranging emergency medical care in the KMG Group</li> <li>◆ KMG Budgets for 2017 and 2018–2019</li> <li>◆ Salary charts for KMG managerial employees with approved grades</li> <li>◆ Salary charts for KMG managerial and administrative personnel</li> <li>◆ Motivational KPI maps for KMG managerial employees and their 2017 targets</li> <li>◆ KMG staffing</li> </ul>	<ul style="list-style-type: none"> <li>◆ Final results of motivational KPI maps for KMG managerial employees for 2016</li> <li>◆ 2016 performance-based remuneration for KMG administrative staff who have switched to grading</li> <li>◆ Grades of KMG managerial and administrative employees and maximum remuneration for 2017</li> <li>◆ List of goods, work and services for which KMG is entitled to implement procurement procedures to select a supplier of goods, work or services prior to the approval of 2018 procurement budgets and plans</li> <li>◆ <b>6 Regulations</b> on the Risk Committee; the Occupational Safety, Industrial Safety and Environmental Protection Committee; the Scientific and Technical Council for “Oil and Gas Refining”; the Operating Committee of the “Transportation, Refining and Marketing” Division of KMG; the Coordination Council for occupational safety, industrial safety and environmental protection; and steering committees for KMG business/functional transformation</li> <li>◆ <b>3 methods</b> (to select potential candidates to drill KMG Group lateral/horizontal wells; to assess the technical and economic</li> </ul>	<p>efficiency of KMG Group drilling operations and well intervention, and calculate oil and liquid production levels in KMG mining assets during business planning)</p>	<ul style="list-style-type: none"> <li>◆ <b>15 rules</b> relating to KMG internal activities</li> <li>◆ the KMG Development Plan (separate) for 2017–2021</li> <li>◆ an action plan to implement recommendations from KMG’s independent auditor Ernst &amp; Young LLP on the results of the audit of 2016 consolidated and separate financial statements</li> <li>◆ the 2017–2019 action plan to implement the KMG Development Strategy until 2025</li> <li>◆ an action plan to improve energy saving and efficiency in KMG subsidiaries and dependent entities, including jointly controlled entities and joint ventures for 2017–2020</li> <li>◆ the KMG Development Plan (separate) for 2018–2022</li> <li>◆ an action plan to implement a Road Map to improve the state of work and environmental safety in the KMG Group for 2018</li> <li>◆ the KMG Management Board work plan for 2018</li> </ul>		

## Remuneration of Management Board Members

Total remuneration to KMG Management Board members in 2017 amounted to 621,393,811.90 tenge, which included salaries and all monetary bonuses paid by KMG to Management Board members for their

work in 2017 and total remuneration paid to Management Board members (executive employees) according to 2016 results in accordance with the Rules for remunerating KMG Management Board members

(executive employees), Internal Audit Service employees and the Corporate Secretary as approved by Resolution of the KMG Board of Directors No.1/2012 dated 13 February 2013.

## Improvement IN KMG corporate governance practices

On 15 December 2015, the KMG Board of Directors (Minutes No. 18/2015) approved an action plan to improve the KMG corporate governance system for 2016–2017 (the “Plan”), which is to be monitored on a quarterly basis.

### To implement the Plan, KMG and its subsidiaries approved the following key documents:

- ◆ A Corporate Governance Code for 97 subsidiaries
- ◆ The KMG Code of Business Ethics
- ◆ Amendments and additions to Regulations on the KMG Board of Directors Strategy and Innovations Committee
- ◆ Amendments and additions to KMG Management Board Regulations
- ◆ An induction programme for newly elected KMG Board of Directors members

- ◆ A procedure for monitoring the implementation of the induction programme for newly elected KMG Board of Directors members
- ◆ Rules for recruiting, selecting and appointing the CEO of the KMG executive body
- ◆ Rules for preparing the KMG Annual Report
- ◆ A corporate risk management system policy for KMG, its subsidiaries and dependent entities
- ◆ Model rules for organising production and non-production risk management processes in KMG, its subsidiaries and dependent entities
- ◆ Risk identification and assessment methods; selecting risk management methods in KMG, its subsidiaries and dependent entities
- ◆ Rules for making amendments and additions to the Integrated Risk Classifier of KMG, its subsidiaries and dependent entities
- ◆ “Golden Rules” – the KMG Occupational Health and Safety Employee Code
- ◆ Rules for drafting, concluding and executing contracts in KMG
- ◆ Amendments and additions to KMG Management Board Regulations
- ◆ The Order of the KMG Management Board Chairman On Interaction between KMG and the State Authorities
- ◆ The Order of the KMG Management Board Chairman On the Identification of Persons Responsible for providing Information for Disclosure

- ◆ Operating instructions for the design and content of the KMG corporate website
- ◆ A plan to interact with stakeholders regarding sustainable development

#### To implement the Plan, KMG:

- ◆ elected a new Board of Directors due to the expiration of the term of office of the previous Board of Directors
- ◆ approved the KMG Sustainable Development Report for 2016
- ◆ approved a lower transaction and investment project threshold after which only the KMG Management Board is authorised to approve
- ◆ added the analysis and monitoring of major investment projects in KMG subsidiaries to the competence of the Board of Directors Strategy and Innovations Committee
- ◆ had an independent consultant, PricewaterhouseCoopers LLP conduct an external evaluation and prepare a report on the performance of the Board of Directors, members of the Board of Directors and its Committees for 2016
- ◆ held a strategic session for Management Board members to discuss “KMG Today”; “Why do Shareholder expectations and the actual situation in the Group differ so significantly?” and “Strategic Vision”

- ◆ developed a table of typical management body competencies for limited liability partnership subsidiaries
- ◆ worked on integrating subsidiary charters
- ◆ held regular training for Group employees in sustainable development and risk management
- ◆ continued the restructuring of Group non-core facilities
- ◆ introduced a new operating model assuming the concentration of basic management functions in the parent organisation as part of the Transformation Programme
- ◆ held quarterly Risk Committee meetings in accordance with the Samruk-Kazyna risk management policy
- ◆ to strengthen the role of the risk management system, provided direct Head of the Risk Management Department accountability to the Management Board Chairman
- ◆ had the Board of Directors approve risk management reports quarterly
- ◆ included monthly risk reporting in the Monthly Management Report
- ◆ introduced an internal corruption seminar



**Implementation of the Plan has helped improve corporate governance in KMG in the following key areas:**

- ◆ Risk management
- ◆ Sustainable development
- ◆ Efficiency of the Board of Directors

**APPROACH TO THE CONSIDERATION OF AGENDA ITEMS**

To improve corporate governance, in 2017 the Chairman of the Board of Directors, Christopher Walton submitted a proposal to structure the agenda for KMG Board of Directors meetings using the following four blocks:

- “Minutes and consequent decisions”, in which decisions and instructions from previous meetings are considered, and minutes from

previous meetings are submitted for joint discussion

- “Safety”, in which a KMG Occupational Safety and Environmental Protection Report is submitted to the KMG Board of Directors for review. Given the paramount importance of employee occupational safety and the priority of environmental protection objectives, the KMG Occupational Safety and Environmental Protection Report has been allocated a separate agenda block and is reviewed every month
- “Issues for resolution”, the largest block and which includes the majority of issues relating to KMG operating, investment and financial activities
- “Information for reference”, which includes periodic informative reports to ensure Board of Directors members are made aware

of key changes in KMG current activities in good time

Efforts to monitor the effective use of time in the consideration of each issue were increased.

**AUTOMATION OF THE BOARD OF DIRECTORS**

In accordance with a Board of Directors Resolution dated 30 November 2017 (Minutes No. 16/2017), to ensure the efficiency, timeliness and awareness of the decision-making process, BoardMaps software was introduced to automate KMG Board of Directors processes, allowing KMG to replace hard copy documents provided to Board of Directors members and committees with electronic copies; better plan, prepare, hold and document meetings. The new system improves the performance of the Board of Directors and its Committees.



# INFORMATION FOR SHAREHOLDERS AND INVESTORS

## KMG SHAREHOLDERS (AS AT 31 DECEMBER 2017)

Holder name	Ordinary shares, pcs.	Ordinary shares, %	Preferred shares	Total shares, pcs.	Total shares, %
JSC Samruk-Kazyna Sovereign Wealth Fund	530,979,141	90.09	–	530,979,141	90.09
National Bank of the Republic of Kazakhstan	58,420,748	9.91	–	58,420,748	9.91

## INFORMATION ON KMG SECURITIES ISSUED (AS AT 31 DECEMBER 2017)

Share type	Number of authorised shares	Number of outstanding shares	Number of unplaced shares
Ordinary	849,559,596	589,399,889	260,159,707

### Information on the current share value, earnings per share and share book value:

- ◆ KMG shares are not traded on any stock exchange

### KMG CREDIT RATINGS

**Moody's Investors Service:** "Baa3" rating, "Stable" outlook (1 August 2017)

**Standard & Poor's:** "BB-" rating, "Stable, kza-" outlook (30 January 2018)

**Fitch Ratings:** "BBB-" rating, "Stable" outlook (29 June 2017)

### DIVIDEND POLICY

#### Principles of KMG's dividend policy

- ◆ guarantee Samruk-Kazyna's payment of dividends on the state-owned stake, and make payments and incur expenses on behalf of Samruk-Kazyna's sole shareholder
- ◆ ensure the financing of Samruk-Kazyna activities, including the financing of new activities and investment projects implemented at Samruk-Kazyna's expense
- ◆ the Companies' need to finance development costs, including the cost of investment activities

## DIVIDENDS

Resolution of the Samruk-Kazyna Management Board dated 30 May 2017 introduced the following procedure for distributing KMG net income for 2016 of 305,849,105,000 tenge:

- 1) 6,670,370,000 tenge or 2% of KMG consolidated net income should be spent on dividends
- 2) KMG should retain the remaining net income of 299,178,735,000

The approved dividend for one ordinary share of KMG for 2016 was 11 tenge 32 tiyn.

Likewise, Resolution of the Samruk-Kazyna Management Board dated 30 May 2017 allocated 39,206,995,750 tenge of KMG net income for 2013. The dividend value for 2013 per KMG share was 66 tenge 52 tiyn.

### Information on dividends paid in previous years:

- ◆ Accrued dividends at the end of 2014 amounted to 31.1 bln. tenge
- ◆ Accrued dividends at the end of 2015 amounted to 59.7 bln. tenge
- ◆ Accrued dividends at the end of 2016 amounted to 6.6 bln. tenge

### Investor interaction

<b>April 2017</b>	Eurobond (2.75 bln. USD) road show
<b>June 2017</b>	Conference call with investors regarding financial and operating performance for Q1 2017
<b>September 2017</b>	Conference call with investors regarding financial and operating performance for Q2 2017
<b>November 2017</b>	Investor and bondholder road show (non-deal road-show) in London
<b>December 2017</b>	Conference call with investors regarding financial and operating performance for Q3 2017

### Contact information for investors

The KMG Investor Relations Service provides interaction with existing KMG bond holders and potential KMG investors. The E-mail for investor relations: [ir@kmg.kz](mailto:ir@kmg.kz).

## Internal control and audit

### INFORMATION ON THE CENTRALISED INTERNAL AUDIT SERVICE

- ◆ The centralised Internal Audit Service (IAS) reports to the KMG Board of Directors and is managed by the Audit Committee of the KMG Board of Directors. It operates in compliance with Kazakhstan law, KMG internal regulations and International Occupational Internal Audit Standards.
- ◆ The main goal of the IAS is to provide the Board of Directors with independent and objective information to ensure the effective management of KMG and its subsidiaries by employing a systematic approach towards improving risk management, internal control and corporate governance processes.
- ◆ To perform its activities in accordance with an annual audit plan, the IAS:

  - ◆ assesses the reliability and effectiveness of applicable internal controls and risk management procedures
  - ◆ assesses the reliability, completeness and objectivity of the accounting system and financial statements of KMG and its subsidiaries and affiliates prepared on the basis of it
  - ◆ assesses the rationality of using the resources of KMG and its subsidiaries and the methods used to ensure the preservation of assets
  - ◆ control compliance with statutory requirements in Kazakhstan, corporate regulations and rules for performing operating, investment and financial activities
- ◆ The IAS uses audit results to provide recommendations on improving KMG operations. It systematically monitors and controls the development and implementation of measures aimed to implement recommendations.
- ◆ Pursuant to the requirements of International Occupational Internal Audit Standards and to ensure the proper quality of internal audit, the IAS implements a system for the continuous professional development of auditors. As a result, of the 29 IAS employees, 24 or 83% hold international certificates and diplomas, such as:

  - ◆ Certified Internal Auditor – 5
  - ◆ Diploma in International Financial Reporting – 5
  - ◆ Professional Accountant of the Republic of Kazakhstan – 9
  - ◆ Certified Accounting Practitioner/Certified International Professional Accountant – 5
  - ◆ Certified Professional Internal Auditor Diploma – 15
  - ◆ Certified Fraud Examiner – 1
  - ◆ Certified Information Systems Auditor – 2

## Annex to the Annual Report of JSC NC «KazMunayGas» for 2017

This Report on compliance with provisions and principles of the Corporate Governance Code (hereinafter - the Code) of JSC NC «KazMunayGas» (hereinafter - KMG) (approved by the resolution of the Sole Shareholder of KMG dated May 27, 2015, Minutes № 22/15) is developed to implement item 6 of the Code. It covers information on KMG's compliance with the principles and provisions of the Code.

In general, at year-end 2017 KMG complied with provisions and principles of the Code, except for the following aspects:

№	CODE REFERENCE	PROVISIONS OF THE CODE	"EXTENT OF COMPLIANCE	COMMENTS
1	2	3	4	5
<b>ПРАВИТЕЛЬСТВО</b>				
1	item 2 of Chapter 1	During the development and monitoring of the implementation of the strategy, the Board of Directors and the executive body hold strategic sessions where the main activities, tasks, issues, risks, corrective measures are discussed.	complies partially	In December 2017, a strategic session was held with the members of the KMG Management Board. The materials prepared for that strategic session were submitted to the Strategy and Innovations Committee of the Board of Directors of KMG with a relevant discussion. The joint strategic session with the members of the Board of Directors and Management Board of KMG is scheduled for September 2018 in the approved calendar of meetings of the Board of Directors of KMG for 2018.
2	item 2 of Chapter 1	It is recommended to provide the optimal structure for the Fund's Organizations. The parent company can be established in the form of a joint-stock company in the Holding company. Other organizations are recommended to establish in the form of limited liability partnership. In the organizations that have been already established in the form of a joint-stock company, it is recommended to consider the possibility for reorganization in the form of a limited liability company with account of economic, legal and other aspects and interests of the Fund. When creating new Organizations the preferred legal form is limited liability partnership. Creation of new Organizations in the form of a joint-stock company is allowed in exceptional cases such as planned in the future transfer of the Organization's shares to the Stock Exchange Market.	complies partially	The implementation of the Transformation Program of KMG Group provides a reduction in the number of management levels through the addition of subholdings to the national company. As part of the Transformation Program, it is proposed to simplify the assets structure of KMG Group including through the liquidation/reorganization of subholdings. Thus, in 2017, the activities on joining of KazMunayGas - Processing and Marketing JSC, KMG subholding, to KMG were completed, and the process of integration of the other KMG subholdings with KMG was initiated. In December 2015, the Government of the Republic of Kazakhstan approved the Comprehensive Privatization Plan for 2016-2020, which included 73 companies of KMG Group. In general, in 2017, measures were taken on 18 assets, including: 5 companies sold; 4 companies liquidated; 2 companies reorganized and 7 companies included in the perimeter of KMG IPO. The optimization of the assets structure of KMG Group will continue in the future. When creating new Organizations, KMG gives preference to the establishment of Organizations in the form of a limited liability partnerships. In 2017, legal entities in the form of a joint stock company were not created.

KMG Business Model and Business Geography	Strategy	Transition to a New Operating Model	Group performance	Technology: Research and Development Institute of Production and Drilling Technology	Social and Environmental Responsibility	Risk Management	Corporate Governance report
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1	2	3	4	5
3	item 2 of Chapter 1	When creating the Organization in the form of a limited liability partnership, participants decide independently on the need of creation of the Supervisory Boards and the feasibility of the election to its composition of independent members depending on the scope and specifics of the newly established organization.	complies partially	When establishing the Organization in the form of the LLP, if necessary, supervisory boards are created, while the number of members of the Supervisory Board depends on the scale of the Organization's activities. The election of independent directors to the Supervisory Boards of KMG Group organizations is not used due to the lack of necessity and coordination of such practices by the party who owns all the voting shares of KMG - Samruk-Kazyna JSC. In 2017, Magistralny Vodovod LLP was established. The creation of the Supervisory Board in it is not planned.
4	item 14 of Chapter 1	Boards of Directors of the Fund and organizations ensure the implementation of business ethics standards and their compliance. All officials and employees of the Fund and organizations should sign the statement on acknowledgement of the Business Ethics Code and regularly confirm their knowledge of the Code.	complies partially	The Business Ethics Code of KMG was updated and approved by the decision of the Board of Directors of KMG on September 29, 2016, (Minutes No.13/2016). In 2017 a training devoted to a clarification of the Business Ethics Code's provisions for the employees of the KMG's Corporate Center was held. KMG has not implemented the practice of regularly confirming a knowledge of this Code by its employees.

#### THE FUND AND ORGANIZATIONS

5	item 3 of Chapter 2	The Boards of Directors of the Companies have full autonomy in decision-making within their competence, established by the charter of Companies.	complies partially	According to item 4 of the KMG Charter, KMG's financial and production activities are carried out on the basis of economic independence; in compliance with item 13 of the KMG Charter, the objective of KMG is to obtain net income in the course of independent economic activity; in accordance with item 24 of the KMG Charter, KMG independently solves all issues related to the planning of production activities, labor remuneration, logistics, social development, income distribution, recruitment, placement and retraining of personnel. At that, some documents of the Samruk-Kazyna JSC (Investment Policy approved by the Board of Directors of the Samruk-Kazyna JSC on September 26, 2017, the Rules for approval of the appointment and early termination of the powers of the heads of executive bodies of legal entities, all voting shares of which are directly or indirectly owned by the Samruk-Kazyna JSC approved by the decision of the Fund's Management Board dated October 16 2012, Minutes No.40/12) provide the procedures that restrict the full independence of the KMG Board of Directors in making decisions (including the conclusion of M&A transactions, appointment of heads of executive bodies of KMG's subsidiaries).
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1	2	3	4	5
6	item 9 of Chapter 2	Other possible management mechanisms for a group of the holding company include the centralization of certain functions (planning, treasury, accounting, information technology, legal support, internal audit and others).	complies partially	<p>The internal audit has been centralized since 2008, except for the companies of KMG Group, where the existence of the separate internal audit service is mandatory requirement of the law. Their centralization is envisaged within the integration of subholdings.</p> <p>As part of the Business Transformation Program, KMG, taking into account the results of the analysis of existing business processes, decided to centralize functions of treasury, IT, accounting and tax accounting, HR functions on the basis of relevant specialized service organizations - Shared Service Centers. The phased implementation of the corresponding projects for the centralization of functions began in 2017 and will continue in the future in accordance with the schedule provided by the Roadmap for the Transformation Program.</p> <p>The activity on Transformation and Centralization of legal functions of the KMG's group of companies is being implemented by the Legal Support block of KMG since December of 2017.</p>

#### SUSTAINABLE DEVELOPMENT

7	item 5 of Chapter 3	The Fund and the Organizations should have a management system in the field of Sustainable Development.	complies partially	In the second quarter of 2017, the Samruk-Kazyna JSC sent a new Reference Model for Sustainable Development to KMG, which will form the basis for building a management system for sustainable development. In 2017, the preparation was carried out, the completion of the development of a management system for sustainable development is planned for Quarter 4, 2019.
8	item 5 of Chapter 3	The Board of Directors carries out strategic management and control over the implementation of sustainable development. The executive body forms the corresponding action plan and submits it for consideration of the Board of Directors.	complies partially	<p>The obligation of the Board of Directors of KMG to ensure the growth of long-term value and sustainable development is provided by the Charter of KMG.</p> <p>As of December 31, 2017, KMG has no Action Plan for the implementation of sustainable development.</p> <p>In 2018, the KMG's Board of Directors is planning a separate strategic session devoted to discussing sustainable development issues and elaborating an appropriate approach to building a sustainable development system in KMG.</p>

#### RIGHTS OF SHAREHOLDERS

9	item 2 of Chapter 4	The Organization must have a transparent procedure for the election and establishment of remuneration of the Board of Directors (Supervisory Board and/ or the Executive Board) approved by the Annual General Meeting/ Shareholder (the Sole Shareholder)/Participant (the Sole Participant). The election of the composition of the Board of Directors (Supervisory Board and/ or the Executive Board) is performed in the order determined by the law of the Republic of Kazakhstan, the Charter and internal documents of the Organization and this Code.	complies partially	<p>The issues of election of the Board of Directors and establishment of remuneration to the members of the Board of Directors are regulated by the Rules on Forming the Board of Directors of companies of Samruk-Kazyna JSCs approved by the decision of the Management Board of the Samruk-Kazyna JSC of September 26, 2016 (Minutes No.35/16).</p> <p>The implementation of the relevant document on the Boards of Directors (Supervisory Boards) of KMG subsidiaries is scheduled for Q2 2018.</p>
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KMG Business Model and Business Geography	Strategy	Transition to a New Operating Model	Group performance	Technology: Research and Development Institute of Production and Drilling Technology	Social and Environmental Responsibility	Risk Management	Corporate Governance report
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1	2	3	4	5
10	item 2 of Chapter 4	Distribution of net profit and payment of dividends by companies, more than fifty percent of shares (interests) of which are owned by the Fund on the property right or trust management, is carried out in compliance with the dividend policy of the Fund.	complies partially	Distribution of net profit and payment of dividends by KMG is carried out in accordance with the Dividend Policy of the Samruk-Kazyna JSC. At that, according to the results of independent diagnostics of the level of corporate governance of KMG conducted in 2017 by an independent consultant - PricewaterhouseCoopers LLP - KMG was recommended to develop their own dividend policy based on the IPO plans. In this context, the relevant event will be implemented after the decision-making on the issue of IPO of KMG.

#### THE BOARD OF DIRECTORS AND THE EXECUTIVE BOARD

11	item 3 of Chapter 5	In order to understand the relevant issues of the organization's activities, the members of the Board of Directors should regularly visit the key facilities of the organization and hold meetings with employees.	complies partially	In May 2017, a meeting of the KMG Board of Directors was held in Atyrau, within which the members of the KMG Board of Directors visited one of the key production facilities of the KMG group of companies - Atyrau Oil Refinery, and held meetings with employees (representatives) of Embamunaygaz, Tengizchevroil LLP, Atyrau Oil Refinery LLP, North Caspian Operating Company N.V.). In the future, it is planned to hold similar meetings on a regular basis. In addition, the Induction Program for newly elected members of the Board of Directors provides visits to key production facilities of the KMG group of companies.
12	item 6 of Chapter 5	The Fund and Organizations must have succession plans of appointments to the Board of Directors in order to maintain business continuity of operations and progressive renewal of the Board of Directors.	not complies	KMG has no succession plan for the members of the Board of Directors. The formation and approval of the succession plan of the Board of Directors of KMG is provided in the Roadmap for the Improvement of Corporate Governance of KMG for 2018.
13	item 7 of Chapter 5	The Board of Directors approves the professional development program for each member of the Board of Directors.	complies partially	In 2017 the program of professional development for each member of the Board of Directors of KMG was not approved by the Board of Directors of KMG. The Training Plan for members of the KMG Board of Directors is planned to be approved in 2018. When forming the Training Plan, the members of the Board of Directors of KMG will take into account the recommendations submitted by an independent consultant following the results of an evaluation of the activities of the Board of Directors, Committees of the Board of Directors and members of the Board of Directors of KMG in 2017.
14	item 12 of Chapter 5	Meetings of the Board of Directors are held in accordance with the work plan approved before the beginning of the calendar year including a list of considered issues and a schedule of meetings with dates.	complies partially	Meetings of the Board of Directors of KMG in 2017 were conducted in compliance with the approved Work Plan of the Board of Directors, including, among other things, a list of issues and dates of meetings. The Work Plan of the Board of Directors of KMG for 2017 was not approved before the beginning of the corresponding calendar year. The decision to approve the Work Plan of the Board of Directors of KMG was made by the Board of Directors of KMG on January 26, 2017 (Minutes No.1/2017).
15	item 12 of Chapter 5	The recommended frequency of meetings of the Board of Directors is 8-12 meetings per year.	complies partially	In 2017, 19 meetings of the Board of Directors were held, instead of 8-12 meetings recommended by the Code. This is due to the urgent issues, which were considered at extraordinary meetings of the Board of Directors.

1	2	3	4	5
16	item 12 of Chapter 5	It is recommended that the number of issues planned for consideration of the Board of Directors during the year be evenly distributed to ensure thorough and full discussion and timely and high-quality decisions.	complies partially	In 2017, the Board of Directors of KMG held 19 meetings. Of these, 12 are regular in-presence meetings of the Board of Directors and 7 are extraordinary meetings held through a conference call (simultaneous discussion of the members of the Board of Directors in the «telephone meeting» mode). The number of issues considered by the Board of Directors in 2017 at in-presence meetings was not evenly distributed. The agenda for the next regular meetings of the Board of Directors of KMG included 7 to 25 issues. At extraordinary meetings, the Board of Directors of KMG considered from 1 to 6 issues in the reporting period. The uneven distribution of the number of issues considered by the Board of Directors in 2017 is caused by the inclusion of additional urgent issues in the agenda, as well as the convening of extraordinary meetings.
17	item 10 of Chapter 5	The establishment of the remuneration for member of the Board of Directors of a Company should be made in accordance with the methodology developed by the Fund. Additionally the expected positive effect to the organization of participation in the Board of Directors of particular member should be taken into account.	complies partially	The decision of the Management Board of the Samruk-Kazyna JSC dated September 26, 2016 (Minutes No.35/16) approved the Rules for the Formation of the Board of Directors of companies of Samruk-Kazyna JSC providing, among other things, the procedure for establishing remuneration to members of the Board of Directors. When determining the amount of remuneration, the duties of a member of the Board of Directors, the scale of the company's activities, long-term goals and tasks are taken into account. Remuneration is paid to independent directors. Representatives of the Samruk-Kazyna JSC on the Board of Directors of Organizations are remunerated on the basis of the decision of the Management Board of the Samruk-Kazyna JSC. The implementation of the relevant document on the Boards of Directors (Supervisory Boards) of KMG subsidiaries is scheduled for Q2 2018.
18	item 13 of Chapter 5	The Board of Directors, committees and members of the Board of Directors shall be evaluated on an annual basis as part of a structured and approved process that is approved by the Board of Directors of the Organization. This process should follow the methodology of the Fund. At the same time at least once in every three years assessment is carried out by an independent professional organization.	complies partially	In June 2017, an independent consultant PricewaterhouseCoopers LLP completed the evaluation of the activities of the Board of Directors, Committees of the Board of Directors and members of the Board of Directors of KMG. Following the results of this evaluation, the consultant gave a number of recommendations to KMG. The results of the external evaluation were considered by the Board of Directors of KMG on July 31, 2017 (Minutes No.10/2017). Based on the results of the external evaluation, the composition of KMG Board of Directors was revised. The implementation of the recommendations based on the results of the external evaluation was partially implemented in 2017, the full implementation is planned in the Roadmap for Improvement of Corporate Governance of KMG for 2018. In connection with the external evaluation of the activities of the Board of Directors of KMG, the Committees of the Board of Directors and members of the Board of Directors, in 2017, as well as the diagnostics of KMG's corporate governance, there was no self-evaluation of the Board of Directors.

KMG Business Model and Business Geography	Strategy	Transition to a New Operating Model	Group performance	Technology: Research and Development Institute of Production and Drilling Technology	Social and Environmental Responsibility	Risk Management	Corporate Governance report
1	2	3	4	5			
19	item 14 of Chapter 5	The process, timing and procedure for assessing the activities of the Board of Directors, its Committees and members of the Board of Directors should be clearly regulated in the internal documents of the organization.	complies partially	<p>The process, timing and procedure for assessing the activities of the Board of Directors, its Committees and members of the Board of Directors are regulated by the Regulations on the evaluation of the activities of the Board of Directors, Committees of the Board of Directors, members of the Board of Directors, the Management Board, the Head and members of the Management Board, the Internal Audit Service and its head by the Board of Directors of JSC «NC «KazMunayGas» approved by the decision of KMG's Board of Directors dated September 22-23, 2009 (Minutes No.12/2009). In 2018, it is planned to develop and approve new Regulations on the evaluation of the activities of the Board of Directors, Committees of the Board of Directors, members of the Board of Directors in compliance with the guidelines of the Samruk-Kazyna JSC for evaluating the activities of the Board of Directors and its Committees, the Chairman, the members of the Board of Directors and the Corporate Secretary of organizations, approved by the decision of the Management Board of the Samruk-Kazyna JSC dated December 14, 2017 (Minutes No.44/17), and taking into account the recommendations of independent consultants based on the results of 2017:</p> <p>1) evaluation of the activities of the Board of Directors, Committees of the Board of Directors and members of the Board of Directors of KMG;</p> <p>2) diagnostics of KMG's corporate governance level.</p>			
20	item 14 of Chapter 5	The evaluation of the Board of Directors, its Committees and members of the Board of Directors, feedback to the members of the Board of Directors and development of follow-up improvement measures are carried out under the supervision of the Chairman of the Board of Directors. The results of the evaluation are discussed at a separate meeting of the Board of Directors, which results in the development program for the Board of Directors as a whole and individually for each of its members.	complies partially	<p>In 2017 an independent consultant evaluated the activities of the Board of Directors of KMG, Committees of the Board of Directors and members of the Board of Directors under the leadership of the Chairman of KMG Board of Directors. The results of the external evaluation were considered at the in-person meeting of the Board of Directors of KMG on July 31, 2017 (Minutes No.10/2017), and the composition of KMG SD was revised based on the results.</p> <p>The recommendations of the independent consultant are laid down in the Roadmap for the Improvement of Corporate Governance of KMG for 2018 including the need to develop the Development Program for the Board of Directors in general and individually for each of its members.</p>			
21	item 20 of Chapter 5	In case of change of the Chairman of the Board of Directors it is recommended to ensure succession in the composition of the Board of Directors.	complies partially	<p>Based on the results of an external evaluation of the activities of the Board of Directors, Committees of the Board of Directors and members of the Board of Directors of KMG in 2017, the consultant gave corresponding recommendations. As a result, C.J. Walton became the new Chairman of the Board of Directors of KMG, who has been the Independent Director of KMG since 2014. Thus, succession was provided in the composition of the Board of Directors of KMG.</p> <p>At that, KMG has no approved Succession Plan of the Board of Directors including the Chairman of the Board of Directors, as well as documents regulating the succession of the Board of Directors.</p>			

1	2	3	4	5
<b>RISK MANAGEMENT AND INTERNAL CONTROL SYSTEM</b>				
22	item 4 of Chapter 6	The Board of Directors should approve the overall level of risk appetite and levels of tolerance for key risks that should be enshrined in the company's internal documents.	complies partially	<p>The total risk appetite for 2017 is approved by the decision of the Board of Directors of KMG on July 31, 2017 (Minutes No.10/2017).</p> <p>As part of the implementation of the vertical process for managing production and non-production risks at the KMG group of companies, the relevant internal documents of KMG on the corporate risk management system were approved in the established order. These documents provide the need to determine the levels of tolerance for key risks.</p> <p>With that, the tolerance levels for KMG's key risks in 2017 were not approved. Determining the levels of tolerance for risks and their regular monitoring to ensure compliance with risk appetite are laid down in the Roadmap for Improving Corporate Governance of KMG for 2018.</p>
23	item 4 of Chapter 6	Levels of tolerance for key risks are reviewed in case of significant events.	complies partially	Measures to approve the levels of tolerance for key risks, their regular monitoring and review of the tolerance levels for key risks in case of significant events are included in the Roadmap for Improving Corporate Governance of KMG for 2018.
24	item 7 of Chapter 6	The Board of Directors jointly with the Audit Committee are responsible for conducting annual assessments of the effectiveness of the risk management and internal control system.	complies partially	<p>In 2017, independent consultant PricewaterhouseCoopers LLP carried out a diagnostics of the level of KMG's corporate governance through five components including Risk Management, Internal Control and Audit.</p> <p>A separate assessment of the effectiveness of the risk management and internal control system was not carried out in 2017.</p>

# TERMS, ACRONYMS AND ABBREVIATIONS

AGP	Asia Gas Pipeline LLP
APG	Associated petroleum gas
BOT	Batumi Oil Terminal Ltd
BSGP	Beineu-Shymkent Gas Pipeline LLP
BSO	Behavioural safety observations
CDP	Carbon Disclosure Project
COCO	Owned and operated by the Company
CODO	Owned by the Company and operated by dealers
CPC	Caspian Pipeline Consortium
DODO	Owned and operated by dealers
EBITDA	Earnings before interest, taxation, depreciation and amortisation
EIA	Energy Information Administration
FGP	Future Growth Project
GDP	Gross Domestic Product
GDR	Global Depositary Receipt
GGFR	Global Gas Flaring Reduction Partnership
GMI	Global Methane Initiative
GTM	Geological and technical measures
HR	Human Resources
HSE	Health, safety and environment
ICA	JSC Intergas Central Asia
JSC	Joint Stock Company
KBTU	Kazakh-British Technical University
KCP	Kazakhstan-China Pipeline LLP
KMG I	KMG International N.V.
KMG, Company, Group	JSC National Company KazMunayGas
KPI	Key performance indicator
KPO	Karachaganak Petroleum Operating
KTG	JSC KazTransGas
KTGA	JSC KazTransGas Aimak

KTO	JSC KazTransOil
LLP	Limited Liability Partnership
NCOC	North Caspian Operating Company
PKOP	PetroKazakhstan Oil Products, Shymkent Refinery
POCR	Pavlodar Oil Chemistry Refinery
PPE	Personal protection equipment
RSU	Russian State University of Oil and Gas
TCO	Tengizchevroil LLP
TRM	Oil Transportation, Refining and Marketing
USPTU	Ufa State Petroleum Technical University
WPMP	Wellhead Pressure Management Project
POCR	Pavlodar Oil Chemistry Refinery
PPE	Personal protection equipment
RSU	Russian State University of Oil and Gas
TCO	Tengizchevroil LLP
TRM	Oil Transportation, Refining and Marketing
USPTU	Ufa State Petroleum Technical University
WPMP	Wellhead Pressure Management Project



**ҚазМұнайГаз**  
NATIONAL COMPANY / ҰЛТТЫҚ КОМПАНИЯСЫ

JSC “National Company  
“KazMunayGas”  
Consolidated financial  
statements

*For the year ended December 31, 2017  
with independent auditors' report*

**2017**

**ANNUAL REPORT**

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Independent auditors' 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 2017, the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year 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 2017 and its consolidated financial performance and its consolidated cash flows for the year 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* (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 a separate 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 the 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 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 product 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.

### ***Discontinued operations***

On 15 December 2016, the Group signed a share sale and purchase agreement (the SPA) to sell a 51% interest in KMG International NV (KMGI) subsidiary of the Group.

In 2017, all conditions precedent indicated in the SPA were executed and on 15 December 2017, the Group signed an addendum to the SPA and a conditional act of transfer of shares with an expectation to complete the transaction in June 2018.

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 sensitivity analysis.

We focused on the analysis of criteria for the classification of assets as held for sale, and operations as discontinued. We examined the SPA and an addendum to the SPA and obtained managements' assessment of the status of execution of conditions precedent to the transaction. We analysed the management's assessment of the fair value less cost to sell of KMGI's assets and liabilities that is based on the terms of the SPA.



This area was one of the most significance in our audit because of the uncertainty of completion of the sale of 51% interest in KMGI and the judgement required to assess whether or not the sale is highly probable. Such assessment impacts the measurement and presentation of assets of KMGI classified as held for sale and liabilities directly associated with them, and the results from discontinued operations, that are material to the consolidated financial statements.

Information associated with discontinued operations is disclosed in Note 5 to the consolidated financial statements; a description of the accounting policy and key judgements and estimates is included in Notes 3 and 4 to the consolidated financial statements.

### ***Compliance with loan covenants***

In accordance with the terms of certain financing arrangements, the Group should maintain and 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 costs, therefore, we focused on this area during our audit. Breaching covenants could result in significant fines and penalties along with 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 19 to the consolidated financial statements.

We examined the terms of financing arrangements. We compared data used in the calculations with the financial statements. We assessed arithmetic accuracy of financial covenants calculations.



### ***Other information included in the Group's 2017 annual report***

Other information consists of the information included in the Group's 2017 Annual Report other than the consolidated financial statements and our auditor's report thereon. Management is responsible for the other information. The Group's 2017 Annual Report is expected to be made available to us after the date of this auditor's report.

Our opinion on the consolidated financial statements does not cover the other information and we will 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 identified above when it becomes available 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.

### ***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 consolidated 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.



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, 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.

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*



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

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12 March 2018

## CONSOLIDATED STATEMENT OF FINANCIAL POSITION

In thousands of tenge	Note	As at December 31	
		2017	2016*
<b>ASSETS</b>			
<b>Non-current assets</b>			
Property, plant and equipment	7	3,359,094,790	2,953,135,665
Exploration and evaluation assets	8	253,326,100	231,553,168
Investment property	9	27,423,225	29,480,044
Intangible assets	10	115,431,414	116,488,612
Long-term bank deposits	11	48,523,034	50,027,102
Investments in joint ventures and associates	12	3,810,351,341	3,706,276,810
Deferred income tax asset	31	65,135,777	71,909,033
VAT receivable		96,666,045	71,918,992
Advances for non-current assets		124,906,942	139,185,121
Loans and receivables due from related parties	15	672,448,689	565,994,497
Other financial assets	16	4,161,312	–
Other non-current assets		14,027,609	20,687,850
		<b>8,591,496,278</b>	<b>7,956,656,894</b>
<b>Current assets</b>			
Inventories	13	108,897,355	98,776,900
VAT receivable		68,245,090	68,719,671
Income tax prepaid		35,586,296	74,457,414
Trade accounts receivable	14	306,324,631	279,811,631
Short-term bank deposits	11	1,638,940,642	1,182,669,493
Loans and receivables due from related parties	15	169,501,500	135,673,233
Other current assets	14	167,916,249	149,079,608
Cash and cash equivalents	17	1,190,156,359	878,438,350
		<b>3,685,568,122</b>	<b>2,867,626,300</b>
Assets classified as held for sale	5	1,111,688,937	1,058,794,076
		<b>4,797,257,059</b>	<b>3,926,420,376</b>
<b>TOTAL ASSETS</b>		<b>13,388,753,337</b>	<b>11,883,077,270</b>

The accounting policies and explanatory notes on pages 8 through 97 form an integral part of these consolidated financial statements.

## CONSOLIDATED STATEMENT OF FINANCIAL POSITION (continued)

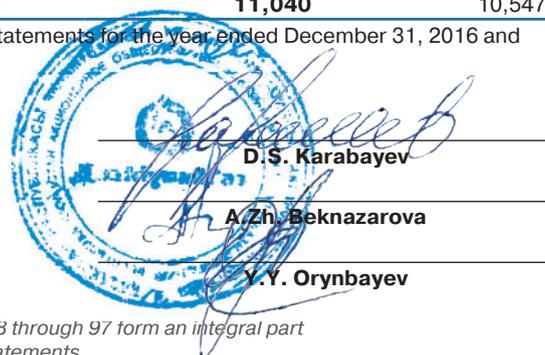
		As at December 31	
In thousands of tenge	Note	2017	2016
<b>EQUITY AND LIABILITIES</b>			
<b>Equity</b>			
Share capital	18	709,344,505	696,376,625
Additional paid-in capital	18	243,876,410	243,655,405
Other equity		83,185	222,074
Currency translation reserve		1,298,442,284	1,372,771,521
Retained earnings		3,500,635,709	3,163,685,193
<b>Attributable to equity holders of the Parent Company</b>		<b>5,752,382,093</b>	<b>5,476,710,818</b>
<b>Non-controlling interest</b>	18	<b>870,017,901</b>	<b>801,560,097</b>
<b>Total equity</b>		<b>6,622,399,994</b>	<b>6,278,270,915</b>
<b>Non-current liabilities</b>			
Borrowings	19	3,399,487,735	2,706,101,321
Provisions	21	150,638,244	139,371,823
Deferred income tax liabilities	31	312,013,046	264,599,978
Financial guarantee		10,767,166	12,259,980
Prepayment on oil supply agreements	22	581,577,501	738,572,306
Other non-current liabilities		46,270,628	52,509,205
		<b>4,500,754,320</b>	<b>3,913,414,613</b>
<b>Current liabilities</b>			
Borrowings	19	763,955,792	366,438,649
Provisions	21	78,812,199	94,394,277
Income tax payable		7,705,079	2,301,839
Trade accounts payable	22	325,120,176	260,137,009
Other taxes payable	23	79,168,191	34,014,457
Financial guarantee		1,170,697	1,211,481
Prepayment on oil supply agreements	20	332,330,000	249,967,500
Other current liabilities	22	144,405,371	119,042,249
		<b>1,732,667,505</b>	<b>1,127,507,461</b>
Liabilities directly associated with the assets classified as held for sale	5	532,931,518	563,884,281
<b>Total liabilities</b>		<b>6,766,353,343</b>	<b>5,604,806,355</b>
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>13,388,753,337</b>	<b>11,883,077,270</b>
Book value per ordinary share	18	11,040	10,547

\*Certain numbers shown here do not correspond to the consolidated financial statements for the year ended December 31, 2016 and reflect combination of notes made, refer to Note 2.

Executive vice-president – financial director

Vice-president – finance controller

Chief accountant



D.S. Karabayev

A.Zh. Beknazarova

Y.Y. Orynbayev

The accounting policies and explanatory notes on pages 8 through 97 form an integral part of these consolidated financial statements.

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

In thousands of tenge	Note	For the years ended December 31	
		2017	2016
Revenue	24	2,458,835,090	1,857,435,356
Cost of sales	25	(2,379,902,871)	(1,561,746,019)
<b>Gross profit</b>		<b>78,932,219</b>	<b>295,689,337</b>
General and administrative expenses	26	(152,011,319)	(117,675,164)
Transportation and selling expenses	27	(288,527,270)	(198,473,083)
Impairment of property, plant and equipment, intangible assets	28	(25,641,552)	(3,282,679)
Loss on disposal of property, plant and equipment, intangible assets and investment property, net		(3,814,867)	(5,620,831)
Other operating income		20,164,501	19,429,680
Other operating expenses		(30,093,073)	(14,821,567)
<b>Operating loss</b>		<b>(400,991,361)</b>	<b>(24,754,307)</b>
Net foreign exchange gain/(loss)		67,182,980	(12,894,441)
Finance income	29	121,735,274	167,891,688
Finance costs	29	(294,897,464)	(230,383,354)
Reversal/(impairment) of investments in joint ventures		14,845,359	(5,503,379)
Impairment of assets classified as held for sale		(67,594)	(92,601)
Impairment of loan given		–	(1,346,447)
Share in profit of joint ventures and associates, net	30	414,565,236	270,190,990
<b>(Loss)/profit before income tax</b>		<b>(77,627,570)</b>	<b>163,108,149</b>
Income tax expenses	31	(192,029,803)	(163,791,137)
Loss for the year from continuing operations		(269,657,373)	(682,988)
<b>Discontinued operations</b>			
Profit after income tax for the year from discontinued operations	5	789,183,404	360,854,031
<b>Net profit for the year</b>		<b>519,526,031</b>	<b>360,171,043</b>
<b>Net profit for the year attributable to:</b>			
Equity holders of the Parent Company		437,485,878	305,849,105
Non-controlling interest		82,040,153	54,321,938
		<b>519,526,031</b>	<b>360,171,043</b>

The accounting policies and explanatory notes on pages 8 through 97 form an integral part of these consolidated financial statements.

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (continued)

In thousands of tenge	Note	For the years ended December 31	
		2017	2016
<b>Other comprehensive loss</b>			
Other comprehensive loss to be reclassified to profit or loss in subsequent periods			
Exchange differences on translation of foreign operations		<b>(74,167,162)</b>	(38,081,340)
Accumulated differences on translation of disposal group		<b>(423,776)</b>	–
<b>Other comprehensive loss to be reclassified to profit or loss in the year</b>		<b>(74,590,938)</b>	(38,081,340)
<b>Other comprehensive (loss)/income not to be reclassified to profit or loss in subsequent periods</b>			
Actuarial (loss)/gain on defined benefit plans of the Group		<b>(1,148,036)</b>	3,775,606
Actuarial loss on defined benefit plans of joint ventures		<b>(173,333)</b>	(127,142)
Write-off of deferred tax assets		<b>(150,746)</b>	–
Tax effect		<b>8,642</b>	(807,240)
<b>Other comprehensive (loss)/income not to be reclassified to profit or loss in the year</b>		<b>(1,463,473)</b>	2,841,224
<b>Other comprehensive loss for the year</b>		<b>(76,054,411)</b>	(35,240,116)
<b>Total comprehensive income for the year, net of tax</b>		<b>443,471,620</b>	324,930,927
<b>Total comprehensive income for the year attributable to:</b>			
Equity holders of the Parent Company		<b>361,870,465</b>	275,618,617
Non-controlling interest		<b>81,601,155</b>	49,312,310
		<b>443,471,620</b>	324,930,927

Executive vice-president – financial director

Vice-president – finance controller

Chief accountant



**D.S. Karabayev**

**A.Zh. Beknazarova**

**Y.Y. Orynbayev**

*The accounting policies and explanatory notes on pages 8 through 97 form an integral part of these consolidated financial statements.*

## CONSOLIDATED STATEMENT OF CASH FLOWS

In thousands of tenge	For the years ended December 31	
	2017	2016*
<b>Cash flows from operating activities</b>		
Receipts from customers	5,634,357,593	5,210,416,312
Payments to suppliers	(3,715,959,005)	(2,572,353,624)
Other taxes and payments	(914,413,795)	(781,008,413)
Income taxes paid	(112,604,740)	(106,406,440)
Interest received	104,803,503	61,212,114
Interest paid	(216,639,835)	(197,781,984)
Payments to employees	(369,717,122)	(336,491,364)
Taxes received from Tax authorities	79,392,887	31,066,631
Other payments	(89,330,944)	(32,472,306)
<b>Net cash flows from operating activities</b>	<b>399,888,542</b>	<b>1,276,180,926</b>
<b>Cash flows from investing activities</b>		
Placement of bank deposits, net	(457,272,356)	(269,568,073)
Purchase of property, plant and equipment, intangible assets, investment property and exploration and evaluation assets	(464,352,881)	(464,811,894)
Proceeds from sale of property, plant and equipment, intangible assets, investment property and exploration and evaluation assets	1,408,198	1,379,771
Proceeds from sale of subsidiaries (Note 6)	9,151,261	–
Cash acquired with subsidiaries	180,678	–
Dividends received from joint ventures and associates	271,782,500	118,607,550
Acquisition of and contribution to joint ventures	(2,625)	(160,057,189)
Refund of contribution to joint ventures	1,714,856	1,672,268
Repayment of loans due from related parties	336,957	125,002,452
Acquisition of debt securities (Note 16)	(332,401)	–
Note receivable from associate	118,367	6,889,431
Loans given to related parties	(184,707,890)	(222,725,040)
<b>Net cash flows used in investing activities</b>	<b>(821,975,336)</b>	<b>(863,610,724)</b>

The accounting policies and explanatory notes on pages 8 through 97 form an integral part of these consolidated financial statements.

## CONSOLIDATED STATEMENT OF CASH FLOWS (continued)

In thousands of tenge	For the years ended December 31	
	2017	2016*
<b>Cash flows from financing activities</b>		
Proceeds from borrowings (Note 19)	<b>1,508,170,132</b>	316,799,290
Repayment of borrowings (Note 19)	<b>(689,074,491)</b>	(530,514,370)
Distributions to Samruk-Kazyna	–	(2,202,898)
Dividends paid to Samruk-Kazyna and National Bank of RK (Note 18)	<b>(45,877,517)</b>	(90,853,335)
Dividends paid to non-controlling interests (Note 18)	<b>(12,415,761)</b>	(5,248,975)
Issue of shares (Note 18)	<b>1</b>	<b>1</b>
Net cash flows from / (used in) financing activities	<b>760,802,364</b>	(312,020,287)
Effects of exchange rate changes on cash and cash equivalents	<b>22,436,734</b>	(3,531,543)
Net change in cash and cash equivalents	<b>361,152,304</b>	97,018,372
Cash and cash equivalents, at the beginning of the year	<b>905,452,511</b>	808,434,139
Cash and cash equivalents, at the end of the year	<b>1,266,604,815</b>	905,452,511

\* The Group changed method of presentation of consolidated statement of cash flows (Note 2).

Executive vice-president – financial director

Vice-president – finance controller

Chief accountant



**D.S. Karabayev**

**A.Zh. Beknazarova**

**Y.Y. Orynbayev**

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

In thousands of tenge	Attributable to equity holder of the Parent Company						
	Share capital	Additional paid-in capital	Other equity	Currency translation reserve	Retained earnings	Non-controlling interest	
<b>As at December 31, 2015</b>	<b>696,363,445</b>	<b>243,655,405</b>	<b>3,110,573</b>	<b>1,405,325,707</b>	<b>2,988,542,754</b>	<b>753,179,913</b>	<b>6,090,177,797</b>
Net profit for the year	-	-	-	-	305,849,105	54,321,938	360,171,043
Other comprehensive income	-	-	-	(32,554,186)	2,323,698	(5,009,628)	(35,240,116)
<b>Total comprehensive income for the year</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(32,554,186)</b>	<b>308,172,803</b>	<b>49,312,310</b>	<b>324,930,927</b>
Contribution to share capital	13,180	-	-	-	-	-	13,180
Dividends	-	-	-	-	(59,748,893)	(5,167,227)	(64,916,120)
Distributions to Samruk-Kazyna	-	-	-	-	(22,401,021)	-	(22,401,021)
Transactions with Samruk-Kazyna	-	-	-	-	(50,871,857)	-	(50,871,857)
Recognition of share-based payments	-	-	891,404	-	-	518,777	1,410,181
Execution of share-based payments	-	-	(3,740,318)	-	-	3,740,318	-
Forfeiture of share-based payments	-	-	(39,585)	-	-	(23,038)	(62,623)
Change of share in subsidiaries	-	-	-	-	(8,593)	(956)	(9,549)
<b>As at December 31, 2016</b>	<b>696,376,625</b>	<b>243,655,405</b>	<b>222,074</b>	<b>1,372,771,521</b>	<b>3,163,685,193</b>	<b>801,560,097</b>	<b>6,278,270,915</b>

The accounting policies and explanatory notes on pages 8 through 97 form an integral part of these consolidated financial statements.

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (continued)

In thousands of tenge	Attributable to equity holder of the Parent Company						Total	Non-controlling interest	Total
	Share capital	Additional paid-in capital	Other equity	Currency translation reserve	Retained earnings	Total			
<b>As at December 31, 2016</b>	<b>696,376,625</b>	<b>243,655,405</b>	<b>222,074</b>	<b>1,372,771,521</b>	<b>3,163,685,193</b>	<b>5,476,710,818</b>	<b>801,560,097</b>	<b>6,278,270,915</b>	
Net profit for the year	-	-	-	-	437,485,878	437,485,878	82,040,153	519,526,031	
Other comprehensive income	-	-	-	(74,329,237)	(1,286,176)	(75,615,413)	(438,998)	(76,054,411)	
<b>Total comprehensive income for the year</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(74,329,327)</b>	<b>436,199,702</b>	<b>361,870,465</b>	<b>81,601,155</b>	<b>443,471,620</b>	
Contribution to share capital (Note 18)	12,967,880	221,005	-	-	-	13,188,885	-	13,188,885	
Dividends (Note 18)	-	-	-	-	(45,878,887)	(45,878,887)	(13,269,562)	(59,148,449)	
Distributions to Samruk-Kazyna (Note 18)	-	-	-	-	(23,634,306)	(23,634,306)	-	(23,634,306)	
Transactions with Samruk-Kazyna (Note 18)	-	-	-	-	(29,735,993)	(29,735,993)	-	(29,735,993)	
Recognition of share-based payments	-	-	-	-	-	-	-	-	
Execution of share-based payments	-	-	(130,900)	-	-	(130,900)	130,900	-	
Forfeiture of share-based payments	-	-	(7,989)	-	-	(7,989)	(4,689)	(12,678)	
Change of share in subsidiaries	-	-	-	-	-	-	-	-	
<b>As at December 31, 2017</b>	<b>709,344,505</b>	<b>243,876,410</b>	<b>83,185</b>	<b>1,298,442,284</b>	<b>3,500,635,709</b>	<b>5,752,382,093</b>	<b>870,017,901</b>	<b>6,622,399,994</b>	

Executive vice-president – financial director

Vice-president – finance controller

Chief accountant



D.S. Karabayev

A.Zh. Beknazarova

Y.Y. Orynbayev

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) For the year ended December 31, 2017

### 1. GENERAL

JSC “National Company “KazMunayGas” (the “Company”, “KazMunayGas” or “Parent Company”) is a wholly owned state 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 SamrukKazyna. 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, 2017, the Company has an interest in 52 operating companies (2016: 47) (jointly the “Group”).

The Company has its registered office in the Republic of Kazakhstan, Astana, Kabanbay Batyr avenue, 19.

The principal objective 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 34).

These consolidated financial statements of the Group were approved for issue by the Executive vice-president – financial director, vice-president – financial controller and the Chief accountant on March 12, 2018.

### 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 thousands, except when otherwise indicated.

#### 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.

The Group changed method of presentation of consolidated cash flow statement from indirect method to direct method for the period of January 1, 2017 to December 31, 2017 since the Group believes direct method is more relevant to users of consolidated financial statements. The Group adopted a method of presenting the consolidated cash flows statement on a retrospective basis.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 2. BASIS OF PREPARATION (CONTINUED)

#### Comparative information

Consolidated statement of financial position has been revised to combine certain items with similar nature.

Effect on consolidated statement of financial position as at December 31, 2017:

In thousands of tenge	As previously	Reclassifications	As reclassified
<b>Assets</b>			
<b>Non-current assets</b>			
Bonds receivable from Samruk-Kazyna	37,683,003	(37,683,003)	–
Note receivable from a shareholder of a joint venture	16,695,758	(16,695,758)	–
Note receivable from associate	34,837,804	(34,837,804)	–
Loans due from related parties	476,777,932	(476,777,932)	–
Loans and receivable due from related parties	–	565,994,497	565,994,497
<b>Current assets</b>			
Bonds receivable from Samruk-Kazyna	4,440,000	(4,440,000)	–
Note receivable from a shareholder of a joint venture	17,617,100	(17,617,100)	–
Loans due from related parties	113,616,133	(113,616,133)	–
Loans and receivable due from related parties	–	135,673,233	135,673,233

The above mentioned reclassifications did not have any impact on the consolidated financial statements of the Group. The management believes that such presentation is more transparent as they reflect the nature of such assets.

#### 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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 2. BASIS OF PREPARATION (CONTINUED)

#### Foreign currency translation (continued)

##### 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, 2017 was 332.33 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, 2017 (2016: 333.29 tenge to 1 US dollar). The currency exchange rate of KASE as at March 12, 2018 was 320.55 tenge to 1 US dollar.

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### 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, 2016, except for the adoption of new standards and interpretations effective as of January 1, 2017. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

The nature and the effect of these changes are disclosed below. Although these new standards and amendments apply for the first time in 2017, they do not have a material impact on the annual consolidated financial statements of the Group. The nature and the impact of each new standard or amendment is described below:

##### Amendments to IAS 7 Statement of Cash Flows: Disclosure Initiative

The amendments require entities to provide disclosure of changes in their liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes (such as foreign exchange gains or losses). The Group has provided the information for both the current and the comparative period in Note 19.

##### Amendments to IAS 12 Income Taxes: Recognition of Deferred Tax Assets for Unrealised Losses

The amendments clarify that an entity needs to consider whether tax law restricts the sources of taxable profits against which it may make deductions on the reversal of deductible temporary difference related to unrealized losses. Furthermore, the amendments provide guidance on how an entity should determine future taxable profits and explain the circumstances in which taxable profit may include the recovery of some assets for more than their carrying amount.

The Group applied amendments retrospectively. However, their application has no effect on the Group's financial position and performance as the Group has no deductible temporary differences or assets that are in the scope of the amendments.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### New and amended standards and interpretations (continued)

##### Annual improvements 2014-2016 cycle

##### Amendments to IFRS 12 Disclosure of Interests in Other Entities: Clarification of the scope of disclosure requirements in IFRS 12

The amendments clarify that the disclosure requirements in IFRS 12 apply to an entity's interest in a subsidiary, a joint venture or an associate (or a portion of its interest in a joint venture or an associate) that is classified (or included in a disposal group that is classified) as held for sale. This amendment does not have any impact on the Group.

##### Standards issued but not yet effective

The standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's consolidated financial statements are listed below, are those that the Group reasonably expects will have an impact on the disclosures, financial position or performance when applied at a future date. The Group intends to adopt these standards, if applicable, when they become effective.

- ◆ IFRS 9 Financial Instruments (January 1, 2018);
- ◆ IFRS 15 Revenue from Contracts with Customers (January 1, 2018);
- ◆ IFRS 2 Classification and Measurement of Share-based Payment Transactions – Amendments to IFRS 2 (January 1, 2018);
- ◆ IFRS 16 Leases (January 1, 2019);
- ◆ Amendments to IFRS 10 and IAS 28: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture;
- ◆ IFRIC Interpretation 22 Foreign Currency Transactions and Advance Consideration (January 1, 2018);
- ◆ IFRIC Interpretation 23 Uncertainty over Income Tax Treatment (January 1, 2019);
- ◆ IFRS 1 First-time Adoption of International Financial Reporting Standards – Deletion of short-term exemptions for first-time adopters (January 1, 2018);
- ◆ IAS 28 Investments in Associates and Joint Ventures – Clarification that measuring investees at fair value through profit or loss is an investment-by-investment choice (January 1, 2018);
- ◆ Transfers of Investment Property – Amendments to IAS 40

##### IFRS 9 Financial Instruments

IFRS 9 replaces IAS 39 Financial Instruments: Recognition and Measurement and brings together all three aspects of the accounting for financial instruments project: classification and measurement, impairment and hedge accounting.

IFRS 9 is effective for annual periods beginning on or after January 1, 2018. Except for hedge accounting, retrospective application is required but providing comparative information is not compulsory. The Group plans to adopt the new standard on the required effective date and will not restate comparative information.

As at the reporting date the Group has not completed detailed impact assessment of all three aspects of IFRS 9. This assessment may be subject to changes arising from further reasonable and supportable information being made available to the Group in 2018 when IFRS 9 is fully adopted.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Standards issued but not yet effective (continued)

##### IFRS 9 Financial Instruments (continued)

###### (a) Classification and measurement

The Group expects to continue measuring at fair value all financial assets currently held at fair value. The Group continues assessment of the possible effect.

Trade receivables are held to collect contractual cash flows and are expected to give rise to cash flows representing solely payments of principal and interest. The Group analysed the contractual cash flow characteristics of those instruments and concluded that they meet the criteria for amortised cost measurement under IFRS 9. Therefore, reclassification for these instruments is not required.

###### (b) Impairment

IFRS 9 requires the Group to record expected credit losses on all of loans, trade receivables, deposits, either on a 12-month or lifetime basis. The Group will apply the simplified approach and record lifetime expected losses on all trade receivables. The Group is currently developing unified approach for all the entities within the Group with respect to application of IFRS 9 and as at the date of these financial statements continues to analyze all available information in order to assess the effect of IFRS 9 adoption.

###### (c) Hedge accounting

The Group determined that all existing hedge relationships that are currently designated in effective hedging relationships will continue to qualify for hedge accounting under IFRS 9. As IFRS 9 does not change the general principles of how an entity accounts for effective hedges, applying the hedging requirements of IFRS 9 will not have a significant impact on Group's financial statements.

##### IFRS 15 Revenue from Contracts with Customers

IFRS 15 was issued in May 2014, and amended in April 2016, and establishes a five-step model to account for revenue arising from contracts with customers. Under IFRS 15, revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer.

The new revenue standard will supersede all current revenue recognition requirements under IFRS. Either a full retrospective application or a modified retrospective application is required for annual periods beginning on or after January 1, 2018. Early adoption is permitted. During 2017, the Group performed a detailed analysis of IFRS 15 and decided to apply a modified retrospective application.

The Group operates in sale of crude oil, refined products, gas and other products and rendering of services, such as oil and gas transportation, refining and oil support services.

###### (a) Sale of goods

For contracts with customers in which the sale of goods is generally expected to be the only performance obligation, adoption of IFRS 15 is not expected to have any material impact on the Group's revenue and profit or loss. The Group expects the revenue recognition to occur at a point in time when control of the asset is transferred to the customer, generally on signing of act of acceptance.

###### (b) Rendering of services

The Group fulfills performance obligation on a monthly basis and recognizes revenue from rendering of oil and gas transportation services, based on the actual volumes of services rendered. Revenue from refining and oil support services is recognized over time given that the buyer simultaneously receives and consumes the benefits provided by the Group. It is expected that the application of IFRS 15 to service contracts will not affect the Group's revenue and profit or loss.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Standards issued but not yet effective (continued)

##### IFRS 15 Revenue from Contracts with Customers (continued)

##### (c) Presentation and disclosure requirements

The presentation and disclosure requirements in IFRS 15 are more detailed than under current IFRS. Many of the disclosure requirements in IFRS 15 are new and the Group has assessed that the impact of some of these disclosures requirements will not be significant.

In 2017 the Group continued testing of appropriate systems, internal controls, policies and procedures necessary to collect and disclose the required information.

#### Basis of consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries as of December 31, 2017. 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 of 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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Business combinations and goodwill

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 IAS 39 Financial Instruments: Recognition and Measurement, is measured at fair value with changes in fair value recognised either in either profit or loss or as a change to other comprehensive income ("OCI"). If the contingent consideration is not within the scope of IAS 39, it is measured in accordance with the appropriate IFRS. 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:

- (i) the consideration transferred measured in accordance with this IFRS 3 Business Combinations, which generally requires acquisition-date fair value;
- (ii) the amount of any non-controlling interest in the acquiree measured in accordance with this IFRS; and
- (iii) 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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Business combinations and goodwill (continued)

##### Acquisition of subsidiaries in accordance with the Shareholder instructions

In acquisitions of subsidiaries from third parties made in accordance with the Shareholder instructions, the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interests, and any previous interest held, over the net identifiable assets acquired and liabilities assumed is recognised directly in equity as a distribution to the Parent Company.

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.

#### Undivided interest in jointly controlled operations

The Group has undivided interest in jointly controlled operations.

Upon acquisition the Group shall recognize in relation to its interest in joint operations its assets, including its share of any assets held jointly; its liabilities, including its share of any liabilities incurred jointly. Subsequently, the Group shall recognize its revenue from the sale of its share of the output arising from the joint operations; its share of the revenue from the sale of the output by the joint operations; and its expenses, including its share of any expenses incurred jointly.

The Group accounts for the assets, liabilities, revenues and expenses relating to its interest in the joint operations in accordance with its accounting policy.

When the Group does not share the joint control over joint operations, it follows the accounting of the parties that share control as discussed in next paragraphs.

#### 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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Investment in associates and joint ventures (continued)

The consolidated statement of comprehensive income reflects the Group's share of the results of operations of the joint venture or associate, deducted by the amount of dividends declared from joint venture or associate to the Group. 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 outside operating profit 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 statement of profit or loss.

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 is 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 noncurrent assets and liabilities.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### 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.

##### 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 fieldbyfield basis is aggregated with exploration and evaluation assets and transferred to oil and gas development 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 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 development assets after impairment is assessed and any resulting impairment loss is recognized.

##### Development costs

Expenditure on the construction, installation or completion of infrastructure facilities such as platforms, pipelines and the drilling of development wells, including unsuccessful development or delineation wells and unforeseen technical problems, is capitalized within oil and gas development 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 contract are depreciated on a straight-line basis over useful lives of 4-10 years.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Oil and gas assets and other property, plant and equipment (continued)

Property, plant and equipment other than oil and gas assets principally comprise buildings, machinery and equipment which 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

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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Investment properties

Investment property is initially measured at cost, including transaction costs. Transaction costs shall be included in the initial measurement.

Since the Group adopted cost model, after initial recognition, investment property is accounted for in accordance with the cost model as set out in IAS 16 Property, Plant and Equipment – cost less accumulated depreciation and less accumulated impairment losses.

The depreciation is calculated based on straight line method basis over the expected remaining useful average life of 2100 years.

At each reporting date, the Group determines the fair value of investment property and in the event that the fair value of the asset exceeds its fair value, the difference is recognized in profit and loss.

Investment property derecognised (eliminated from the statement of financial position) on disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from its disposal. Gains or losses arising from the retirement or disposal of investment property shall be determined as the difference between the net disposal proceeds and the carrying amount of investment property and recognised in profit or loss in the period of the retirement or disposal.

#### 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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### 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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Asset retirement obligation (decommissioning) (continued)

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:

- (a) changes in the provision are added to, or deducted from, the cost of the related asset in the current period;
- (b) 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
- (c) 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 financial assets at fair value through profit or loss, loans and receivables, held-to-maturity investments, available-for-sale financial assets, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. All financial assets are recognized initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are attributable to the acquisition of the financial asset.

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.

The Group financial assets include cash and cash equivalents, short-term bank deposits, bonds receivable from the Parent Company, note receivable from associate, note receivable from a shareholder of a joint venture, loans due from related parties and trade accounts receivable.

##### Subsequent measurement

The subsequent measurement of financial assets depends on their classification as follows:

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Financial assets (continued)

##### Subsequent measurement (continued)

###### *Financial assets at fair value through profit or loss*

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing 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 IAS 39. Derivatives, including separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments. Financial assets at fair value through profit and loss are carried in the consolidated statement of financial position at fair value with net changes in fair value presented as finance costs or finance income through profit or loss.

The consolidated statement of financial position at fair value with changes in fair value recognized in finance income or finance costs in the consolidated statement of comprehensive income. Financial assets designated upon initial recognition at fair value through profit or loss are designated at their initial recognition date and only if the criteria under IAS 39 is satisfied.

The Group has not designated any financial assets upon initial recognition as at fair value through profit or loss.

The Group evaluated its financial assets held for trading, other than derivatives, to determine whether the intention to sell them in the near term is still appropriate. When the Group is unable to trade these financial assets due to inactive markets and management's intention to sell them in the foreseeable future significantly changes, the Group may elect to reclassify these financial assets in rare circumstances. The reclassification to loans and receivables, available-for-sale or held to maturity depends on the nature of the asset. This evaluation does not affect any financial assets designated at fair value through profit or loss using the fair value option at designation, these investments cannot be reclassified after initial recognition.

Derivatives embedded in host contracts are accounted for as separate derivatives and recorded at fair value if their economic characteristics and risks are not closely related to those of the host contracts and the host contracts are not held for trading or designated at fair value through profit or loss. These embedded derivatives are measured at fair value with changes in fair value recognised in profit or loss. Re-assessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss.

###### *Loans and receivables*

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, such financial assets are subsequently measured at amortized cost using the effective interest rate method (EIR), less impairment. 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 income in the consolidated statement of comprehensive income. The losses arising from impairment of trade and other receivables are recognized in general and administrative expenses. The losses arising from impairment of loans receivable are recognized in finance costs.

###### *Held-to-maturity investments*

Non-derivative financial assets with fixed or determinable payments and fixed maturities are classified as held to maturity when the Group has the positive intention and ability to hold them to maturity. After initial measurement, held to maturity investments are measured at amortized cost using the EIR, less impairment. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included in finance income in the consolidated statement of comprehensive income. The losses arising from impairment are recognised in the consolidated statement of comprehensive income as finance costs.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Financial assets (continued)

##### Subsequent measurement (continued)

##### *Available-for-sale financial investments*

Available-for-sale financial investments include equity investments and debt securities. Equity investments classified as available-for-sale are those that are neither classified as held for trading nor designated at fair value through profit or loss. Debt securities in this category are those that are intended to be held for an indefinite period of time and that may be sold in response to needs for liquidity or in response to changes in the market conditions.

After initial measurement, available-for-sale financial investments are subsequently measured at fair value with unrealized gains or losses recognised in other comprehensive income and credited in the available-for-sale revaluation reserve until the investment is derecognized, at which time the cumulative gain or loss is recognised in other operating income, or the investment is determined to be impaired, when the cumulative loss is reclassified from the availableforsale revaluation reserve to finance costs in the consolidated statement of comprehensive income. Interest earned whilst holding available-for-sale financial investments is reported as finance income using the EIR method.

The Group evaluates whether the ability and intention to sell its available-for-sale financial assets in the near term is still appropriate. When, in rare circumstances, the Group is unable to trade these financial assets due to inactive markets, the Group may elect to reclassify these financial assets if the management has the ability and intention to hold the assets for foreseeable future or until maturity.

For a financial asset reclassified from the available-for-sale category, the fair value carrying amount at the date of reclassification becomes its new amortized cost and any previous gain or loss on the asset that has been recognised in equity is amortized to profit or loss over the remaining life of the investment using the EIR. Any difference between the new amortized cost and the maturity amount is also amortized over the remaining life of the asset using the EIR. If the asset is subsequently determined to be impaired, then the amount recorded in equity is reclassified to the consolidated statement of comprehensive income.

##### **Derecognition**

A financial asset (or, where applicable a part of a financial asset or part of a group of similar financial assets) is derecognized when:

- the rights to receive cash flows from the asset have expired;
- 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 (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) 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 receive cash flows from an asset or has entered into a pass-through arrangement, and has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the asset is recognized to the extent of the Group's continuing involvement in the asset.

In that case, the Group also recognizes 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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Financial assets (continued)

##### Impairment of financial assets

The Group assesses, at each reporting date, whether there is objective evidence that a financial asset or a group of financial assets is impaired. An impairment exists if one or more events that has occurred since the initial recognition of the asset (an incurred 'loss event'), has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated. Evidence of impairment may include indications that the debtors or a group of debtors is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganisation and observable data indicating that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

##### *Financial assets carried at amortized cost*

For financial assets carried at amortized cost the Group first assesses individually whether objective evidence of impairment exists individually for financial assets that are individually significant, or collectively for financial assets that are not individually significant. If the Group determines that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment. Assets that are individually assessed for impairment and for which an impairment loss is, or continues to be, recognized are not included in a collective assessment of impairment. If there is objective evidence that an impairment loss has incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future expected credit losses that have not yet been incurred). The present value of the estimated future cash flows is discounted at the financial asset original effective interest rate. If a loan has a variable interest rate, the discount rate for measuring any impairment loss is the current EIR.

The carrying amount of the asset is reduced through the use of an allowance account and the amount of the loss is recognized in current period expenses. Interest income continues to be accrued on the reduced carrying amount and is accrued using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss. The interest income is recorded as part of finance income in the consolidated statement of comprehensive income. Loans together with the associated allowance are written off when there is no realistic prospect of future recovery and all collateral has been realized or has been transferred to the Group. If, in a subsequent year, the amount of the estimated impairment loss increases or decreases because of an event occurring after the impairment was recognized, the previously recognized impairment loss is increased or reduced by adjusting the allowance account. The present value of the estimated future cash flows is discounted at the financial asset's original EIR. If a loan has a variable interest rate, the discount rate for measuring any impairment loss is the current EIR.

##### *Available-for-sale financial investments*

For available-for-sale financial investments, the Group assesses at each reporting date whether there is objective evidence that an investment or a group of investments is impaired.

In the case of equity investments classified as available-for-sale, objective evidence would include a significant or prolonged decline in the fair value of the investment below its cost. 'Significant' is evaluated against the original cost of the investment and 'prolonged' against the period in which the fair value has been below its original cost. When there is evidence of impairment, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that investment previously recognised in the consolidated statement of comprehensive income – is removed from other comprehensive and recognised in profits or loss. Impairment losses on equity investments are not reversed through profit or loss; increases in their fair value after impairment are recognised in other comprehensive income.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Financial assets (continued)

##### Impairment of financial assets (continued)

###### *Available-for-sale financial investments (continued)*

In the case of debt instruments classified as available-for-sale, the impairment is assessed based on the same criteria as financial assets carried at amortized cost. However, the amount recorded for impairment is the cumulative loss measured as the difference between the amortized cost and the current fair value, less any impairment loss on that investment previously recognised in the consolidated statement of comprehensive income.

Future interest income continues to be accrued based on the reduced carrying amount of the asset, using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss. The interest income is recorded as part of finance income. If, in a subsequent year, the fair value of a debt instrument increases and the increase can be objectively related to an event occurring after the impairment loss was recognised in the consolidated statement of comprehensive income, the impairment loss is reversed through profits or loss.

#### 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 within the scope of IAS 39 are classified as financial liabilities at fair value through profit or loss, loans and borrowings, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. The Group determines the classification of its financial liabilities at initial recognition.

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, bank overdraft, loans and borrowings and derivative financial instruments.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Financial liabilities (continued)

##### 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 IAS 39. 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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Financial liabilities (continued)

##### 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 Shareholder directly in the equity.

#### 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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Employee benefits (continued)

##### Long-term employee benefits (continued)

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.

These obligations are valued by independent qualified actuaries on an annual basis.

#### Revenue recognition

Revenue is recognized when it is probable that the economic benefits associated with the transaction will flow to the Group and the amount of revenue can be reliably measured. Revenue is measured at the fair value of the consideration received, excluding discounts, rebates, and other sales taxes or duty. The following specific recognition criteria must also be met before revenue is recognized:

##### Sale of goods

Revenue from the sale of crude oil, refined products, gas and other products is recognized when delivery has taken place and risks and rewards of ownership of the goods have passed to the buyer.

##### Rendering of services

Revenue from rendering of services, such as transportation, refining and oil support services, is recognized when the services have been performed.

##### Interest income

For all financial instruments measured at amortised cost and interest-bearing financial assets classified as available for sale, 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 statement of profit or loss.

#### 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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Income taxes (continued)

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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### 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.

##### Share based payments

Employees of some Group entities receive remuneration in the form of share-based payment transactions, whereby employees render services as consideration for equity instruments of a subsidiary in which they are employed ('equity-settled transactions').

The cost of equity-settled transactions with employees is measured by reference to the fair value at the date on which they are granted. The fair value is determined using an appropriate pricing model.

The cost of equity-settled transactions is recognized, together with a corresponding increase in other equity reserves, over the period in which the performance and/or service conditions are fulfilled, ending on the date on which the relevant employees become fully entitled to the award ('the vesting date'). The cumulative expense recognized for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The consolidated statement of comprehensive income charge or credit for a period represents the movement in cumulative expense recognized as at the beginning and end of that period.

No expense is recognized for awards that do not ultimately vest.

Where the terms of an equity-settled award are modified, the minimum expense recognized is the expense as if the terms had not been modified. An additional expense is recognized for any modification, which increases the total fair value of the share-based payment arrangement, or is otherwise beneficial to the employee as measured at the date of modification.

Where an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognized for the award is recognized immediately. However, if a new award is substituted for the cancelled award, and designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the previous paragraph.

##### 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.

##### Other distributions to the Shareholder

Expenditures incurred by the Group based on the respective resolution of the Government 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) and acquisitions of investments.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### 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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

#### **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, 2017 the Group did not carry out an assessment due to absence of impairment or impairment reversal indicators.

As at December 31, 2017 further decreased levels of drilling services provided and increases in inflation rate and cost of capital indicated that Group's cash generating units may be impaired. Therefore, for the year ended December 31, 2017 management has carried out a formal assessment of the recoverable amount of its assets. An impairment loss of 23,309,760 thousand tenge (Note 7), mainly related to property, plant and equipment of Oil Transport Corporation (OTC) and PNHZ was recognized in the consolidated financial statements.

OTC calculates recoverable amount using a discounted cash flow model. The discount rate from 12.77% to 16.01% was derived from the CGU's pre-tax weighted average cost of capital. The five-year business plans, which are approved on an annual basis, are the primary source of information. They contain forecasts of transport services volumes, revenues, costs and capital expenditure. Various assumptions such as tariff for the service and cost inflation rates take into account existing prices, foreign exchange rates, other macroeconomic factors and historical trends and variability. Most of the projections beyond the five-year period were inflated using available inflation estimates.

The Group performed its annual impairment test of Pavlodar oil chemistry refinery LLP ("PNHZ") in December 2017 and 2016. The Group considers the forecast refinery margins and production volumes, among other factors, when reviewing for indicators of impairment. Before performing this test, the Group impaired specific work in progress that was not considered as part of PNHZ CGU (Note 10).

PNHZ calculates recoverable amount using a discounted cash flow model. The discount rate was calculated on the weighted average cost of capital before taxes. The weighted average cost of capital takes into account both borrowed and own capital. The cost of equity is derived from the expected return on investment. The cost of debt capital is based on interest-bearing loans that PNHZ is obliged to maintain. 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 2036 were based on five-years business plan of PNHZ till 2021, which assumes current management estimates on potential changes in operating and capital costs. The significant part of those cash flows after 2021 was forecasted by applying expected inflation rate, excluding capital costs, which are based on the best estimate of management as of valuation date.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

#### Recoverability of oil and gas assets, downstream, refining and other assets (continued)

As of December 31, 2017 the Group has material goodwill related to acquisitions of PNHZ (Note 10).

As at December 31, 2017 recoverable amount of PNHZ CGU amounted to 432,622,355 thousand tenge (in 2016: 315,402,461 thousand tenge). It was calculated based on fair value less costs to sell. The fair value less costs to sell calculation is based on a discounted cash flow model. Cash flows assume the highest and best use of assets by independent market participants, i.e. other companies of the same industry in the existing economic environment. The discount rate applied to the cash flow projections is 13.25% (in 2016: 11.58%), and cash flows beyond the five-year period are extrapolated using a 2.78% growth rate (in 2016: 4.99%).

Based on the results of impairment test no impairment of PNHZ goodwill was identified in 2017.

#### *Key assumptions used in calculating fair value less costs to sell*

The key assumptions used in calculating fair value less costs to sell use for PNHZ are as follows:

- ◆ volumes of crude oil and oil products output;
- ◆ capital expenditures for 2018-2036;
- ◆ price of crude oil and oil products;
- ◆ discount rates.

*Volumes of crude oil and oil products output* – are the forecasts of PNHZ with respect to the output of oil products during processing one ton of crude oil before and after modernization of PNHZ.

*Capital expenditures* – costs: a) on reconstruction and modernization of PNHZ; b) necessary to maintain the current condition of the asset.

*Prices of crude oil and oil products in the local market* – the prices which are based on the assessment of the management of the Group's on purchase of crude oil from local oil producers and sales of oil products to local customers.

*Discount rates* represent the current market assessment of the risks specific to each CGU, taking into consideration the time value of money and individual risks of the underlying assets that have not been incorporated in the cash flow estimates. The discount rate calculation is based on the specific circumstances of the PNHZ and its operating segments and is derived from its weighted average cost of capital (WACC). The WACC takes into account both debt and equity. The cost of equity is derived from the expected return on investment by PNHZ investors. The cost of debt is based on the interest-bearing borrowings the PNHZ is obliged to service. Segment-specific risk is incorporated by applying individual beta factors. The beta factors are evaluated annually based on publicly available market data.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

#### Recoverability of downstream, refining and other assets (continued)

##### 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 WACC discount rates and target EBITDA in terminal period. Increase in discount rates by 1.0% from 13.25% to 14.25%, would result in recoverable amount of goodwill decrease by 40,369,592 thousand tenge. Decrease of target cash flow projections in terminal period by 5% from 23% to 18% would result in decrease of the recoverable value of goodwill for 3,993,727 thousand tenge.

#### 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, 2017 were in the range from 2.01% to 5.57% and from 5.17% to 10.00%, respectively (2016: from 2.04% to 6.7% and from 5.5% to 10.15%). Movements in the provision for asset retirement obligations are disclosed in Note 21.

##### 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 KazTransGaz 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, 2017 the carrying amounts of the Group's asset retirement obligations relating to decommissioning of pipelines and land were 65,139,689 thousand tenge (December 31, 2016: 59,539,785 thousand tenge) (Note 21).

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

#### 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 2017. 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 21.

#### Employee benefits

The cost of defined long-term employee benefits 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 disclosed under other provisions or provisions for taxes in Note 21. Further uncertainties related to taxation are disclosed in Note 35.

Taxable income is computed in accordance with the tax legislation enacted as at January 1, 2017. Deferred tax is calculated with respect to both CIT and EPT. Deferred CIT and EPT are calculated on temporary differences for assets and liabilities allocated to subsoil use contracts at the expected rates that were enacted by the tax authorities as at December 31, 2017.

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. The carrying value of recognized deferred tax assets as at December 31, 2017 was 65,135,777 thousand tenge (2016: 71,909,033 thousand tenge). Further details are disclosed in Note 31.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 4. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

#### 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. Further details are disclosed in Note 33.

#### Operating lease commitments – the Group as lessee

The Group has entered into office space and car leases. The Group has determined that the lessor retains all the significant risks and rewards of ownership of office spaces and cars and so accounts for them as operating leases in the consolidated financial statements

#### 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.

#### Discontinued operations

In September 2015, the Group developed a new privatization plan which was subsequently approved by the Government in December 2015. The new privatization plan envisages sale of certain assets including 51% share in KMG International N.V. group (KMG I). On December 15, 2016, following this plan the Group signed share sale and purchase agreement (the SPA) to sell a 51% interest in KMG I. During 2017 all conditions precedent indicated in SPA were executed. On December 15, 2017, in order to maintain the previously agreed terms of the deal with the buyer, the Group signed an addendum to SPA and conditional act of transfer of shares of KMG I with an expectation to complete the transaction in June 2018.

The Group estimated fair value of the 51% share in KMG I at 680,000 thousand US dollars (equivalent of 225,984,400 thousand tenge).

The Group considered the subsidiary to meet the criteria to be classified as discontinued operations for the following reasons:

- ◆ KMG I is available for immediate sale and can be sold in its current condition;
- ◆ the actions to complete the sale were initiated and expected to be completed within one year.

Additional disclosures are provided in Note 5.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 5. DISCONTINUED OPERATIONS AND ASSETS CLASSIFIED AS HELD FOR SALE

The assets and liabilities, classified as discontinued operations and assets classified as held for sale as at December 31, 2017 and the results for 2017 are as follows:

In thousands of tenge	December 31, 2017			Profit/(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	
KMG International N.V.	1,086,784,349	531,002,856	555,781,493	792,849,522
Other assets*	24,904,588	1,928,662	22,975,926	(3,666,118)
<b>Total</b>	<b>1,111,688,937</b>	<b>532,931,518</b>	<b>578,757,419</b>	<b>789,183,404</b>

\* Other assets include Kazakh British Technical University JSC (KBTU) and KMG Usturt LLP. The loss after tax include result from sale of 100% of shares of EurasiaAir JSC (Note 6).

The assets and liabilities, classified as discontinued operations and assets classified as held for sale as at December 31, 2016 and the results for 2016 are as follows:

In thousands of tenge	December 31, 2016			Profit/(loss) after income tax for 2016 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 International N.V.	1,014,948,431	550,226,128	464,722,303	368,199,241
Other assets*	43,845,645	13,658,153	30,187,492	(7,345,210)
<b>Total</b>	<b>1,058,794,076</b>	<b>563,884,281</b>	<b>494,909,795</b>	<b>360,854,031</b>

\* Other assets include EurasiaAir JSC, Kazakh British Technical University JSC (KBTU) and AZPM LLP.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 5. DISCONTINUED OPERATIONS AND ASSETS CLASSIFIED AS HELD FOR SALE (CONTINUED)

#### KMG International N.V. (KMG I)

The results of KMG I for the years ended December 31, 2017 and 2016 are presented below:

In thousands of tenge	2017		2016	
	Before elimination	After elimination*	Before elimination	After elimination*
Revenue	<b>2,724,172,080</b>	<b>2,334,927,450</b>	1,943,293,716	1,695,688,049
Cost of sales	<b>(2,594,154,170)</b>	<b>(1,416,186,062)</b>	(1,833,990,709)	(1,193,961,256)
<b>Gross profit</b>	<b>130,017,910</b>	<b>918,741,388</b>	109,303,007	501,726,793
General and administrative expenses	<b>(48,422,585)</b>	<b>(48,422,585)</b>	(50,098,705)	(50,098,705)
Transportation and selling expenses	<b>(60,408,688)</b>	<b>(60,408,688)</b>	(59,423,245)	(59,423,245)
Impairment recognized on the re-measurement to fair value less costs to sell	<b>(5,921,976)</b>	<b>(5,921,976)</b>	(10,327,447)	(10,327,447)
Reversal/(impairment) of property, plant and equipment and intangible assets, other than goodwill	<b>981,997</b>	<b>981,997</b>	(3,982,106)	(3,982,106)
Other operating losses	<b>(3,502,338)</b>	<b>(3,502,337)</b>	(2,204,976)	(2,204,976)
<b>Operating profit</b>	<b>12,744,320</b>	<b>801,467,799</b>	(16,733,472)	375,690,314
Net foreign exchange loss	<b>(128,297)</b>	<b>(128,297)</b>	(2,272,190)	(2,272,190)
Finance income	<b>838,557</b>	<b>838,557</b>	452,245	452,245
Finance costs	<b>(11,457,926)</b>	<b>(11,457,926)</b>	(10,436,587)	(10,436,587)
Share in profit of joint ventures and associates, net	<b>384,575</b>	<b>384,574</b>	1,175,613	1,175,613
<b>Profit/(loss) before income tax for the year from discontinued operations</b>	<b>2,381,229</b>	<b>791,104,707</b>	(27,814,391)	364,609,395
Income tax benefit	<b>1,744,815</b>	<b>1,744,815</b>	3,589,846	3,589,846
<b>Profit/(loss) after income tax for the year from discontinued operations</b>	<b>4,126,044</b>	<b>792,849,522</b>	(24,224,545)	368,199,241

\* The results are presented after eliminations of intergroup transactions (for 2017: 389,244,630 thousand tenge of revenue and 1,177,968,108 thousand tenge of cost of sales; for 2016: 247,605,667 thousand tenge of revenue and 640,029,453 thousand tenge of cost of sales).

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 5. DISCONTINUED OPERATIONS AND ASSETS CLASSIFIED AS HELD FOR SALE (CONTINUED)

#### KMG International N.V. (KMG I) (continued)

The major classes of assets and liabilities of KMG I, classified as held for sale as at December 31, 2017 and 2016 are as follows:

In thousands of tenge	2017*	2016*
<b>Assets</b>		
Property, plant and equipment	559,864,830	585,545,785
Intangible assets	69,774,013	73,932,864
Investment in associate	13,278,245	12,644,023
Deferred tax asset	33,544,726	34,545,175
Inventories	141,471,552	115,234,684
Trade accounts receivable	161,542,624	128,944,234
Other non-current assets	3,373,814	2,949,283
Other current assets	30,103,448	36,148,634
Cash and cash equivalents	73,831,097	25,003,749
<b>Assets classified as held for sale</b>	<b>1,086,784,349</b>	<b>1,014,948,431</b>
<b>Liabilities</b>		
Borrowings	137,808,610	201,868,754
Deferred income tax liabilities	68,725,179	72,935,184
Provisions	53,136,243	50,706,074
Trade accounts payable	188,730,872	142,278,168
Other taxes payable	24,406,316	17,704,032
Other non-current liabilities	156,195	141,648
Other current liabilities	58,039,441	64,592,268
<b>Liabilities directly associated with the assets classified as held for sale</b>	<b>531,002,856</b>	<b>550,226,128</b>
<b>Net assets directly associated with the disposal group</b>	<b>555,781,493</b>	<b>464,722,303</b>

\* Assets and liabilities are presented after eliminations of intergroup transactions.

The net cash flows incurred by KMG I are as follows:

In thousands of tenge	2017*	2016*
Operating	145,378,203	57,998,062
Investing	(33,401,027)	(34,273,788)
Financing	(63,997,439)	(32,809,432)
<b>Net cash inflows/(outflows)</b>	<b>47,979,737</b>	<b>(9,085,158)</b>

\* Cash flows are presented before eliminations of intergroup transactions.

As at December 31, 2017, items of property, plant and equipment with the net book value of 346,416,024 thousand tenge related to discontinued operations (2016: 372,054,627 thousand tenge) were pledged as collateral to secure borrowings and payables of KMG I.

As at December 31, 2017 KMG I has pledged trade accounts receivable and inventory of approximately 58,115,548 thousand tenge and 111,843,564 thousand tenge, respectively, as a collateral under its borrowings (2016: 87,648,449 thousand tenge and 72,640,966 thousand tenge) related to discontinued operations.

As at December 31, 2017 the initial cost and correspondingly accumulated depreciation of fully depreciated but still in use property, plant and equipment were 201,459,026 thousand tenge (2016: 174,340,401 thousand tenge).

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 6. LOSS OF CONTROL

On November 8, 2017 Company completed the sale of 100% of shares of EurasiaAir JSC, which was classified as discontinued operations, for 11,850,000 thousand tenge.

At the date of loss of control net assets of EurasiaAir JSC were as follows:

In thousands of tenge	Net assets at the date of disposal
<b>Assets</b>	
Property, plant and equipment	10,367,360
Intangible assets	41,901
Trade accounts receivable	2,824,184
Cash	3,339,751
Other current assets	706,204
	<b>17,279,400</b>
<b>Liabilities</b>	
Deferred income tax liabilities	2,381,767
Trade accounts payable	2,306,514
Current liabilities	752,353
	<b>5,440,634</b>
<b>Net assets</b>	<b>11,838,766</b>

The resulting gain on disposal of investment amounted to 11,234 thousand tenge and was included into the profit from discontinued operations.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 7. PROPERTY, PLANT AND EQUIPMENT

In thousands of tenge	Oil and gas assets	Pipelines	Refinery assets	Buildings and improvements	Machinery and equipment	Vehicles	Other	Capital work in progress	Total
<b>Net book value as at December 31, 2015</b>									
(restated)	879,613,848	606,283,140	247,532,399	184,750,124	260,127,436	76,049,925	23,825,549	383,160,263	2,661,342,684
Foreign currency translation	(10,971,334)	-	-	(1,432,872)	(417,878)	(750,283)	(285,909)	98,148	(13,760,128)
Change in estimate	(8,500,916)	(6,079,200)	-	(53,279)	-	-	-	-	(14,633,395)
Additions	83,804,363	2,590,183	692,596	2,288,823	6,554,473	2,536,240	5,060,421	422,448,504	525,975,603
Additions on finance lease	-	-	871,933	-	-	-	-	-	871,933
Disposals	(5,646,977)	(1,734,827)	(1,377,061)	(1,301,727)	(1,893,689)	(4,340,763)	(2,203,070)	(14,650,326)	(33,148,440)
Depreciation charge	(67,800,045)	(22,759,956)	(26,768,931)	(17,306,955)	(26,465,714)	(7,973,698)	(5,998,828)	-	(175,074,127)
Accumulated depreciation and impairment on disposals	5,587,411	1,665,595	917,594	611,453	1,707,023	4,159,902	1,965,237	3,252,309	19,866,524
(Impairment) / reversal of impairment (Note 28)	1,113,617	(1,206,581)	-	405,314	(641,489)	(918,887)	(544,666)	(1,457,438)	(3,250,130)
Transfers to discontinued operations	(84,640)	-	-	(4,203,451)	(926,578)	(150,232)	(2,018,896)	(4,135,805)	(11,519,602)
Transfers from inventory, net	15,838	489,059	155,774	1,246	81,689	30,694	19,292	1,297,315	2,090,907
Transfer to assets held for sale, net	(19,911)	-	(17,055)	(113,630)	(2,076)	(210,124)	(203)	-	(362,999)
Transfers (to)/from investment property (Note 9)	-	-	-	(200,042)	(363)	-	967	-	(199,438)
Transfers (to)/from intangible assets, net (Note 10)	1,915	-	-	-	-	-	-	(695,965)	(694,050)
Transfer to exploration and evaluation assets (Note 8)	(3,446,255)	-	-	-	-	-	-	(923,422)	(4,369,677)
Transfers and reclassifications	3,966,096	64,031,658	93,630,122	48,909,084	39,723,354	1,169,683	13,589,517	(265,019,514)	-
<b>Net book value as at December 31, 2016</b>	<b>877,633,010</b>	<b>643,279,071</b>	<b>315,637,371</b>	<b>212,354,088</b>	<b>277,846,188</b>	<b>69,602,457</b>	<b>33,409,411</b>	<b>523,374,069</b>	<b>2,953,135,665</b>

The accounting policies and explanatory notes on pages 8 through 97 form an integral part of these consolidated financial statements.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 7. PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

In thousands of tenge	Oil and gas assets	Pipelines	Refinery assets	Buildings and improvements	Machinery and equipment	Vehicles	Other	Capital work in progress	Total
<b>Net book value as at December 31, 2016</b>	<b>877,633,010</b>	<b>643,279,071</b>	<b>315,637,371</b>	<b>212,354,088</b>	<b>277,846,188</b>	<b>69,602,457</b>	<b>33,409,411</b>	<b>523,374,069</b>	<b>2,953,135,665</b>
Foreign currency translation	(2,413,467)	-	-	(395,815)	413,356	(98,328)	192,521	(413,504)	(2,715,237)
Change in estimate	247,396	(199,915)	-	(4,855)	-	-	-	-	42,626
Additions	27,176,012	16,878,787	297,455	8,086,249	6,334,531	8,087,416	2,684,947	531,171,597	600,716,994
Disposals	(17,371,754)	(1,153,877)	(2,647,246)	(4,304,287)	(3,035,202)	(1,423,630)	(2,846,129)	(1,458,232)	(34,240,357)
Depreciation charge	(62,017,598)	(23,892,749)	(32,550,787)	(16,018,534)	(28,137,645)	(7,845,341)	(5,169,968)	-	(175,632,622)
Accumulated depreciation and impairment on disposals	14,880,689	858,685	2,517,354	4,033,279	2,433,160	1,259,612	2,671,583	760,282	29,414,644
Impairment (Note 28)	-	(1,321)	-	(1,343,255)	(1,431,137)	(1,907,846)	(947,310)	(17,678,891)	(23,309,760)
Transfers (to)/from inventory, net	(1,688)	(52,019)	13,086,516	1,060	34,440	240	1,278	166,149	13,235,976
Transfer to discontinued operations and assets held for sale, net	(170,291)	-	(3,908,276)	(3,553,089)	(242,126)	(123,814)	(97,736)	(60)	(8,095,392)
Transfers to investment property (Note 9)	-	-	-	(251,422)	(13,059)	-	(746)	(357,143)	(622,370)
Transfers (to)/from intangible assets, net (Note 10)	(210,414)	-	-	-	-	-	1,577	(1,507,120)	(1,715,957)
Transfer from exploration and evaluation assets (Note 8)	8,880,580	-	-	-	-	-	-	-	8,880,580
Transfers and reclassifications	82,273,967	104,461,639	194,362,603	14,756,917	98,323,465	5,664,728	3,352,591	(503,195,970)	-
<b>Net book value as at December 31, 2017</b>	<b>928,906,442</b>	<b>740,178,361</b>	<b>486,794,990</b>	<b>213,360,336</b>	<b>352,525,971</b>	<b>73,215,494</b>	<b>33,252,019</b>	<b>530,861,177</b>	<b>3,359,094,790</b>

The accounting policies and explanatory notes on pages 8 through 97 form an integral part of these consolidated financial statements.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

In thousands of tenge	Oil and gas assets	Pipelines	Refinery assets	Buildings and improvements	Machinery and equipment	Vehicles	Other	Capital work in progress	Total
At cost	1,895,494,619	897,214,797	670,697,037	361,025,155	567,043,377	172,744,554	82,087,998	572,214,596	5,218,522,133
Accumulated depreciation and impairment	(966,588,177)	(157,036,436)	(183,902,047)	(147,664,819)	(214,517,406)	(99,529,060)	(48,835,979)	(41,353,419)	(1,859,427,343)
<b>Net book value as at December 31, 2017</b>	<b>928,906,442</b>	<b>740,178,361</b>	<b>486,794,990</b>	<b>213,360,336</b>	<b>352,525,971</b>	<b>73,215,494</b>	<b>33,252,019</b>	<b>530,861,177</b>	<b>3,359,094,790</b>
At cost	1,796,687,457	776,793,501	473,343,599	350,113,598	466,840,617	161,145,408	79,902,688	547,812,419	4,652,639,287
Accumulated depreciation and impairment	(919,054,447)	(133,514,430)	(157,706,228)	(137,759,510)	(188,994,429)	(91,542,951)	(46,493,277)	(24,438,350)	(1,699,503,622)
<b>Net book value as at December 31, 2016</b>	<b>877,633,010</b>	<b>643,279,071</b>	<b>315,637,371</b>	<b>212,354,088</b>	<b>277,846,188</b>	<b>69,602,457</b>	<b>33,409,411</b>	<b>523,374,069</b>	<b>2,953,135,665</b>

In 2017, the Group capitalized in the carrying amount of property, plant and equipment borrowing costs at the average interest rate of 3.36% in the amount of 29,962,865 thousand tenge which are related to the construction of assets (2016: 28,515,460 thousand tenge at the average interest rate of 2.42%).

As at December 31, 2017, items of property, plant and equipment with the net book value of 594,020,576 thousand tenge (2016: 483,908,126 thousand tenge) were pledged as collateral to secure borrowings and payables of the Group.

Additions to capital work in progress are mainly related to capital repair of main gas pipelines of Intergas Central Asia JSC, the subsidiary of KTG, development drilling at Ozenmunaigas and Embamunaigas subsidiaries and modernization projects of the Group refineries located in Atyrau and Pavlodar.

As at December 31, 2017 the cost of fully depreciated but still in use property, plant and equipment were 88,901,167 thousand tenge (2016: 81,065,726 thousand tenge).

### Impairment of property, plant and equipment

In 2017, the Group recorded net impairment loss of 23,309,760 thousand tenge, which is mainly attributable to impairment of capital work in progress of PNHZ in the amount of 15,226,880 thousand tenge associated with change in configuration of modernization project and impairment of property, plant and equipment of OTC in the amount of 5,039,820 thousand tenge (Note 4).

In 2016, the Group recorded net impairment loss of 3,250,130 thousand tenge, which is mainly attributable to impairment of property, plant and equipment of ANS in the amount of 3,036,355 thousand tenge.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 8. EXPLORATION AND EVALUATION ASSETS

In thousands of tenge	Tangible	Intangible	Total
Net book value as at December 31, 2015	169,094,278	39,431,785	208,526,063
Foreign currency translation	(677,712)	(339,900)	(1,017,612)
Additions	21,130,985	3,484,421	24,615,406
Transfer from property, plant and equipment (Note 7)	4,369,677	–	4,369,677
Disposals	(18,734)	(4,857,647)	(4,876,381)
Change in estimate	(63,985)	–	(63,985)
<b>Net book value as at December 31, 2016</b>	<b>193,834,509</b>	<b>37,718,659</b>	<b>231,553,168</b>
Foreign currency translation	(94,631)	(52,800)	(147,431)
Additions	33,075,420	344,512	33,419,932
Transfer to property, plant and equipment (Note 7)	(8,880,580)	–	(8,880,580)
Disposals	(104,945)	(557,243)	(662,188)
Transfers to discontinued operations and assets held for sale, net	–	(1,030,477)	(1,030,477)
Impairment (Note 28)	(802,687)	(10,761)	(813,448)
Change in estimate	(112,876)	–	(112,876)
Transfers and reclassifications	(1,261,185)	1,261,185	–
<b>Net book value as at December 31, 2017</b>	<b>215,653,025</b>	<b>37,673,075</b>	<b>253,326,100</b>

As at December 31, 2017 and 2016 the exploration and evaluation assets are represented by the following projects:

In thousands of tenge	2017	2016
Project N	85,093,174	84,350,943
Pearls	35,069,407	34,328,596
Zhambyl	33,396,110	31,946,639
Urikhtau	27,685,604	30,326,087
Satpayev	33,791,001	14,653,706
Other	38,290,804	35,947,197
	<b>253,326,100</b>	231,553,168

Exploration costs on Pearls and Satpayev projects are financed by project partners other than the Group. Respective financial liabilities are recognized within borrowings (Note 19). The repayment of the financing for these projects depends on the identification of commercially recoverable reserves.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 9. INVESTMENT PROPERTY

In thousands of tenge	Total
<b>Net book value as at December 31, 2015</b>	<b>29,260,917</b>
Additions	565,862
Depreciation charge	(722,174)
Disposals	(47)
Transfers from assets classified as held for sale	174,243
Transfer from property, plant and equipment (Note 7)	199,438
Transfers from inventory	1,805
Net book value as at December 31, 2016	29,480,044
Depreciation charge	<b>(703,010)</b>
Disposals	<b>(233,132)</b>
Impairment (Note 28)	<b>(1,518,344)</b>
Transfers to assets classified as held for sale	<b>(224,703)</b>
Transfer from property, plant and equipment (Note 7)	<b>622,370</b>
<b>Net book value as at December 31, 2017</b>	<b>27,423,225</b>
At cost	<b>32,473,275</b>
Accumulated depreciation and impairment	<b>(5,050,050)</b>
<b>Net book value as at December 31, 2017</b>	<b>27,423,225</b>
At cost	32,589,798
Accumulated depreciation and impairment	(3,109,754)
<b>Net book value as at December 31, 2016</b>	<b>29,480,044</b>

Investment property is mainly represented by Emerald Quarter office building leased under operating lease terms. The management of the Group believes that as at December 31, 2017 the fair value of this building is 24,219,173 thousand tenge (2016: 26,723,865 thousand tenge). The fair value of investment property was based on the market price of the office property (Note 33).

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 10. INTANGIBLE ASSETS

In thousands of tenge	Goodwill	Software	Other	Total
Net book value as at December 31, 2015	90,003,639	11,013,606	18,928,126	119,945,371
Foreign currency translation	–	(1,164)	(1,396,052)	(1,397,216)
Additions	–	2,474,012	511,244	2,985,256
Disposals	–	(2,357,734)	(477,764)	(2,835,498)
Amortization charge	–	(3,620,391)	(1,936,237)	(5,556,628)
Accumulated amortization and impairment on disposals	–	2,343,001	452,278	2,795,279
Impairment	–	(32,549)	–	(32,549)
Transfer from property, plant and equipment, net (Note 7)	–	691,448	2,602	694,050
Transfers to discontinued operations	–	(100,373)	(9,080)	(109,453)
Transfers and reclassifications	–	8,236	(8,236)	–
<b>Net book value as at December 31, 2016</b>	<b>90,003,639</b>	<b>10,418,092</b>	<b>16,066,881</b>	<b>116,488,612</b>
Foreign currency translation	–	(53,462)	125,676	72,214
Additions	–	2,296,273	728,041	3,024,314
Disposals	–	(830,439)	(208,287)	(1,038,726)
Amortization charge	–	(3,681,446)	(1,961,809)	(5,643,255)
Accumulated amortization and impairment on disposals	–	353,851	192,529	546,380
Transfers (to)/from inventory, net	–	(47)	265,965	265,918
Transfer from property, plant and equipment, net (Note 7)	–	1,083,277	632,680	1,715,957
Transfers and reclassifications	–	91,996	(91,996)	–
<b>Net book value as at December 31, 2017</b>	<b>90,003,639</b>	<b>9,678,095</b>	<b>15,749,680</b>	<b>115,431,414</b>
At cost	125,324,547	37,842,270	23,833,222	187,000,039
Accumulated amortization and impairment	(35,320,908)	(28,164,175)	(8,083,542)	(71,568,625)
<b>Net book value as at December 31, 2017</b>	<b>90,003,639</b>	<b>9,678,095</b>	<b>15,749,680</b>	<b>115,431,414</b>
At cost	126,946,769	33,487,005	24,072,716	184,506,490
Accumulated amortization and impairment	(36,943,130)	(23,068,913)	(8,005,835)	(68,017,878)
<b>Net book value as at December 31, 2016</b>	<b>90,003,639</b>	<b>10,418,092</b>	<b>16,066,881</b>	<b>116,488,612</b>

Carrying amount of goodwill is allocated to each of the group of cash-generating units as follows:

Cash-generating unit	2017	2016
Cash-generating units of PNHZ	88,553,296	88,553,296
Gas stations	1,450,343	1,450,343
<b>Total goodwill</b>	<b>90,003,639</b>	<b>90,003,639</b>

#### PNHZ

In 2017 and 2016, based on the impairment test results, no impairment of PNHZ goodwill was recognized.

For the detailed discussion of testing goodwill for impairment refer to Note 4.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 11. BANK DEPOSITS

In thousands of tenge	2017	2016
Denominated in US dollar	<b>1,656,762,879</b>	1,202,060,798
Denominated in tenge	<b>28,228,345</b>	28,256,972
Denominated in other currency	<b>2,472,452</b>	2,378,825
	<b>1,687,463,676</b>	1,232,696,595

As at December 31, 2017, the weighted average interest rate for long-term bank deposits was 1.07% in US dollars and 2.29% in tenge, respectively (2016: 1.16% in US dollars and 4.87% in tenge, respectively).

As at December 31, 2017, the weighted average interest rate for short-term bank deposits was 1.65% in US dollars, 7.51% in tenge and 0.65% in other foreign currencies, respectively (2016: 1.84% in US dollars, 12.13% in tenge and 0.36% in other foreign currencies, respectively).

In thousands of tenge	2017	2016
Maturities under 1 year	<b>1,638,940,642</b>	1,182,669,493
Maturities between 1 and 2 years	<b>835,902</b>	178,088
Maturities over 2 years	<b>47,687,132</b>	49,849,014
	<b>1,687,463,676</b>	1,232,696,595

As at December 31, 2017 bank deposits include mainly cash pledged as collateral of 62,072,850 thousand tenge (2016: 108,695,345 thousand tenge), which are represented mainly by 14,903,887 thousand tenge (2016: 63,718,200 thousand tenge) pledged with SB Sberbank Russia JSC until execution of obligations (March 1, 2018) by Atyrau Oil Refinery LLP (ANPZ) on loans received from this bank on construction of the deep oil processing plant at Atyrau Oil Refinery and 32,100,440 thousand tenge (2016: 33,276,000 thousand tenge) at restricted bank accounts designated as a liquidation fund per requirements of subsoil use contracts.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 12. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES

In thousands of tenge	Main activity	Place of business	December 31, 2017		December 31, 2016	
			Carrying value	Percentage ownership	Carrying value	Percentage ownership
Joint ventures						
Kashagan B.V.	Oil and gas exploration and production	Kazakhstan	1,743,495,073	50.00%	1,759,152,117	50.00%
Tengizchevroil LLP	Oil and gas exploration and production	Kazakhstan	1,353,084,254	20.00%	1,154,183,137	20.00%
Mangistau Investments B.V.	Oil and gas development and production	Kazakhstan	135,780,525	50.00%	191,813,452	50.00%
Ural Group Limited BVI	Oil and gas exploration and production	Kazakhstan	78,031,456	50.00%	72,898,443	50.00%
KazGerMunay LLP	Oil and gas exploration and production	Kazakhstan	47,537,370	50.00%	71,109,842	50.00%
Vaisera Holding BV	Oil refining	Kazakhstan	36,736,906	50.00%	27,044,986	50.00%
KazRosGas LLP	Processing and sale of natural gas and refined gas products	Kazakhstan	33,760,512	50.00%	79,658,348	50.00%
Kazakhoil-Aktobe LLP	Production of crude oil	Kazakhstan	22,715,643	50.00%	39,503,663	50.00%
Beineu-Shymkent Pipeline LLP	Construction and operation of the gas pipeline	Kazakhstan	17,700,751	50.00%	–	50.00%
Teniz Services LLP	Design, construction and operation of infrastructure facilities, support of offshore oil operations	Kazakhstan	6,134,421	48.996%	6,195,807	48.996%
Other			22,648,911		21,839,079	
Associates						
PetroKazakhstan Inc. ("PKI")	Exploration, production and processing of oil and gas	Kazakhstan	115,920,426	33.00%	144,252,432	33.00%
Caspian Pipeline Consortium (CPC)	Transportation of liquid hydrocarbons	Kazakhstan / Russia	195,094,592	20.75%	137,035,180	20.75%
Other			1,710,501		1,590,324	
			<b>3,810,351,341</b>		<b>3,706,276,810</b>	

All of the above joint ventures and associates are strategic for the Group's business.

As at December 31, 2017, the Group's share in unrecognized losses of joint ventures and associates was equal to 175,622,640 thousand tenge (December 31, 2016: 357,813,869 thousand tenge). The Group's change in share of unrecognized losses of joint ventures and associates for 2017 was 182,191,229 thousand tenge (2016: 174,756,859 thousand tenge).

The following table summarizes the movements in the investments in 2017 and 2016:

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 12. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

In thousands of tenge	2017	2016
At January 1	<b>3,706,276,810</b>	3,422,939,745
Share in profits of joint ventures and associates, net (Note 30)	<b>414,565,236</b>	270,190,990
Additional contributions without change in ownership	–	165,401,066
Refund of contributions without change in ownership	<b>(1,714,856)</b>	(1,925,543)
Dividends received	<b>(271,782,500)</b>	(118,607,550)
Change in dividends receivable	<b>(39,889,075)</b>	10,160,358
Adjustment of unrealized income*	<b>(20,722,048)</b>	–
Acquisitions	<b>2,625</b>	87
Reversal/(impairment) of investments	<b>14,845,359</b>	(5,503,379)
Other changes in the equity of the joint venture	<b>10,629,606</b>	8,475,525
Transfers to assets classified as held for sale	<b>(66,899)</b>	–
Foreign currency translation	<b>(1,792,917)</b>	(44,854,489)
<b>At December 31</b>	<b>3,810,351,341</b>	3,706,276,810

\* Adjustment of unrealized income represents elimination of unrealized profit from sale of inventory from the Group to JV made by the Group when using the equity method.

In 2016, additional contributions without change in ownership mainly relates to the cash calls for Kashagan project (159,758,211 thousand tenge or 469,556 thousand US dollars).

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 12. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

The following tables illustrate summarized financial information of material joint ventures, based on financial statements of these entities for 2017:

In thousands of tenge	KMG Kashagan B.V.	Tengizchevroil LLP	Mangistau Investments B.V.	Ural Group Limited BVI	KazGerMunay LLP	Valsera Holding BV
Non-current assets	4,181,690,783	8,719,901,854	393,188,438	219,833,754	131,809,168	417,762,488
Current assets, including	172,993,385	1,527,676,810	66,799,332	57,066	46,380,639	55,449,428
Cash and cash equivalents	49,409,827	748,523,476	3,090,429	46,894	37,913,868	17,662,733
Non-current liabilities, including	(563,262,794)	(2,507,495,652)	(66,129,352)	(63,640,210)	(28,691,378)	(210,750)
Non-current financial liabilities	–	(1,329,320,000)	–	(54,732,538)	–	–
Current liabilities, including	(304,431,229)	(974,661,744)	(122,297,369)	(187,698)	(54,423,690)	(399,527,354)
Current financial liabilities	(272,147,696)	(31,718,905)	–	–	–	(327,331,592)
<b>Equity</b>	<b>3,486,990,145</b>	<b>6,765,421,268</b>	<b>271,561,049</b>	<b>156,062,912</b>	<b>95,074,739</b>	<b>73,473,812</b>
Share of ownership	50%	20%	50%	50%	50%	50%
<b>Carrying amount of the investments as at December 31, 2017</b>	<b>1,743,495,073</b>	<b>1,353,084,254</b>	<b>135,780,525</b>	<b>78,031,456</b>	<b>47,537,370</b>	<b>36,736,906</b>
Revenue	183,119,424	4,357,947,405	635,902,730	7,806	184,616,262	60,807,978
Depreciation, depletion and amortization	(90,257,871)	(560,816,868)	(62,190,091)	(19,797)	(34,072,143)	(5,026,754)
Finance income	1,024,605	22,006,884	125,989	16,556	1,306,260	411,019
Finance costs	(36,556,637)	(127,134,154)	(5,787,751)	(1,890,789)	(1,014,422)	(65,961)
Income tax expense	(3,749,814)	(621,385,125)	(34,036,342)	(690,912)	(53,071,478)	(4,373,083)
Profit/(loss) for the year from continuing operations	(20,416,709)	1,449,898,428	99,210,060	(3,754,422)	35,426,899	19,501,556
Other comprehensive (loss)/income	(10,897,380)	7,517,157	(228,950)	(218,852)	(664,344)	(117,716)
<b>Total comprehensive income/(loss)</b>	<b>(31,314,089)</b>	<b>1,457,415,585</b>	<b>98,981,110</b>	<b>(3,973,274)</b>	<b>34,762,555</b>	<b>19,383,840</b>
Dividends received	–	79,694,300	105,523,482	–	40,445,243	2,377,123

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 12. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

The following tables illustrate summarized financial information of material joint ventures, based on financial statements of these entities for 2017:

In thousands of tenge	KazRosGas LLP	Kazakhoil-Aktobe LLP	Beineu-Shymkent Pipeline LLP	TenizService LLP	Asia Gas Pipeline LLP (AGP)
Non-current assets	27,017,765	49,853,017	442,256,509	514,174,591	1,572,551,905
Current assets, including	150,968,308	19,768,150	139,271,512	72,382,243	519,332,547
Cash and cash equivalents	30,876,542	6,003,873	71,938,622	4,636,467	9,069,756
Non-current liabilities, including	–	(7,430,578)	(464,526,731)	(419,764,043)	(2,058,444,374)
Non-current financial liabilities	–	–	(457,760,112)	(12,536,470)	(2,015,735,146)
Current liabilities, including	(69,020,954)	(16,759,302)	(110,972,112)	(154,272,542)	(331,505,536)
Current financial liabilities	–	(6,847,436)	(91,094,674)	(7,290,228)	(297,653,555)
<b>Equity</b>	<b>108,965,119</b>	<b>45,431,287</b>	<b>6,029,178</b>	<b>12,520,249</b>	<b>(298,065,458)</b>
Share of ownership	50%	50%	50%	48.996%	50%
Accumulated unrecognized share of losses	–	–	–	–	149,032,729
Consolidation adjustments	(20,722,048)	–	14,686,162	–	–
<b>Carrying amount of the investments as at December 31, 2017</b>	<b>33,760,512</b>	<b>22,715,643</b>	<b>17,700,751</b>	<b>6,134,421</b>	<b>–</b>
Revenue	243,526,652	56,046,725	79,096,648	3,466,618	587,428,795
Depreciation, depletion and amortization	(638,139)	(17,062,183)	(13,235,308)	(378,038)	(64,332,618)
Finance income	2,488,969	212,438	20,952	38,606	3,757,049
Finance costs	(13,361,780)	(2,472,632)	(24,649,158)	(116,278)	(86,077,312)
Income tax expense	(11,906,811)	2,415,969	–	(645,283)	(89,287,214)
<b>Profit/(loss) for the year from continuing operations</b>	<b>17,244,090</b>	<b>(33,576,039)</b>	<b>38,484,528</b>	<b>3,374,702</b>	<b>269,647,198</b>
Other comprehensive (loss)/income	(1,939,339)	–	–	–	–
<b>Total comprehensive income/(loss)</b>	<b>15,304,751</b>	<b>(33,576,039)</b>	<b>38,484,528</b>	<b>3,374,702</b>	<b>269,647,198</b>
Change in unrecognized share of losses	–	–	19,910,964	–	134,823,599
Dividends received	18,647,418	–	–	–	–

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 12. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

The following tables illustrate summarized financial information of material joint ventures, based on financial statements of these entities for 2016:

In thousands of tenge	KMG Kashagan B.V.	Tengizchevroil LLP	Mangistau Investments B.V.	Ural Group Limited BVI	KazGerMunay LLP	Valsera Holding BV
Non-current assets	4,272,763,806	6,865,450,041	395,489,866	215,892,000	152,790,499	236,339,155
Current assets, including	174,986,584	2,424,218,478	95,375,850	310,850	50,846,056	91,231,530
Cash and cash equivalents	86,451,093	1,795,549,215	3,870,651	297,396	39,694,839	76,650,503
Non-current liabilities, including	(601,418,805)	(2,456,711,253)	(65,632,702)	(68,663,338)	(27,510,090)	(227,305,975)
Non-current financial liabilities	(250,522,762)	(1,333,160,000)	–	(57,970,000)	–	–
Current liabilities, including	(328,027,351)	(1,062,041,583)	(41,606,110)	(1,742,626)	(33,906,781)	(46,174,738)
Current financial liabilities	(271,597,355)	(34,823,472)	–	–	–	–
Equity	3,518,304,234	5,770,915,683	383,626,904	145,796,886	142,219,684	54,089,972
Share of ownership	50%	20%	50%	50%	50%	50%
Carrying amount of the investments as at December 31, 2016	1,759,152,117	1,154,183,137	191,813,452	72,898,443	71,109,842	27,044,986
Revenue	16,419,924	3,568,833,894	532,016,705	39,899	157,268,631	52,340,852
Depreciation, depletion and amortization	(10,493,810)	(453,762,627)	(55,342,813)	(29,672)	(36,325,000)	(4,465,956)
Finance income	903,219	9,238,666	52,201	17,221	946,000	328,489
Finance costs	(40,494,823)	(172,523,889)	(4,942,864)	(1,652,398)	(1,231,000)	(46,426)
Income tax benefit/(expense)	58,587,222	(316,950,160)	(20,804,933)	(187,093)	(19,873,000)	(7,230,337)
Profit/(loss) for the year from continuing operations	15,451,774	739,551,980	59,532,404	(3,155,114)	10,259,065	20,828,376
Other comprehensive (loss)/income	(66,056,550)	(109,061,451)	(294,736)	(2,751,222)	(2,644,700)	40,452
Total comprehensive (loss)/income	(50,604,776)	630,490,529	59,237,668	(5,906,336)	7,614,365	20,868,828
Dividends received	–	–	44,347,360	–	27,514,925	–

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 12. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

The following tables illustrate summarized financial information of material joint ventures, based on financial statements of these entities for 2016:

In thousands of tenge	KazRosGas LLP	Kazakhoil-Aktobe LLP	Beineu-Shymkent Pipeline LLP	Tenizservice LLP	Asia Gas Pipeline LLP (AGP)
Non-current assets	9,641,413	85,936,432	449,074,109	257,098,119	1,691,909,542
Current assets, including	244,478,957	28,462,628	115,813,128	31,907,475	529,037,901
Cash and cash equivalents	62,379,300	10,749,817	56,148,742	6,423,515	64,862,965
Non-current liabilities, including	(454,608)	(7,586,856)	(474,773,724)	(242,533,551)	(2,466,567,228)
Non-current financial liabilities	–	–	(467,117,974)	11,655,148	(2,433,422,400)
Current liabilities, including	(94,349,066)	(27,804,878)	(129,935,447)	(33,826,507)	(322,092,871)
Current financial liabilities	–	–	(11,384,051)	4,558,879	(281,792,538)
Equity	159,316,696	79,007,326	(39,821,934)	12,645,536	(567,712,656)
Share of ownership	50%	50%	50%	48.996%	50%
Accumulated unrecognized share of losses	–	–	19,910,968	–	283,856,328
Carrying amount of the investments as at December 31, 2016	79,658,348	39,503,663	–	6,195,807	–
Revenue	231,655,238	54,593,234	33,827,305	3,304,883	551,219,060
Depreciation, depletion and amortization	(717,333)	(16,043,932)	(9,378,998)	(385,920)	(59,269,618)
Finance income	6,256,417	524,548	24	17,777	3,949,093
Finance costs	(100,133)	(1,006,373)	(11,103,332)	(2,806)	(85,771,582)
Income tax benefit/ (expense)	(14,443,039)	(12,179,837)	–	(479,326)	(80,881,044)
Profit/(loss) for the year from continuing operations	37,294,835	(23,070,957)	14,989,344	2,756,175	304,750,874
Other comprehensive (loss)/income	(285,886)	–	–	–	–
Total comprehensive (loss)/income	37,008,949	(23,070,957)	14,989,344	2,756,175	304,750,874
Change in unrecognized share of losses	–	–	10,947,110	–	152,375,437
Dividends received	36,252,976	6,734,600	–	–	–

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 12. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

The following tables illustrate summarized financial information about a material associates, based on its financial statements for 2017:

In thousands of tenge	2017	
	PKI	CPC
Non-current assets	356,151,959	2,042,156,419
Current assets	84,903,668	95,627,293
Non-current liabilities	(59,122,504)	(756,148,455)
Current liabilities	(30,659,104)	(595,179,435)
<b>Equity</b>	<b>351,274,019</b>	<b>786,455,822</b>
Share of ownership	33%	20.75%
Goodwill	–	31,905,009
<b>Carrying amount of the investment as at December 31</b>	<b>115,920,426</b>	<b>195,094,592</b>
Revenue	137,911,562	647,477,562
Profit for the year	21,920,516	263,450,520
Other comprehensive (loss)/income	(991,827)	16,353,875
<b>Total comprehensive income</b>	<b>20,928,689</b>	<b>279,804,395</b>
Dividends received	20,453,367	–

The following tables illustrate summarized financial information about a material associates, based on its financial statements for 2016:

In thousands of tenge	2016	
	PKI	CPC
Non-current assets	459,502,915	2,099,989,380
Current assets	97,178,710	86,254,119
Non-current liabilities	(99,253,349)	(1,139,220,549)
Current liabilities	(20,299,694)	(540,815,685)
<b>Equity</b>	<b>437,128,582</b>	<b>506,207,265</b>
Share of ownership	33%	20.75%
Goodwill	–	31,997,172
<b>Carrying amount of the investment as at December 31</b>	<b>144,252,432</b>	<b>137,035,180</b>
Revenue	128,809,187	546,965,806
(Loss)/profit for the year	(47,908,279)	390,880,208
Other comprehensive (loss)/income	(10,771,298)	79,529,104
Total comprehensive (loss)/income	(58,679,577)	470,409,312
Change in unrecognized share of losses	–	6,198,893

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 12. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES (CONTINUED)

The following tables illustrate aggregate financial information of individually immaterial joint ventures (the Group's proportional share):

In thousands of tenge	2017	2016
Non-current assets	125,404,236	137,412,947
Current assets	37,468,195	32,551,366
Non-current liabilities	(127,415,389)	(146,407,855)
Current liabilities	(35,006,253)	(51,571,034)
Goodwill	172,214	172,214
Impairment	(3,635,227)	(3,635,227)
Accumulated unrecognized share of losses	(25,661,135)	(53,316,668)
<b>Carrying amount of the investments as at December 31</b>	<b>22,648,911</b>	<b>21,839,079</b>
Profit for the year from continuing operations	18,233,038	12,463,584
Other comprehensive income/(losses)	497,482	(120,785)
Total comprehensive income	18,730,520	12,342,799
Unrecognized share of income	13,600,372	5,906,724

The following tables illustrate aggregate financial information of individually immaterial associates (the Group's proportional share):

In thousands of tenge	2017	2016
Non-current assets	8,518,491	6,880,547
Current assets	1,663,030	2,707,872
Non-current liabilities	(5,599,325)	(4,848,556)
Current liabilities	(3,800,471)	(3,720,029)
Impairment	–	(159,415)
Accumulated unrecognized share of losses	(928,776)	(729,905)
<b>Carrying amount of the investments as at December 31</b>	<b>1,710,501</b>	<b>1,590,324</b>
Profit/losses for the year from continuing operations	51,773	(514,758)
Total comprehensive income/(losses)	51,773	(514,758)
Unrecognized share of losses	(198,871)	(671,305)

### 13. INVENTORIES

In thousands of tenge	2017	2016
Materials and supplies	58,212,821	61,605,528
Refined products	30,129,849	14,504,132
Gas products	15,689,458	20,579,927
Crude oil	12,237,322	8,525,374
Less: provision for obsolete inventory	(7,372,095)	(6,438,061)
	<b>108,897,355</b>	<b>98,776,900</b>

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 14. TRADE ACCOUNTS RECEIVABLE AND OTHER CURRENT ASSETS

In thousands of tenge	2017	2016
Advances paid and prepaid expenses	85,533,159	89,388,255
Taxes receivable, other than VAT	23,492,489	34,330,632
Dividends receivable	29,009,976	3,242,634
Restricted cash	13,056,590	1,380,977
Other current assets	34,738,931	27,208,178
Less: allowance for impairment	(17,914,896)	(6,471,068)
<b>Total other current assets</b>	<b>167,916,249</b>	<b>149,079,608</b>
Trade accounts receivable	317,477,806	290,199,726
Less: allowance for impairment	(11,153,175)	(10,388,095)
<b>Trade accounts receivable</b>	<b>306,324,631</b>	<b>279,811,631</b>

As at December 31, 2017 and 2016 the above assets were non-interest bearing.

In 2017 Specialized Interdistrict Economic Court of Astana approved settlement agreements related to the civil cases on the statement of claim of the Company, KazMunayGas–refining and marketing JSC and Delta Bank JSC (“Delta Bank”) on recovery of bank deposits and penalty interests, according to which Delta Bank had to make payments within six months. Due to the uncertainty regarding the payment from Delta Bank, the Group accrued 100% provision for impairment of the deposits in the total amount of 36,161 thousand US dollars (equivalent to 11,637,410 thousand tenge) (Note 29). In connection with the revocation of the Delta Bank license by National Bank of RK, the Group reclassified deposits in restricted cash.

Movements in the allowance for impairment of trade accounts receivable and other current assets were as follows:

In thousands of tenge	Individually impaired
<b>As at December 31, 2015</b>	<b>13,602,754</b>
Charge for the year	9,141,218
Recovered	(3,565,932)
Written off	(1,794,727)
Discontinued operations	(419,627)
Foreign currency translation	(104,523)
<b>As at December 31, 2016</b>	<b>16,859,163</b>
Charge for the year	<b>7,812,444</b>
Recovered	<b>(6,519,114)</b>
Written off	<b>(977,097)</b>
Transfers and reclassifications	<b>11,855,869</b>
Foreign currency translation	<b>36,806</b>
<b>As at December 31, 2017</b>	<b>29,068,071</b>

As at December 31, the ageing analysis of trade accounts receivable is as follows:

In thousands of tenge	Total	Neither past due nor impaired	Past due but not impaired				
			<30 days	30-60 days	61-90 days	91-120 days	>120 days
2017	306,324,631	231,716,027	6,164,625	36,318,632	15,059,406	1,533,783	15,532,158
2016	279,811,631	261,776,745	3,577,040	7,558,909	4,342,068	906,982	1,649,887

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 15. LOANS AND RECEIVABLES DUE FROM RELATED PARTIES

In thousands of tenge	2017	2016
Loans due from related parties	<b>785,593,140</b>	640,650,266
Note receivable from a shareholder of a joint venture	<b>38,014,555</b>	34,312,858
Bonds receivable from Samruk-Kazyna	<b>18,342,494</b>	42,123,003
Less: allowance for impairment of loans to related parties	–	(15,418,397)
	<b>841,950,189</b>	701,667,730
In thousands of tenge	2017	2016
Loans due from related parties in tenge	<b>471,798,857</b>	403,380,730
Loans due from related parties in US dollars	<b>311,340,691</b>	220,434,656
Note receivable from a shareholder of a joint venture in US dollars	<b>38,014,555</b>	34,312,858
Bonds receivable from Samruk-Kazyna in tenge	<b>18,342,494</b>	42,123,003
Loans due from related parties in other foreign currencies	<b>2,453,592</b>	1,416,483
	<b>841,950,189</b>	701,667,730
In thousands of tenge	2017	2016
Current portion	<b>169,501,500</b>	135,673,233
Non-current portion	<b>672,448,689</b>	565,994,497
	<b>841,950,189</b>	701,667,730

Loans due from related parties are stated at amortized cost.

Since the Group acquired remaining 49% of interest in KS EP and it became a subsidiary, the balance of loan from KS EP, including the allowance for impairment was fully eliminated.

Note receivable from a shareholder of a joint venture

In 2007, the Group acquired a 50% interest in a jointly controlled entity, CITIC Canada Energy Limited (“CCEL”), whose investments are involved in oil and natural gas production in the Western Kazakhstan, from its co-investor, State Alliance Holdings Limited, a holding company ultimately belonging to CITIC Group (“CITIC”), and listed on the Hong Kong Stock Exchange.

CCEL is contractually obliged to declare dividends on an annual basis based on available distributable equity. At the same time, for the period until 2020 KMG EP is contractually obliged to transfer any dividends received from CCEL, in excess of a guaranteed amount, to CITIC, up to the total maximum amount, which is equal to 508.8 million US dollars (169,101 million tenge) as at December 31, 2017 (2016: 512.3 million US dollars or 170,760 million tenge). The total maximum amount represents the balance of KMG EP’s share of the original purchase price funded by CITIC plus accrued interest. KMG EP has no obligation to pay amounts to CITIC unless it receives an equivalent amount from CCEL. Accordingly, the Group recognizes in its consolidated statement of financial position only the right to receive dividends from CCEL in the guaranteed amount of 26.9 million US dollars which yields an effective interest rate of 15% per annum on an annual basis until 2020, plus the right to retain any dividends in excess of the total maximum guaranteed amount. The carrying amount of this receivable at December 31, 2017, was equal to 114 million US dollars (38,014,555 thousand tenge) (2016: 103 million US dollars or 34,312,858 thousand tenge).

In addition, KMG EP has the right, subject to certain conditions precedent, to exercise a put option and return the investment to CITIC in exchange for 150 million US dollars plus annual interest of 8% less the cumulative amount of the guaranteed payments received.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 16. OTHER FINANCIAL ASSETS

In October 2017, the Group noted indicators of impairment on deposits and cash on current accounts held in Bank RBK JSC of 27,889,370 thousand tenge. Based on an analysis of the recoverability of the deposits, the Group recognised a loss on impairment on deposits of 6,972,343 thousand tenge (Note 29). As result, the carrying amount of deposits and cash on current accounts comprised 20,917,027 thousand tenge.

In November 2017, National Bank of RK jointly with the Government of the Republic of Kazakhstan and Kazakhmys Corporation LLC (KCC), a third party, signed a framework agreement on improving the conditions of Bank RBK JSC. Pursuant to a resolution of the government dated November 7, 2017, on December 29, 2017, the Group's deposits and cash on current accounts held in Bank RBK JSC with carrying amount of 27,889,370 thousand tenge were converted to 15 year coupon bonds at par value of 1 tenge each bearing 0.01% per annum. Under this framework agreement, KCC guaranteed to repay 7,666,949 thousand tenge at the end of five years. As a result, coupon bonds were initially recognised at a fair value of 4,161,312 thousand tenge. The fair value was determined by discounting future cash flows for the bonds using a discount rate of 13.0% and maturity date of five years. The difference between carrying amount of deposits and cash and the fair value of coupon bonds in the amount of 16,755,715 thousand tenge was recognised as a transaction with the shareholder by the Group in the consolidated statement of changes in equity (Note 18).

### 17. CASH AND CASH EQUIVALENTS

In thousands of tenge	2017	2016
Term deposits with banks – US dollars	<b>790,300,142</b>	435,939,051
Term deposits with banks – tenge	<b>115,103,490</b>	180,075,718
Current accounts with banks – US dollars	<b>250,473,444</b>	245,711,146
Current accounts with banks – tenge	<b>30,272,279</b>	13,214,622
Current accounts with banks – other currencies	<b>2,139,505</b>	1,893,667
Term deposits with banks – other currencies	<b>43,535</b>	37,995
Cash-on-hand	<b>1,823,964</b>	1,566,151
	<b>1,190,156,359</b>	878,438,350
Cash and cash equivalents attributable to discontinued operations	<b>76,448,456</b>	27,014,161
	<b>1,266,604,815</b>	905,452,511

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, 2017, the weighted average interest rate for time deposits with banks was 1.04% in US dollars and 7.85% in tenge, respectively (2016: 0.61% in US dollars and 8.15% in tenge, respectively).

As at December 31, 2017 and 2016 cash and cash equivalents were not pledged as collateral.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 18. EQUITY

#### Share capital

Total number of outstanding, issued and paid shares comprises:

	December 31, 2015	Issued in 2016	December 31, 2016	Issued in 2017	December 31, 2017
<b>Number of shares issued and paid, including</b>	584,207,465	5,272	584,212,737	<b>5,187,152</b>	<b>589,399,889</b>
Par value of 27,726.63 tenge	137,900	–	137,900	–	<b>137,900</b>
Par value of 5,000 tenge	59,707,029	–	59,707,029	–	<b>59,707,029</b>
Par value of 2,500 tenge	65,911,763	5,272	65,917,035	<b>5,187,152</b>	<b>71,104,187</b>
Par value of 2,451 tenge	1	–	1	–	<b>1</b>
Par value of 1,000 tenge	1	–	1	–	<b>1</b>
Par value of 921 tenge	1	–	1	–	<b>1</b>
Par value of 858 tenge	1	–	1	–	<b>1</b>
Par value of 838 tenge	1	–	1	–	<b>1</b>
Par value of 704 tenge	1	–	1	–	<b>1</b>
Par value of 592 tenge	1	–	1	–	<b>1</b>
Par value of 500 tenge	458,450,766	–	458,450,766	–	<b>458,450,766</b>
<b>Share capital (000'tenge), including</b>	696,363,445	13,180	696,376,625	<b>12,967,880</b>	<b>709,344,505</b>
Par value of 27,726.63 tenge	3,823,502	–	3,823,502	–	<b>3,823,502</b>
Par value of 5,000 tenge	298,535,145	–	298,535,145	–	<b>298,535,145</b>
Par value of 2,500 tenge	164,779,408	13,180	164,792,588	<b>12,967,880</b>	<b>177,760,468</b>
Par value of 2,451 tenge	2	–	2	–	<b>2</b>
Par value of 1,000 tenge	1	–	1	–	<b>1</b>
Par value of 921 tenge	1	–	1	–	<b>1</b>
Par value of 858 tenge	1	–	1	–	<b>1</b>
Par value of 838 tenge	1	–	1	–	<b>1</b>
Par value of 704 tenge	1	–	1	–	<b>1</b>
Par value of 592 tenge	1	–	1	–	<b>1</b>
Par value of 500 tenge	229,225,382	–	229,225,382	–	<b>229,225,382</b>

In 2017 the Company issued 5,187,152 common shares. As consideration, the Company received high, medium and low pressure gas pipelines and associated facilities for 12,967,880 thousand tenge that were previously recognized as additional paid-in capital and cash for 1 thousand tenge.

In 2016 the Company issued 5,272 common shares. As consideration for these common shares the Company received building in Kyzylorda for 13,180 thousand tenge and cash for 1 thousand tenge.

As at December 31, 2017, 260,159,707 common shares were authorized, but not issued (2016: 265,346,859 common shares).

#### Additional paid-in capital

In 2017 the Group increased additional paid in capital in the amount of 13,188,885 thousand tenge, which represents the fair value of gas pipelines contributed by the Government on trust management terms, which serves as a short-term mechanism until the legal title for the pipelines transfers to the Group.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 18. EQUITY (CONTINUED)

#### Transactions with Samruk-Kazyna

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%. In this regard, the Company recognized a modification of the debt and recognized the effect of modification of 24,019,820 thousand tenge through equity, at the new market rates.

In 2017 the Company provided interest free loan to Samruk-Kazyna, the difference between fair value and nominal value of the loan amounting 5,716,173 thousand tenge (2016: 50,871,857 thousand tenge) recognized as transaction with Samruk-Kazyna in the consolidated statement of changes in equity.

#### Distributions to Samruk-Kazyna

In 2017 distributions to Samruk-Kazyna includes: accrual of provision for construction of the Palace of martial arts in Astana city in the amount of 5,544,234 thousand tenge (2016: 14,275,013 thousand tenge), the results of operations of PSA LLP (subsidiary of the Group) in the total amount of 5,792,675 thousand tenge (2016: 5,852,146 thousand tenge) and the adjustment of the fair value of cost of gas pipelines received as a payment for the issued common shares of 514 thousand tenge.

In 2017 due to transferring obligations for reconstruction of the trade and exhibition center in Moscow to Corporate Fund "TVC Kazakhstan", the Company reversed previously recognized provision of 4,458,832 thousand tenge.

As at December 31, 2017 the Group recognized the discount on purchased bonds of "Special financial company DSFK" LLP through retained earnings in the amount of 16,755,715 thousand tenge (Note 16).

#### Dividends

In 2017, based on the decision of Samruk-Kazyna and National Bank of RK, the Company declared and paid dividends for 2016 in the amount of 11.32 tenge per common share in the total amount of 6,672,007 thousand tenge and dividends for 2013 in the amount of 66.52 tenge per common share in the total amount of 39,206,880 thousand tenge.

In 2017 the Group declared dividends of 13,269,562 thousand tenge to the holders of non-controlling interest in KMG EP and KTO (subsidiaries of the Group). As at December 31, 2017 the dividends payable by the Group to the holders of non-controlling interest is 1,850,141 thousand tenge (as at December 31, 2016: 1,862,166 thousand tenge).

#### 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 thousands of tenge	2017	2016
Total assets	<b>13,388,753,337</b>	11,883,077,270
Less: intangible assets	<b>115,431,414</b>	116,488,612
Less: total liabilities	<b>6,766,353,343</b>	5,604,806,355
<b>Net assets</b>	<b>6,506,968,580</b>	6,161,782,303
Number of ordinary shares	<b>589,399,889</b>	584,212,737
<b>Book value per ordinary share</b>	<b>11,040</b>	10,547

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 18. EQUITY (CONTINUED)

#### Earnings per share

In thousand tenge	2017	2016
Weighted average number of common shares for basic and diluted earnings per share	<b>588,967,626</b>	584,210,540
Basic and diluted share in net profit for the period	<b>0.882</b>	0.617
Basic and diluted share in loss from continuing operations	<b>(0.458)</b>	(0.001)

#### Non-controlling interest

The following tables illustrate information of subsidiaries in which the Group has significant non-controlling interests:

	Country of incorporation and operation	2017		2016	
		Share	Carrying value	Share	Carrying value
KazMunayGas Exploration Production JSC	Kazakhstan	<b>36.99%</b>	779,932,098	36.98%	715,007,274
Rompetrol Downstream S.R.L.	Romania	<b>45.37%</b>	46,577,301	45.37%	41,753,314
KazTransOil JSC	Kazakhstan	<b>10.00%</b>	42,861,526	10.00%	42,221,868
Rompetrol Petrochemicals S.R.L.	Romania	<b>45.37%</b>	8,698,505	45.37%	11,002,892
Rompetrol Rafinare S.A.	Romania	<b>45.37%</b>	705,953	45.37%	1,775,348
Rompetrol Vega	Romania	<b>45.37%</b>	(19,743,196)	45.37%	(20,763,577)
Other			10,985,714		10,562,978
			870,017,901		801,560,097

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 18. EQUITY (CONTINUED)

#### Non-controlling interest (continued)

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 thousands of tenge	KazMunayGas Exploration Production JSC	KazTransOil JSC	Rompetrol Rafinare S.A.	Rompetrol Downstream S.R.L.	Rompetrol Vega S.R.L.	Rompetrol Petrochemicals S.R.L.
<b>Summarized statement of financial position</b>						
Non-current assets	771,619,013	450,725,408	219,853,770	119,373,059	21,456,147	3,417,387
Current assets	1,562,165,394	99,864,145	213,572,571	121,460,853	9,847,562	25,180,684
Non-current liabilities	(53,790,289)	(60,818,542)	(50,695,215)	(13,368,325)	(24,447,296)	(2,679,868)
Current liabilities	(171,271,707)	(65,826,269)	(381,175,202)	(124,808,982)	(50,370,467)	(6,746,676)
Total equity	2,108,722,411	423,944,742	1,555,924	102,656,605	(43,514,054)	19,171,527
Attributable to:						
Equity holder of the Parent Company	1,328,790,313	381,083,216	849,971	56,079,304	(23,770,857)	10,473,022
Non-controlling interest	779,932,098	42,861,526	705,953	46,577,301	(19,743,197)	8,698,505
<b>Summarized statement of comprehensive income</b>						
Revenue	954,505,779	222,449,953	868,442,783	402,786,476	56,963,700	65,575,792
Profit/(loss) for the year from continuing operations	195,361,299	65,889,883	(1,696,400)	10,744,848	2,060,006	(4,905,225)
Total comprehensive income/(loss) for the year, net of tax	194,983,214	66,003,468	(2,356,951)	10,632,091	2,248,922	(5,078,872)
Attributable to:						
Equity holder of the Parent Company	122,875,728	59,403,121	(1,287,556)	5,808,104	1,228,541	(2,774,485)
Non-controlling interest	72,107,486	6,600,347	(1,069,395)	4,823,987	1,020,381	(2,304,387)
Dividends declared to non-controlling interests	(7,308,873)	(5,960,689)	—	—	—	—
<b>Summarized cash flow information</b>						
Operating activity	234,062,986	98,945,565	35,473,676	20,967,248	1,223,370	(1,227)
Investing activity	44,736,436	(67,271,259)	(36,389,078)	(2,622,275)	(1,216,751)	2
Financing activity	(18,905,604)	(59,617,355)	(660,692)	(17,790,242)	7,389	(268)
Net increase/(decrease) in cash and cash equivalents	259,551,871	(28,423,901)	(1,576,094)	554,731	14,008	(1,493)

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 18. EQUITY (CONTINUED)

#### Non-controlling interest (continued)

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, 2016 and for the year then ended:

In thousands of tenge	KazMunayGas Exploration Production JSC	KazTransOil JSC	Rompetro Refinare S.A.	Rompetro Downstream S.R.L.	Rompetro Vega Petrochemicals S.R.L.	
<b>Summarized statement of financial position</b>						
Non-current assets	738,093,000	426,739,640	267,716,078	119,113,167	21,101,988	4,300,369
Current assets	1,372,383,000	112,883,363	137,535,233	80,502,620	7,633,039	22,852,248
Non-current liabilities	(49,282,000)	(57,652,505)	(74,068,991)	(57,160,652)	(22,265,502)	(2,828,719)
Current liabilities	(127,682,000)	(61,396,189)	(327,269,445)	(50,430,727)	(52,232,554)	(73,495)
<b>Total equity</b>	<b>1,933,512,000</b>	<b>420,574,309</b>	<b>3,912,875</b>	<b>92,024,408</b>	<b>(45,763,029)</b>	<b>24,250,403</b>
Attributable to:						
Equity holder of the Parent Company	1,218,504,726	378,352,441	2,137,527	50,271,094	(24,999,452)	13,247,511
Non-controlling interest	715,007,274	42,221,868	1,775,348	41,753,314	(20,763,577)	11,002,892
<b>Summarized statement of comprehensive income</b>						
Revenue	727,154,000	207,107,815	726,258,178	247,673,492	49,722,055	–
<b>Profit/(loss) for the year from continuing operations</b>	<b>131,576,000</b>	<b>67,615,565</b>	<b>(4,862,301)</b>	<b>12,978,277</b>	<b>12,529,909</b>	<b>(2,865,715)</b>
<b>Total comprehensive income/(loss) for the year, net of tax</b>	<b>120,368,000</b>	<b>67,963,961</b>	<b>(5,675,817)</b>	<b>2,344,256</b>	<b>4,486,614</b>	<b>(2,046,509)</b>
Attributable to:						
Equity holder of the Parent Company	76,087,439	61,167,565	(3,100,588)	1,280,620	2,450,950	(1,117,967)
Non-controlling interest	44,280,561	6,796,396	(2,575,229)	1,063,636	2,035,664	(928,542)
Dividends declared to non-controlling interests	(51,573)	(5,115,654)	–	–	–	–
<b>Summarized cash flow information</b>						
Operating activity	175,322,000	90,976,610	60,338,009	12,991,805	60,117	(29,683)
Investing activity	(252,679,000)	(20,217,330)	(25,786,852)	(4,953,041)	(61,321)	7
Financing activity	(2,265,000)	(51,166,084)	(31,812,694)	(7,598,919)	115	(495)
<b>Net increase/(decrease) in cash and cash equivalents</b>	<b>(75,219,000)</b>	<b>18,874,141</b>	<b>2,738,463</b>	<b>439,845</b>	<b>(1,089)</b>	<b>(30,171)</b>

The accounting policies and explanatory notes on pages 8 through 97 form an integral part of these consolidated financial statements.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 19. BORROWINGS

In thousands of tenge	2017	2016
Fixed interest rate borrowings	<b>3,137,181,680</b>	2,099,674,818
Weighted average interest rates	<b>6.30%</b>	7.93%
Floating interest rate borrowings	<b>1,026,261,847</b>	972,865,152
Weighted average interest rates	<b>5.21%</b>	4.57%
	<b>4,163,443,527</b>	3,072,539,970
In thousands of tenge	2017	2016
US dollar – denominated borrowings	<b>3,942,714,607</b>	2,846,125,693
Tenge – denominated borrowings	<b>220,728,920</b>	226,414,277
	<b>4,163,443,527</b>	3,072,539,970
In thousands of tenge	2017	2016
Current portion	<b>763,955,792</b>	366,438,649
Non-current portion	<b>3,399,487,735</b>	2,706,101,321
	<b>4,163,443,527</b>	3,072,539,970

### 19. BORROWINGS (CONTINUED)

As at December 31, 2017 and 2016, the debt securities issued and loans comprised:

Bonds	Issuance amount	Redemption date	Interest	2017	2016
Bonds LSE 2008	1.6 billion USD	2018	9.125%	530,055,240	529,821,083
Bonds LSE 2010	1.5 billion USD	2020	7.00%	454,158,285	453,732,442
Bonds LSE 2010	1.25 billion USD	2021	6.375%	374,885,399	375,026,800
Bonds LSE 2013	2 billion USD	2043	5.75%	166,367,016	166,991,558
Bonds LSE 2013	1 billion USD	2023	4.4%	133,839,108	134,371,387
Bonds LSE 2014	1 billion USD	2044	6.00%	9,682,106	9,736,418
Bonds LSE 2014	0.5 billion USD	2025	4.875%	40,464,693	40,558,524
Bonds ISE 2017	0.750 billion USD	2027	4.375%	251,244,525	–
Bonds LSE 2017	0.5 billion USD	2022	3.875%	166,818,793	–
Bonds LSE 2017	1 billion USD	2027	4.75%	332,127,939	–
Bonds LSE 2017	1.25 billion USD	2047	5.75%	412,643,834	–
Bonds KASE 2009	120 billion KZT	2019	6M Libor+8.5%	73,636,569	110,551,375
Bonds KASE 2010	100 billion KZT	2017	7%	–	94,483,326
Bonds LSE 2007	600 million USD	2017	6.375%	–	42,929,372
Others				13,276,427	13,193,743
Total				2,959,199,934	1,971,396,028

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 19. BORROWINGS (CONTINUED)

Loans	Issuance amount	Redemption date	Interest	2017	2016
Development bank of Kazakhstan JSC	1.1 billion USD	2023-2025	4% + 6M Libor – 7.72%	294,631,602	319,055,961
The Export-Import Bank of China	1 billion USD	2027	6M Libor + 4.1%	<b>340,200,397</b>	245,894,740
Sberbank Russia	400 million USD	2024	12M Libor + 3.5%	<b>134,039,138</b>	134,557,235
Development bank of Kazakhstan JSC	140 billion KZT	2022-2027	7%-10.2%	<b>115,480,135</b>	103,733,280
Loan from partners (Project Pearl)	Financing for share of costs KMT in execution of subsoil use contract	From beginning of commercial exploration	6M Libor + 1%	<b>87,370,787</b>	84,876,946
The Syndicate of banks	200 million USD	revolving line of credit	1 M Libor + 2.0%	–	53,541,383
European Bank for Reconstruction and Development	68 billion KZT	2023	3 M CPI + 3.15%	<b>65,373,153</b>	46,322,433
Japan Bank for International Cooperation	298 million USD	2025	6M Libor + 1.10% – 4.64%	<b>62,386,497</b>	42,632,934
Loan from partners (Project Satpayev)	Financing for share of costs KMT in execution of subsoil use contract	From beginning of commercial exploration	12M Libor + 1.5%	<b>51,214,229</b>	28,128,262
Halyk bank JSC	70 million USD	2018	5%	<b>23,315,765</b>	23,393,933
Halyk bank JSC	5 billion KZT	2018	13%-15%	<b>3,137,832</b>	5,018,872
Other	–	–	–	<b>27,094,058</b>	13,987,963
<b>Total</b>				<b>1,204,243,593</b>	1,101,143,942

On April 19, 2017, 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 2.75 billion US dollars (equivalent to 854,315,237 thousand tenge). The Eurobonds were issued in three series, comprising (i) 500,000 thousand US dollars 3.875% Notes due 2022; (ii) 1,000,000 thousand US dollars 4.75% Notes due 2027; and (iii) US 1,250,000 thousand US dollars 5.75% Notes due 2047.

On September 26, 2017 KazTransGas (“KTG”) placed Eurobonds for a total amount of 750 million US dollars (equivalent to: 254,760,086 thousand tenge) with a rate of 4.375% per annum.

On May 10, 2017 Intergas Central Asia JSC (“ICA”), the subsidiary of KTG, executed full redemption of Eurobonds in the amount of 131,875 thousand US dollars (equivalent to 41,948,009 thousand tenge), including accrued interest.

In accordance with loan agreement in July 2017 KTG received a loan from Citibank NA, VTB Bank and ING Bank in the amount of 750,000 thousand US dollars (equivalent to 245,670,000 thousand tenge) and fully repaid it on September 29, 2017.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 19. BORROWINGS (CONTINUED)

In accordance with the loan agreement in May 2017 ICA received a loan from the European Bank for Reconstruction and Development in the amount of 25,254,400 thousand tenge (equivalent to 80,000 thousand US dollars).

In 2017 Atyrau Refinery LLP (“ANPZ”) received a loan from Halyk bank JSC for refinancing loan from Development Bank of Kazakhstan JSC (“DBK”) in the amount of 70,000 thousand US dollars (equivalent to 22,929,200 thousand tenge) and fully repaid the currying amount as at December 31, 2016.

In 2017 the Group received borrowings from DBK in the total amount of 32,133,178 thousand tenge and redeemed borrowings in the total amount of 68,117,408 thousand tenge, including interest. Additionally, the Group made a partial repayment of issued bonds held by DBK in the amount of 44,100,170 thousand tenge, including interest.

Changing in liabilities arising from financing activities

In thousands of tenge	2017	2016
On January 1	3,072,539,970	3,228,868,689
Received by cash	1,486,657,266	282,825,891
Repayment of debt related to letter of credit	135,393,336	131,700,644
Interest paid	(206,445,230)	(187,876,330)
Repayment of principal	(596,156,305)	(470,450,822)
Interest accrued	199,568,750	171,351,678
Interest capitalized	26,532,343	26,165,707
Discount	(15,551,555)	–
Amortization of discount	10,927,921	14,933,481
Derecognition of liabilities	–	(62,513,395)
Foreign currency translation	53,658,844	(50,593,081)
Other	(3,681,813)	(11,872,492)
<b>On December 31</b>	<b>4,163,443,527</b>	<b>3,072,539,970</b>
Current portion	763,955,792	366,438,649
Non-current portion	3,399,487,735	2,706,101,321

In 2016, the Company acquired 27% share in project Zhambyl from KC Kazakh B.V. Wherein, based on the agreement, the loan received from KC Kazakh B.V. on financing Company’s share in project Zhambyl was written-off. As the result, the Group recognized income in the amount of 62,513,395 thousand tenge (Note 29).

#### Covenants

The Group has limitations in terms of the acceptance of debt obligations according to the documentation of international bonds issues. Thus, the debt increase is limited to the need to comply with a financial ratio, which is 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, 2017 and December 31, 2016, the Group complies with this restrictive condition.

Also, 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, 2017 and December 31, 2016, the Group complied with all financial and non-financial covenants.

#### Hedge of net investment in the foreign operations

As at December 31, 2017 certain borrowings denominated in foreign currency were designated as hedge instrument for the net investment in the foreign operations. In 2017, income of 67,150,614 thousand tenge (2016: income of 37,952,320 thousand tenge) on the translation of these borrowings were transferred to other comprehensive income and offset the loss on translation of foreign operations.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 20. OIL SUPPLY AGREEMENT

In 2016 the Group entered into long-term crude oil and liquefied petroleum gas (“LPG”) supply agreement, which involve the prepayment. The total minimum delivery volume approximates 38 million tons of crude oil and 1 million tons of LPG in the period from the date of the contract to March 2021.

As part of this transaction in 2017, the Group received prepayment of 488,536 thousand US dollars (equivalent of 159,301,819 thousand tenge at the date of transaction) (2016: 2,966,005 thousand US dollars or 1,012,020,000 thousand tenge) net of transaction costs.

The agreement stipulates pricing calculation with reference to market quotes and prepayments are settled through physical deliveries of crude oil and LPG.

The Group considers this agreement to be regular way agreement to deliver non-financial items in accordance with the Group’s expected sale requirements.

As of December 31, 2017 the Group has partially settled the prepayments by oil supply in the total amount of 750,000 thousand US dollars.

### 21. PROVISIONS

In thousands of tenge	Asset retirement obligations	Provision for environmental obligation	Provision for taxes	Provision for gas transportation	Employee benefit obligations	Other	Total
As at December 31, 2015	104,129,250	17,756,301	63,228,322	24,813,178	35,072,962	21,936,762	266,936,775
Foreign currency translation	(365,138)	–	(9,212)	–	–	(3,740)	(378,090)
Change in estimate	(18,428,561)	(3,365,970)	–	–	–	–	(21,794,531)
Unwinding of discount	8,158,788	1,251,920	–	–	2,608,255	39,655	12,058,618
Provision for the year	1,044,732	10,187	9,274,588	–	(2,491,391)	15,584,607	23,422,723
Recovered	(1,167,110)	–	(20,989,376)	(451,720)	–	(930,923)	(23,539,129)
Unused amounts reversed	(48,750)	–	–	–	–	–	(48,750)
Use of provision	(1,779,270)	(1,273,771)	(3,457,469)	–	(2,811,727)	(13,569,279)	(22,891,516)
<b>As at December 31, 2016</b>	<b>91,543,941</b>	<b>14,378,667</b>	<b>48,046,853</b>	<b>24,361,458</b>	<b>32,378,099</b>	<b>23,057,082</b>	<b>233,766,100</b>
Foreign currency translation	11,125	–	15,139	–	–	(11,503)	14,761
Change in estimate	(1,248,282)	(458,178)	–	(70,170)	–	62,521	(1,714,109)
Unwinding of discount	8,332,664	1,608,777	–	–	3,039,887	68,786	13,050,114
Provision for the year	3,488,113	8,688,672	7,305,466	–	3,452,764	10,149,672	33,084,687
Recovered	(678,001)	–	(16,528,169)	–	–	(4,840,286)	(22,046,456)
Use of provision	(903,225)	(1,163,683)	(11,161,919)	–	(3,090,513)	(10,294,174)	(26,613,514)
Transfers and reclassifications	–	(33,258)	–	–	–	(57,882)	(91,140)
<b>As at December 31, 2017</b>	<b>100,546,335</b>	<b>23,020,997</b>	<b>27,677,370</b>	<b>24,291,288</b>	<b>35,780,237</b>	<b>18,134,216</b>	<b>229,450,443</b>

As at December 31, 2017 other provisions include provision for construction of the Palace of martial arts in the amount 11,155,740 thousand tenge (2016: 11,303,508 thousand tenge).

Provision for gas transportation relates to the Group’s commitment on reimbursement of losses incurred by 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.

As at December 31, 2017 asset retirements obligations include asset retirement obligations relating to decommissioning of pipelines and land of JSC KazTransOil and Intergas Central Asia JSC in the total amount of 65,139,689 thousand tenge (2016: 59,539,785 thousand tenge) (Note 4).

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 21. PROVISIONS (CONTINUED)

Current portion and long-term portion are segregated as follows:

In thousands of tenge	Asset retirement obligations	Provision for environmental obligation	Provision for taxes	Provision for gas transportation	Employee benefit obligations	Other	Total
<b>As at December 31, 2017</b>							
Current portion	1,543,004	5,921,263	27,677,370	24,291,288	2,688,942	16,690,332	78,812,199
Long-term portion	99,003,331	17,099,734	–	–	33,091,295	1,443,884	150,638,244
<b>Provision as at December 31, 2017</b>	<b>100,546,335</b>	<b>23,020,997</b>	<b>27,677,370</b>	<b>24,291,288</b>	<b>35,780,237</b>	<b>18,134,216</b>	<b>229,450,443</b>
<b>As at December 31, 2016</b>							
Current portion	819,946	487,031	48,046,853	24,361,458	2,380,419	18,298,570	94,394,277
Long-term portion	90,723,995	13,891,636	–	–	29,997,680	4,758,512	139,371,823
<b>As at December 31, 2016</b>	<b>91,543,941</b>	<b>14,378,667</b>	<b>48,046,853</b>	<b>24,361,458</b>	<b>32,378,099</b>	<b>23,057,082</b>	<b>233,766,100</b>

A description of significant provisions, including critical estimates and judgments used, is included in Note 4.

### 22. TRADE ACCOUNTS PAYABLE AND OTHER CURRENT LIABILITIES

In thousands of tenge	2017	2016
Advances received	<b>48,632,581</b>	30,463,723
Due to employees	<b>54,428,090</b>	46,867,358
Dividends payable	<b>1,851,512</b>	1,862,166
Other	<b>39,493,188</b>	39,849,002
Total other current liabilities	<b>144,405,371</b>	119,042,249
Trade accounts payable	<b>325,120,176</b>	260,137,009

Trade accounts payable is denominated in the following currencies as of December 31:

In thousands of tenge	2017	2016
Tenge	<b>218,724,670</b>	210,992,037
US dollars	<b>100,999,516</b>	36,935,083
Euro	<b>672,143</b>	219,061
Other currency	<b>4,723,847</b>	11,990,828
<b>Total</b>	<b>325,120,176</b>	260,137,009

As at December 31, 2017 and 2016, trade accounts payable and other current liabilities were not interest bearing.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 23. OTHER TAXES PAYABLE

In thousands of tenge	2017	2016
Rent tax on crude oil export	<b>27,365,236</b>	5,189,479
Mineral extraction tax	<b>26,160,637</b>	4,488,819
Individual income tax	<b>6,580,681</b>	5,936,494
Withholding tax from non-residents	<b>4,545,294</b>	4,418,027
VAT	<b>3,974,550</b>	4,375,978
Excise tax	<b>174,445</b>	107,067
Other	<b>10,367,348</b>	9,498,593
	<b>79,168,191</b>	34,014,457

### 24. REVENUE

In thousands of tenge	2017	2016
Sales of crude oil, gas and gas products	<b>1,568,121,307</b>	1,040,462,377
Transportation fee	<b>332,325,696</b>	322,341,649
Sales of refined products	<b>307,968,038</b>	293,076,283
Refining of oil and oil products	<b>129,066,720</b>	99,137,367
Quality bank for crude oil	<b>(21,523,472)</b>	(19,864,051)
Other revenue	<b>142,876,801</b>	122,281,731
	<b>2,458,835,090</b>	1,857,435,356

### 25. COST OF SALES

In thousands of tenge	2017	2016
Crude oil, gas and gas products	<b>1,316,053,757</b>	684,684,553
Payroll	<b>293,258,611</b>	281,672,842
Depreciation, depletion and amortization	<b>161,529,007</b>	167,171,547
Materials and supplies	<b>132,338,829</b>	102,086,971
Transportation costs	<b>107,145,222</b>	47,654,973
Mineral extraction tax	<b>93,568,542</b>	40,676,527
Other taxes	<b>58,901,234</b>	53,593,187
Electricity	<b>39,834,721</b>	37,924,337
Repair and maintenance	<b>38,342,873</b>	32,546,598
Other	<b>138,930,075</b>	113,734,484
	<b>2,379,902,871</b>	1,561,746,019

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 29. FINANCE INCOME / FINANCE COST

#### Finance income

In thousands of tenge	2017	2016
Interest income on bank deposits, loans and bonds	<b>79,062,673</b>	75,638,208
Amortization of discount on loans due from related parties	<b>39,159,971</b>	21,378,184
Derecognition of liabilities	–	62,513,395
Other	<b>3,512,630</b>	8,361,901
	<b>121,735,274</b>	167,891,688

#### Finance costs

In thousands of tenge	2017	2016
Interest on loans and debt securities issued	<b>199,568,750</b>	171,351,678
Impairment of bank deposits (Notes 14 and 16)	<b>18,609,753</b>	–
Interest under oil supply agreement	<b>26,473,457</b>	18,628,247
Unwinding of discount on asset retirement obligations and provision for environmental obligation	<b>9,941,441</b>	9,410,708
Amortization of discount on loans and debt securities issued	<b>10,927,921</b>	14,933,481
Discount on assets with non-market interest rate	<b>6,155,426</b>	4,077,354
Other	<b>23,220,716</b>	11,981,886
	<b>294,897,464</b>	230,383,354

### 30. SHARE IN PROFIT OF JOINT VENTURES AND ASSOCIATES, NET

In thousands of tenge	2017	2016
Tengizchevroil LLP	<b>289,979,686</b>	147,910,396
Caspian Pipeline Consortium	<b>54,665,983</b>	74,908,750
Mangistau Investments B.V.	<b>49,605,030</b>	29,766,202
KazGerMunay LLP	<b>17,713,450</b>	5,129,532
Valsera Holdings B.V.	<b>9,750,778</b>	10,414,188
KazRosGas LLP	<b>8,622,045</b>	18,647,418
PetroKazakhstan Inc.	<b>7,233,770</b>	(15,809,732)
Kazakhoil-Aktobe LLP	<b>(16,788,020)</b>	(11,535,479)
Kashagan B.V.	<b>(10,208,354)</b>	7,725,887
Ural Group Limited	<b>(1,877,211)</b>	(1,577,557)
Beineu-Shymkent Pipeline	<b>(668,700)</b>	(3,452,438)
Share in (loss)/profit of other joint ventures and associates	<b>6,536,779</b>	8,063,823
	<b>414,565,236</b>	270,190,990

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 31. INCOME TAX EXPENSES

As at December 31, 2017 income taxes prepaid of 35,586,296 thousand tenge (2016: 74,457,414 thousand tenge) are represented by corporate income tax. As at December 31, 2017 income taxes payable in the amount of 7,705,079 thousand tenge (2016: 2,301,839 thousand tenge) are represented mainly by corporate income tax.

Income tax expense comprised the following for the years ended December 31:

In thousands of tenge	2017	2016
<b>Current income tax</b>		
Corporate income tax	<b>110,916,307</b>	80,090,378
Excess profit tax	<b>5,136,675</b>	(1,128,184)
Withholding tax on dividends and interest income	<b>21,967,459</b>	4,637,262
<b>Deferred income tax</b>		
Corporate income tax	<b>25,449,497</b>	45,733,941
Excess profit tax	<b>(1,275,303)</b>	15,543,024
Withholding tax on dividends and interest income	<b>29,835,168</b>	18,914,716
<b>Income tax expenses</b>	<b>192,029,803</b>	163,791,137

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 2007-2017 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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 31. INCOME TAX EXPENSES (CONTINUED)

A reconciliation of income tax expenses applicable to profit before income tax at the statutory income tax rate (20% in 2017 and 2016) to income tax expenses was as follows for the years ended December 31:

In thousands of tenge	2017	2016
(Loss)/profit before income tax from continuing operations	<b>(77,627,570)</b>	163,108,149
Profit before income tax from discontinued operations	<b>787,700,098</b>	357,713,188
Statutory tax rate	<b>20%</b>	20%
<b>Income tax expense on accounting profit</b>	<b>142,014,506</b>	104,164,267
Share in profit of joint ventures and associates non-taxable or taxable at different rates	<b>(39,416,094)</b>	(31,851,639)
Other non-deductible expenses and non-taxable income	<b>118,322,604</b>	71,705,991
Excess profit tax	<b>3,861,372</b>	14,414,840
Effect of different corporate income tax rates	<b>4,403,939</b>	3,133,154
Change in unrecognized deferred tax assets	<b>(38,639,830)</b>	(916,319)
	<b>190,546,497</b>	160,650,294
<b>Income tax expenses reported in the consolidated statement of comprehensive income</b>	<b>192,029,803</b>	163,791,137
<b>Income tax benefit attributable to discontinued operations</b>	<b>(1,483,306)</b>	(3,140,843)
	<b>190,546,497</b>	160,650,294

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 31. INCOME TAX EXPENSES (CONTINUED)

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 thousands of tenge	2017 Corporate income tax	2017 Excess profit tax	2017 Withholding tax	2017 Total	2016 Corporate income tax	2016 Excess profit tax	2016 Withholding tax	2016 Total
<b>Deferred tax assets</b>								
Property, plant and equipment	39,746,752	(2,213,776)	-	37,532,976	37,366,506	(1,899,726)	-	35,466,780
Tax loss carryforward	445,661,327	-	-	445,661,327	430,057,756	-	-	430,057,756
Employee related accruals	7,016,794	233,019	-	7,249,813	6,801,380	46,020	-	6,847,400
Impairment of financial assets	4,177	-	-	4,177	-	-	-	-
Environmental liability	4,249,110	217,257	-	4,466,367	3,563,499	245	-	3,563,744
Other	36,961,737	1,344,719	-	38,306,456	27,424,474	162,597	-	27,587,071
Less: unrecognized deferred tax assets	(443,527,871)	-	-	(443,527,871)	(404,888,041)	-	-	(404,888,041)
Less: deferred tax assets offset with deferred tax liabilities	(24,557,468)	-	-	(24,557,468)	(26,725,677)	-	-	(26,725,677)
<b>Deferred tax assets</b>	65,554,558	(418,781)	-	65,135,777	73,599,897	(1,690,864)	-	71,909,033
<b>Deferred tax liabilities</b>								
Property, plant and equipment	117,769,984	15,712,243	-	133,482,227	102,407,438	15,716,011	-	118,123,449
Undistributed earnings of joint venture	-	-	202,962,639	202,962,639	-	-	173,127,471	173,127,471
Other	125,648	-	-	125,648	74,735	-	-	74,735
Less: deferred tax assets offset with deferred tax liabilities	(24,557,468)	-	-	(24,557,468)	(26,725,677)	-	-	(26,725,677)
<b>Deferred tax liabilities</b>	93,338,164	15,712,243	202,962,639	312,013,046	75,756,496	15,716,011	173,127,471	264,599,978
<b>Net deferred tax liability</b>	27,783,606	16,131,024	202,962,639	246,877,269	2,156,599	17,406,875	173,127,471	192,690,945

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 31. INCOME TAX EXPENSES (CONTINUED)

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 443,527,871 thousand tenge as at December 31, 2017 (2016: 404,888,041 thousand tenge).

Tax losses carry forward as at December 31, 2017 in the Republic of Kazakhstan expire for tax purposes ten years from the date they are incurred.

The movements in the deferred tax liability/(asset) were as follows:

In thousands of tenge	2017 Corporate income tax	2017 Excess profit tax	2017 Withholding tax	2017 total	2016 Corporate income tax	2016 Excess profit tax	2016 Withholding tax	2016 total
<b>Net deferred tax liability/(asset) as at January 1</b>	<b>2,156,599</b>	<b>17,406,875</b>	<b>173,127,471</b>	<b>192,690,945</b>	<b>(44,648,144)</b>	<b>1,863,851</b>	<b>154,212,755</b>	<b>111,428,462</b>
Foreign currency translation	35,406	(548)	–	34,858	258,403	–	–	258,403
Discontinued operations	–	–	–	–	5,159	–	–	5,159
Charge to the consolidated statement of comprehensive income	25,591,601	(1,275,303)	29,835,168	54,151,466	46,541,181	15,543,024	18,914,716	80,998,921
<b>Net deferred tax liability/(asset) as at December 31</b>	<b>27,783,606</b>	<b>16,131,024</b>	<b>202,962,639</b>	<b>246,877,269</b>	<b>2,156,599</b>	<b>17,406,875</b>	<b>173,127,471</b>	<b>192,690,945</b>

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 32. RELATED PARTY DISCLOSURES

Related party transactions were made on terms agreed to 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.

The following table provides the balances of transactions with related parties as at December 31, 2017 and 2016:

In thousands 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	<b>2017</b>	<b>289,084,327</b>	<b>1,703,093</b>	<b>53,959</b>	–
	2016	250,189,225	1,755,168	227,330	–
Associates	<b>2017</b>	<b>154,953,597</b>	<b>3,747,640</b>	–	–
	2016	196,364,723	6,519,184	–	–
Other state-controlled parties	<b>2017</b>	–	<b>8,752,609</b>	<b>2,675,566</b>	<b>489,948,733</b>
	2016	–	8,783,316	308,652	539,518,308
Joint ventures in which the Group is a venturer	<b>2017</b>	<b>556,563,795</b>	<b>194,182,312</b>	–	–
	2016	426,310,101	148,065,653	–	–

#### Due from related parties

In 2017 the Company provided the additional interest free loan to the SamrukKazyna in the amount of 47,019,835 thousand tenge. The difference between fair value and nominal value of the loan amounting 5,716,173 thousand tenge recognized as transaction with Samruk-Kazyna in the consolidated statement of changes in equity.

As at December 31, 2017 changes in due from associates mainly related to the repayment of interest of the right to claim payments under “Kazakhstan Note” in the amount of 35,142,983 thousand tenge.

As at December 31, 2017 increase in due from joint ventures mainly due to providing additional interest free loan to the BeineuShymkent Pipelines LLP in the amount of 136,962,378 thousand tenge and decreasing of trade accounts receivable for goods and services of Tengizchevroil LLP and Asia Gas Pipeline LLP in the amount of 14,765,262 thousand tenge and 1,528,599 thousand tenge, respectively.

#### Due to related parties

As at December 31, 2017 changes of due to joint ventures mainly include increasing of trade payable for goods and services to Asia Gas Pipeline LLP, Tengizchevroil LLP, Mangistaumunaigaz JSC and BeineuShymkent Pipelines LLP in the amount of 13,877,072 thousand tenge, 13,456,982 thousand tenge, 3,445,528 thousand tenge and 10,415,360 thousand tenge, respectively (2016: 13,277,218 thousand tenge, 14,256,155 thousand tenge, 39,831 thousand tenge и 46,509,577 thousand tenge, respectively).

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 32. RELATED PARTY DISCLOSURES (CONTINUED)

#### Borrowings payable to related parties

In 2017 the Group redeemed bonds and loans payable to DBK in the total amount of 112,217,578 thousand tenge including interest.

The following table provides the total amount of transactions, which have been entered into with related parties during 2017 and 2016:

In thousands of tenge		Sales to related parties	Purchases from related parties	Interest earned from related parties	Interest incurred to related parties
Samruk-Kazyna entities	<b>2017</b>	<b>66,161,168</b>	<b>29,896,957</b>	<b>28,364,559</b>	–
	2016	64,283,484	28,166,784	14,325,455	4,089,541
Associates	<b>2017</b>	<b>9,597,880</b>	<b>38,647,833</b>	<b>10,413,919</b>	–
	2016	25,429,144	61,467,268	13,417,271	4,379,044
Other state-controlled parties	<b>2017</b>	–	<b>2,942,341</b>	–	<b>25,694,310</b>
	2016	–	4,764,444	–	25,424,702
Joint ventures in which the Group is a venturer	<b>2017</b>	<b>318,154,537</b>	<b>1,000,163,766</b>	<b>25,869,046</b>	<b>10,769,061</b>
	2016	303,010,916	624,153,438	26,462,248	4,917,734

Purchase transactions with Samruk-Kazyna, other state-controlled entities and joint ventures are mainly represented by transactions of the Group with NC Kazakhstan Temir Zholy JSC (railway services), NC Kazakhtelecom JSC (telecommunication services), NAC Kazatomprom JSC (energy services), KEGOC JSC (energy supply), Kazpost JSC (postal services) and Samruk-Energo JSC (energy supply). In addition, the Group sells and purchases crude oil and natural gas, refined products and provides transportation services to and from Samruk-Kazyna entities, associates and joint ventures.

#### Key management employee compensation

Total compensation to key management personnel, including key management personnel of subsidiaries, included in general and administrative expenses in the accompanying consolidated statement of comprehensive income was equal to 9,022,125 thousand tenge and 9,797,411 thousand tenge for the years ended December 31, 2017 and 2016, respectively. Compensation to key management personnel consists of contractual salary and performance bonus based on operating results.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 33. FINANCIAL RISK MANAGEMENT, OBJECTIVES AND POLICIES

The Group's principal financial instruments mainly consist of borrowings, cash and cash equivalents, short term 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, 2017 and 2016.

#### 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 and/or by designating hedge between non-financial assets and 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 fair value 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 thousands of tenge	Increase/ decrease in tenge to US dollar exchange rate	Effect on profit before tax
<b>2017</b>	<b>+10%</b>	<b>(96,952,960)</b>
	<b>-10%</b>	<b>96,952,960</b>
2016	+13%	(118,409,921)
	-13%	118,409,921

#### 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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 33. FINANCIAL RISK MANAGEMENT, OBJECTIVES AND POLICIES (CONTINUED)

#### Market risk (continued)

##### Interest rate risk (continued)

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 thousands of tenge	Increase/ decrease in basis points	Effect on profit before tax
<b>2017</b>	<b>+0.70</b>	<b>(6,775,665)</b>
LIBOR	-0.08	762,459
2016	+0.60	(5,598,880)
LIBOR	-0.08	746,405

#### 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 17. 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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 33. FINANCIAL RISK MANAGEMENT, OBJECTIVES AND POLICIES (CONTINUED)

#### Credit risk (continued)

The table below shows the balances of major subsidiaries' cash and cash equivalents, short-term and long-term deposits (Notes 11 and 17) held in banks at the reporting date using the Standard and Poor's and Fitch's credit ratings.

Banks	Location	Rating <sup>1</sup>			
		2017	2016	2017	2016
Halyk Bank	Kazakhstan	BB (stable)	BB (negative)	<b>622,826,562</b>	716,187,314
Bank of Tokyo-Mitsubishi UFJ	Japan	A (stable)	A (stable)	<b>464,530,245</b>	–
Mizuho Bank Ltd	Japan	A (stable)	A (stable)	<b>373,029,697</b>	–
Sumitomo Mitsui Banking Corporation	Japan	A (positive)	A (positive)	–	287,848,285
HSBC	United Kingdom	AA- (stable)	AA- (negative)	<b>113,090,248</b>	166,649,716
BNP Paribas	United Kingdom	BB+ (stable)	A (stable)	<b>161,740,102</b>	166,295,295
Kazkommertsbank	Kazakhstan	B+ (negative)	B- (negative)	<b>78,656,996</b>	165,771,106
Societe Generale	Switzerland	A (stable)	A (stable)	<b>164,779,167</b>	162,461,529
Societe Generale	United Kingdom	A (stable)	A (stable)	<b>314,733,898</b>	–
ING Bank	The Netherlands	A+ (stable)	A (stable)	<b>170,353,494</b>	161,907,378
Sberbank of Russia	Kazakhstan	BB+ (positive)	BBB-	<b>23,148,486</b>	63,718,200
Altyn Bank	Kazakhstan	BB (positive)	BB (negative)	<b>21,965,792</b>	45,247,477
RBK Bank	Kazakhstan	CCC+ (negative)	B- (stable)	<b>10</b>	29,919,368
Credit Suisse	British Virgin Islands	A (stable)	A (stable)	<b>39,338,017</b>	25,472,932
Citibank	United Kingdom	A+ (stable)	A (stable)	<b>46,678,682</b>	19,984,012
Citibank	Kazakhstan	A+(stable)	A+(stable)	<b>2,032,358</b>	12,509,234
Citibank	United Arab Emirates	A+(stable)	A (stable)	<b>50,034,359</b>	–
Delta Bank	Kazakhstan	D	CCC+ (developing)	–	11,984,344
Deutsche Bank	the Netherlands and the United Kingdom	A- (negative)	BBB+ (positive)	<b>88,990,995</b>	10,935,579
Rabobank	The Netherlands	A+ (positive)	A+ (stable)	<b>81,922,668</b>	21,905,818
ABN Amro Bank	The Netherlands	A (positive)	A (stable)	<b>33,354,442</b>	–
ATF Bank	Kazakhstan	B (negative)	B (negative)	<b>5,301,656</b>	9,707,001
Tsesnabank	Kazakhstan	B+ (negative)	B+ (negative)	<b>1,140,857</b>	2,818,521
Forte Bank	Kazakhstan	B (positive)	B (stable)	<b>3,723,436</b>	2,166,169
BankCenterCredit	Kazakhstan	B (stable)	B (stable)	<b>1,946</b>	1,289,220
Eurasian Bank	Kazakhstan	B (negative)	B (stable)	<b>40,845</b>	614,348
Other banks				<b>14,381,113</b>	24,175,948
				<b>2,875,796,071</b>	2,109,568,794

Continued support by the state bodies of the Republic of Kazakhstan is a key assumption in management's conclusions that no impairment allowance is required, and is based on management's review of all available information at the date of approval of the consolidated financial statements.

Source: Interfax – Kazakhstan, Factiva, official sites of the banks as at December 31 of the respective year.

The accounting policies and explanatory notes on pages 8 through 97 form an integral part of these consolidated financial statements.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 33. FINANCIAL RISK MANAGEMENT, OBJECTIVES AND POLICIES (CONTINUED)

#### 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, 2017 and 2016 based on contractual undiscounted payments.

In thousands 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*	Total
<b>As at December 31, 2017</b>						
Borrowings	64,747,057	80,704,232	866,153,813	2,199,515,008	2,809,218,719	6,020,338,829
Financial guarantee	–	1,422,943	4,268,829	35,591,168	64,859,263	106,142,203
Trade accounts payable	82,376,645	168,111,759	82,358,616	–	–	332,847,020
	147,123,702	250,238,934	952,781,258	2,235,106,176	2,874,077,982	6,459,328,052
<b>As at December 31, 2016</b>						
Borrowings	77,329,131	7,427,151	401,808,523	2,659,303,198	1,148,165,669	4,294,033,672
Financial guarantee	–	–	5,692,025	91,072,398	142,300,622	239,065,044
Trade accounts payable	119,638,134	118,852,271	40,736,206	–	–	279,226,611
	196,967,265	126,279,422	448,236,754	2,750,375,596	1,290,466,291	4,812,325,327

\*The Group excludes from maturity profile table the loans payable to project partners under the carry-in financing agreements (Note 19), due to the uncertainty of maturity of these loans.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 34. CONSOLIDATION

The following direct significant subsidiaries have been included in these consolidated financial statements:

Significant entities	Main activity	Country of incorporation	Percentage ownership	
			2017	2016
KazMunayGas Exploration Production JSC ("KMG EP")	Exploration and production	Kazakhstan	<b>63.01%</b>	63.02%
KazTransGas JSC ("KTG")	Gas transportation	Kazakhstan	<b>100.00%</b>	100.00%
KazTransOil JSC ("KTO")	Oil transportation	Kazakhstan	<b>90.00%</b>	90.00%
KazMunayGas – refining and marketing JSC ("KMG RM")	Refinery and marketing of oil products	Kazakhstan	–	100.00%
Atyrau Refinery LLP	Refinery	Kazakhstan	<b>99.53%</b>	–
Pavlodar oil chemistry refinery LLP	Refinery	Kazakhstan	<b>100.00%</b>	–
KazMunayGas Onimderly LLP	Marketing of oil products	Kazakhstan	<b>100.00%</b>	–
KazMunayTeniz LLP ("KMT")	Exploration and production	Kazakhstan	<b>100.00%</b>	100.00%
KazMunayGas-Service LLP ("KMGS")	Service projects	Kazakhstan	<b>100.00%</b>	100.00%
Cooperative KazMunayGas PKI U.A.	Refinery and marketing of oil products	Netherlands	<b>100.00%</b>	100.00%
KMG International N.V. ("KMG I")	Refinery and marketing of oil products	Romania	<b>100.00%</b>	100.00%
KMG Karachaganak LLP	Exploration and production	Kazakhstan	<b>100.00%</b>	100.00%
KazMorTransFlot LLP	Oil transportation and construction	Kazakhstan	<b>100.00%</b>	100.00%
KMG Drilling&Services LLP	Drilling services	Kazakhstan	<b>100.00%</b>	100.00%

In December, 2017 in accordance with the Resolution of the Government of RK the Company reorganized KMG RM through the merger with the Company.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 35. 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 cyclicalities 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, 2017.

As at December 31, 2017, 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.

#### 2009-2012 Comprehensive tax audit of KMG EP

On December 11, 2017 the final decision of the Supreme Court related to the Company's appeal of the tax audit results for 2009 to 2012 tax years was issued and final assessment amounted to 6,534,000 thousand tenge that includes principal, fines and penalties. Accordingly, the tax provision in the amount of 7,031,000 thousand tenge was reversed in these consolidated financial statement.

#### Value-added-tax (VAT) recoverability of KMG EP

In May and June 2017 EmbaMunaiGas JSC and OzenMunaiGas JSC received acts of tax audits for the period 2012 to 2015 that confirmed the Company's right to reimburse VAT receivable for the amounts of 4,033,000 thousand tenge and 26,073,000 thousand tenge, respectively. The tax acts also confirmed that 2,053,000 thousand tenge and 2,006,000 thousand tenge of VAT were not recoverable for EmbaMunaiGas JSC and OzenMunaiGas JSC, respectively.

In these consolidated financial statements, the Group has reversed 30,106,000 thousand tenge of previously accrued VAT allowance. Total remaining VAT allowance as at December 31, 2017 is 10,668,000 thousand tenge.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 35. CONTINGENT LIABILITIES AND COMMITMENTS (CONTINUED)

#### 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 new law on transfer pricing came into effect in Kazakhstan from January 1, 2009. The new 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, 2017.

As at December 31, 2017 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.

#### 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 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, 2017 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, 2017 the Group's share in the total disputed amounts of costs is 242,915,341 thousand tenge (2016: 201,091,569 thousand 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.

#### **KMG Drilling & Services LLP (KMG D&S) litigations with Consortium of companies Ersai Caspian Contractor LLP and Caspian Offshore and Marine Construction LLP**

KMG D&S (subsidiary of the Group) is involved in arbitration proceedings with Consortium of companies Ersai Caspian Contractor LLP and Caspian Offshore and Marine Construction LLP (further – "Consortium") according to purchase contract on construction of JUDR, which is handled by the London Court of International Arbitration. Operative part of the Statement of case includes the following Claimant's demands:

- Declaration of project change in consequence of changes in the requirements of regulatory bodies, increase of Contract price due to such changes, compensation of consequential damages;
- Extension of JUDR delivery date due to permissible delays;
- Declaration by KMG D&S of delay of signing the works acceptance certificates and payment of key stages 5,6,7 of JUDR construction and recovery of damages in respect of delayed payments;
- Damage compensation resulting from increase of Contract price, breach of Contract, as well as exchange rate adjustments and Consortium's additional charges.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 35. CONTINGENT LIABILITIES AND COMMITMENTS (CONTINUED)

#### **KMG Drilling & Services LLP (KMG D&S) litigations with Consortium of companies Ersai Caspian Contractor LLP and Caspian Offshore and Marine Construction LLP (continued)**

In 2017 Consortium increased the amount of claim up to 192,114 thousand US dollars (equivalent to 63,845,287 thousand tenge).

The Group does not agree with the claim and upon completion of the analysis of the case will start to develop the defence's arguments. Legal and technical consultants, independent experts are involved for protection the Group's corporate interests.

There is uncertainty about the result of judicial proceedings. As of December 31, 2017 the Group didn't recognize the provision for given claim.

#### **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 2017, in accordance with its obligations, the Group delivered 5,407,526 tons of crude oil (2016: 3,236,644 tons), including joint ventures, to the Kazakhstan market.

#### **Commitments under subsoil use contracts**

As at December 31, 2017 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
2018	152,970,780	11,025,197
2019	17,589,628	5,460,210
2020	7,379,090	5,810,346
2021	3,001,137	4,144,631
2022-2048	9,805,472	15,386,914
<b>Total</b>	<b>190,746,107</b>	<b>41,827,298</b>

#### **Oil supply commitments**

As of December 31, 2017 the Group had commitments under the oil supply agreements in the total amount of 28.7 million ton (as at December 31, 2016: 28.1 million ton), including joint venture.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 35. CONTINGENT LIABILITIES AND COMMITMENTS (CONTINUED)

#### **Other contractual commitments**

As at December 31, 2017, the Group, including joint ventures, had other capital commitments of approximately 684,856,470 thousand tenge (2016: 1,100,442,105 thousand tenge), related to acquisition and construction of property, plant and equipment.

As at December 31, 2017, the Group had commitments in the total amount of 125,333,073 thousand tenge (2016: 151,079,503 thousand 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, 2017 and 2016, 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.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 36. SEGMENT REPORTING

Management of the Group analyzes the segment information based on IFRS numbers. Segment profits are considered based on gross profit and net profit results. 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 serve different markets.

The Group's activity consists of four main operating segments: exploration and production of oil and gas, transportation of oil, transportation of gas, refining and trading of crude oil and refined products. The remaining operating segments have been aggregated and presented as other operating segment due to their insignificance.

The following represents information about profit and loss, and assets and liabilities of operating segments of the Group for 2017:

In thousands of tenge	Exploration and production of oil and gas and trading of own refined products	Oil transportation	Gas trading and transportation	Refining and trading of crude oil and refined products	Other	Elimination	Total
Revenues from sales to external customers	114,153,662	199,081,114	522,205,420	1,525,574,911	97,819,983	-	2,458,835,090
Revenues from sales to other segments	981,455,736	50,139,885	30,382,814	378,119,454	44,584,007	(1,484,681,896)	-
<b>Total revenue</b>	1,095,609,398	249,220,999	552,588,234	1,903,694,365	142,403,990	(1,484,681,896)	2,458,835,090
<b>Gross profit</b>	581,444,903	102,296,291	126,241,522	126,823,754	(2,647,908)	(855,226,343)	78,932,219
Finance income	30,635,494	7,050,351	15,710,022	52,357,842	102,854,450	(86,872,885)	121,735,274
Finance costs	(15,996,844)	(5,241,821)	(35,846,120)	(88,515,042)	(224,664,707)	75,367,070	(294,897,464)
Depreciation, depletion and amortization	(69,207,237)	(31,696,855)	(30,456,725)	(37,973,497)	(12,544,828)	-	(181,879,142)
Impairment of property, plant and equipment, exploration and evaluation assets and intangible assets, excluding goodwill	(1,463,939)	(51,710)	(326,705)	(15,399,255)	(8,459,943)	-	(25,641,552)
Share in profit of joint ventures and associates, net	337,552,519	57,373,362	7,988,655	10,338,986	1,311,714	-	414,565,236
Income tax expenses	(107,279,249)	(19,633,566)	(24,678,324)	(17,926,627)	(22,512,037)	-	(192,029,803)
Net profit for the year	295,007,049	124,319,958	46,797,287	125,666,735	(77,130,767)	4,865,769	519,526,031
<b>Other segment information</b>							
Investments in joint ventures and associates	3,503,893,511	208,816,622	52,561,936	41,381,920	3,697,352	-	3,810,351,341
Capital expenditures	135,198,715	74,873,446	140,487,481	260,039,531	26,594,379	-	637,193,552
Allowances for obsolete inventories, doubtful accounts receivable, advances paid, and other assets	(4,390,424)	(4,288,838)	(9,231,998)	(5,327,690)	(13,201,216)	-	(36,440,166)
Assets of the segment	6,542,104,710	904,925,698	1,444,619,613	3,624,699,943	2,363,946,296	(1,491,542,923)	13,388,753,337
Liabilities of the segment	629,755,726	186,128,956	760,480,222	2,743,729,400	3,878,415,567	(1,432,156,528)	6,766,353,343
Eliminations represent the exclusion of intra-group turnovers.							

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 36. SEGMENT REPORTING (CONTINUED)

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 2016:

In thousands of tenge	Exploration and production of oil and gas and trading of own refined products	Oil transportation	Gas trading and transportation	Refining and trading of crude oil and refined products	Other	Elimination	Total
Revenues from sales to external customers	112,656,378	188,176,142	483,593,658	992,583,481	80,425,697	-	1,857,435,356
Revenues from sales to other segments	739,286,768	45,849,567	18,364,837	58,996,031	42,593,080	(905,090,283)	-
<b>Total revenue</b>	851,943,146	234,025,709	501,958,495	1,051,579,512	123,018,777	(905,090,283)	1,857,435,356
<b>Gross profit</b>	419,643,185	97,474,945	153,714,720	132,766,007	(10,017,778)	(497,891,742)	295,689,337
Finance income	33,625,179	9,138,097	14,200,584	31,912,152	137,722,140	(58,706,464)	167,891,688
Finance costs	(13,229,134)	(4,829,755)	(27,210,248)	(45,814,320)	(194,230,327)	54,930,430	(230,383,354)
Depreciation, depletion and amortization	(77,003,750)	(31,799,193)	(28,652,432)	(34,080,013)	(9,057,477)	-	(180,592,865)
Impairment of property, plant and equipment, exploration and evaluation assets and intangible assets, excluding goodwill	(1,134,659)	(679,061)	1,575,152	(51)	(3,044,060)	-	(3,282,679)
Share in profit of joint ventures and associates, net	163,204,602	79,407,009	15,191,245	10,839,301	1,548,833	-	270,190,990
Income tax expenses	(76,672,148)	(13,941,937)	(26,531,702)	(19,297,752)	(27,347,598)	-	(163,791,137)
<b>Net profit for the year</b>	285,204,844	149,302,835	95,731,109	564,774,494	(697,184,832)	(37,657,407)	360,171,043
<b>Other segment information</b>							
Investments in joint ventures and associates	3,440,284,418	149,567,256	80,723,711	31,350,162	4,351,263	-	3,706,276,810
Capital expenditures	147,284,800	42,612,060	88,851,035	233,253,447	42,140,785	-	554,142,127
Allowances for obsolete inventories, doubtful accounts receivable, advances paid, and other assets	(19,786,389)	(2,470,383)	(8,329,262)	(5,933,387)	(2,196,200)	-	(38,715,621)
Assets of the segment	6,210,069,721	831,909,870	1,295,190,723	3,459,862,728	1,682,382,885	(1,596,338,657)	11,883,077,270
<b>Liabilities of the segment</b>	529,270,606	164,038,032	663,338,007	2,693,298,363	3,089,738,401	(1,534,877,054)	5,604,806,355

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

### 37. SUBSEQUENT EVENTS

On December 8, 2017 KMG EP announced the launch of a conditional tender offer (the “Tender Offer”) to repurchase all of its outstanding GDRs at a price of 14.00 US Dollars per GDR. According to the result on extraordinary general meeting held on January 22, 2018 the Tender Offer became unconditional in all respects. On January 23, 2018 KMG EP announced the launch of an unconditional offer to repurchase all of its Common Shares (the “Share Offer”) placed on KASE at a price of 84.00 US dollars per Common Share payable in tenge. On February 19, 2018, the Share Offer was effected, as a result of which KMG EP has repurchased a total of 72,788,984 GDR on the over-the-counter basis, 61,281,070 GDRs on the Kazakhstan Stock Exchange and 320,688 common shares. Also, KMG EP repurchased 95,761 preferred shares from preferred shareholders, which from December 8, 2017 to January 8, 2018 exercised the Put Option Right which arose on the announcement of the Tender Offer. Thus, the Company and KMG EP own 47,194,539 common shares and 134,781,116 GDRs, which is approximately 99.2% of the issued common shares, as well as 2,168,908 preferred shares.

On January 19, 2018 the Company made a partial repayment of issued bonds held by Development Bank of Kazakhstan JSC in the amount of 17,197,293 thousand tenge.

On January 26, 2018 KazRosGaz LLP paid dividends to the Company in the amount of 14.180.747 thousand tenge.

On January 22, 2018 ANPZ paid principal and interest on loans received from DBK in the amount of 20.641.777 thousand tenge and 8.727.381 thousand tenge, respectively.



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